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# Social and Emotional Learning During Early Childhood

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## Introduction

Social and emotional aspects of preschoolers' development are crucial for their concurrent and later well-being and mental health, as well as their learning and early school success (Denham, 2006). As Zins, Bloodworth, Weissberg, and Walberg (2007) have noted, "schools are social places, and learning is a social process" (p. 191). Even young students learn alongside and in collaboration with teachers and peers and must be able to utilize their emotions to facilitate learning. A child's abilities to understand emotions of self and others; regulate emotion, attention, and behavior; make good decisions regarding social problems; express healthy emotions; and engage in a range of prosocial behaviors – their social-emotional learning (SEL) skills – all work together to grease the cogs of a successful school experience and facilitate satisfying relationships with others (Denham, Brown, and Domitrovich, 2010). But SEL success may not be easy for children just entering pre-academic and academic settings, because preschool and kindergarten contexts are taxing for them to navigate – they must learn to sit still, attend, follow directions, and master group play, all very challenging tasks! Unfortunately, many children have deficits in these skills by school entry (Rimm-Kaufman, Pianta, & Cox, 2000).

## Definitions and Scope

*Emotional competence* has recently been acknowledged for its central role in the development of pathways to social competence, to school success, and to mental health and risk, from foundations laid during preschool and early primary grades. Emotional competence includes expressing emotions that are, or are not, experienced, regulating emotions in ways that are age and socially appropriate, and decoding these processes in others (Halberstadt, Denham, and Dunsmore, 2001). More specifically, emotionally competent children purposefully express a broad variety of emotions without incapacitating intensity or duration. They understand the emotions of themselves and others, and they regulate their emotions when feeling or expressing "too much" or "too little."

*Social competence*, the result of organized behaviors that meet short- and long-term developmental needs, can be summarized as effectiveness in interaction (Rose-Krasnor, 1997). Such social competence in the early years has been recognized as key to school success and satisfying relationships. In the case of preschoolers, socially competent behaviors are organized around the developmental tasks of positive engagement in developmentally appropriate activities in the physical, social, and cognitive/attentional environment, and self-regulation during peer interaction. Given this overarching definition and specific developmental tasks, social competence during early childhood includes very specific abilities, behaviors, and motivations, such as initiation of peer interaction, response to provocation, cooperativeness, empathy, inhibition of aggression, and positive demeanor during interaction.

*Social and emotional learning (SEL)* refers to the constituents of both emotional and social competence, as promoted by parents, early childhood educators, and preventionists. Thus, the skills of emotional competence are essential for social competence, and the specific abilities we want to promote include all elements of emotional and social competence.

As already noted, the presence of emotional or social competence (i.e., SEL) during early childhood is related to contemporaneous and later success in school – both with peers and academically. Such success, indexed by peer status (i.e., overall popularity, rejection, or isolation),

friendship, and school success, is in turn related to later well-being and successful negotiation of developmental tasks into adulthood.

## SEL Theory

At the center of our theoretical framework are the core SEL skills that contribute to children's school success and other important outcomes. These primarily individual skills are vital contributors to ultimately successful, effective interactions with other people and other associated age-appropriate tasks. SEL skills can be located in five domains (Payton et al., 2000; see alsohttp://casel.org/why-it-matters/what-is-sel/). These domains include both observable behaviors and internal processes, such as perceptions or beliefs. Some of these domains are self-oriented while others are relational in nature. These domains are:

- *Self-management* includes regulating one's emotional experience and expression in productive ways, being aware of feelings, monitoring them, and modifying them when necessary, so that they aid rather than impede the child's ability to cope with varying situations. Important nonemotional aspects of self-management also are crucial to success in early childhood; these include executive function skills (e.g., working memory, attention, and inhibitory control), used in the service of regulating both SEL and academic behavior.
- *Self-awareness* refers to abilities to accurately assess personal feelings, interests, values, and strengths, and maintaining a well-grounded sense of self-confidence. Preschoolers have a well-defined, stable sense of self, but much development in this area occurs later. The ability to identify and label one's own feelings does develop during early childhood, via an increasingly broad and rich emotion vocabulary (Denham, 2006).
- *Social awareness* includes understanding the feelings of others, being able to take their perspective and empathize with these feelings, as well as recognizing and appreciating individual and group similarities and differences. Emotion knowledge is key – children constantly attempt to understand their own and others' behavior, and emotions convey critical interpersonal information that enhances such understanding while guiding interaction. Inability to interpret emotions can make the classroom a confusing, overwhelming place.

- *Relationship skills* include establishing and maintaining positive and effective exchanges with others and, ultimately, healthy and rewarding relationships that last over time. Numerous skills are crucial in this domain, including making positive overtures to play with others, initiating and maintaining conversations, cooperating, listening, taking turns, seeking help when needed, and developing friendship skills (e.g., joining another child or small group, expressing appreciation, negotiating, and giving feedback). In addition, asserting oneself; preventing, managing, and resolving interpersonal conflict; and addressing others' needs through negotiation develop during the preschool-to-primary period.
- *Responsible decision-making* includes making decisions, in both social and academic situations, based on consideration of ethical standards, safety concerns, appropriate social/moral norms, respect for others, and likely consequences of various actions. This domain of SEL becomes important as children's everyday social interactions increase in frequency and complexity. They must learn to solve social problems – to analyze social situations, identify problems, set prosocial goals, and determine effective ways to solve differences that arise within their peer group.

## Current Research

Each SEL competency has its own theoretical traditions and voluminous empirical literatures on its links with developmentally appropriate conceptions of children's social and school success. These include children's (1) overall social competence; (2) classroom learning behaviors, approaches to learning, and feelings about school; and (3) achievement, particularly in preliterary, pre-numeracy, reading, and

mathematics, as well as grades and other aspects of the school experience (e.g., retentions, disciplinary referrals).

*Self-management* is related to social/classroom adjustment and academic achievement (Bierman, Nix, Greenberg, Blair, & Domitrovich, 2008; Denham et al., 2003). Children less able to deal with negative emotions may not have personal resources to focus on learning, whereas those who can maintain a positive emotional tone might be able to remain positively engaged with classroom tasks (Trentacosta & Izard, 2007).

More cognitive/behavioral forms of regulation are also related to young children's academic success. Young children's abilities to carry out complex directions, finish tasks, and to concentrate are directly related to kindergarten achievement, for example (Howse, Calkins, Anastopoulos, Keane, & Shelton, 2003). Furthermore, Liew, McTigue, Barrois, and Hughes (2008) found that first-grade inhibitory control (e.g., being able to walk on a line and trace a star) predicted third grade reading scores (see also Ponitz, McClelland, Matthews, & Morrison, 2009).

The components of *self-awareness* are related to positive child outcomes, with the strongest findings for academic outcomes in parallel domain areas. For example, Marsh, Ellis, and Craven (2002) found positive associations between preschoolers' academic self-concepts and achievement. Preschoolers' self-perceptions of achievement motivation during were correlated with reading and math scores in 1st grade (Measelle, Ablow, Cowan, & Cowan, 1998). Few research reports focus on children's conceptions of their own emotions and such outcomes.

Young children's *social awareness*, their emotion knowledge, contributes to their overall social competence; it is related to their positive peer status and prosocial reactions to peers' and adults' emotions (Denham et al., 2003). Research by Izard and colleagues (e.g., Izard et al., 2001) corroborates these assertions: Head Start children's emotion knowledge predicted both contemporaneous and later teacher reports of social functioning.

Increasingly, researchers are also confirming a link between early academic success and young children's emotion knowledge. Leerkes, Paradise, O'Brien, Calkins, and Lange (2008) showed that emotion knowledge – but not emotion regulation – was related to preschoolers' pre-academic achievement. Similarly, Izard and colleagues (2001) found strong evidence that 5-year-olds' emotion knowledge predicted both their age 9 social and academic competence. Thus, it is evident that children's ability to understand emotions, especially in context, plays an important role in their concurrent and later academic success.

Links have been found between *social problem-solving* and both social and academic success, as well as the advantages of specifically *prosocial* problem solutions (e.g., Denham & Almeida, 1987; Youngstrom et al., 2000). Specifically, specific aspects of social problem-solving are related to preschoolers' social competence and behavior problems (Coy, Speltz, DeKlyen, & Jones, 2001). Children's emotional and behavioral responses to hypothetical peer dilemmas were related to teachers' concurrent and later assessments of school adjustment and their kindergarten academic progress (Bierman, Domitrovich, et al., 2008).

Children with poorer *relationship skills* are more likely to have social difficulties and thus, indirectly, with school adjustment. Unpacking this indirect relation, Normandeau and Guay (1998) have found that kindergartners' prosocial behavior predicts their cognitive self-control in 1st grade, which then predicts 1st grade achievement.

Numerous researchers have found that the social skills constituting this component of SEL are even directly related to early academic success. Elias and Haynes (2008) showed that initial social competence and improvements in social competence (i.e., cooperation, self-control, and assertion) predicted third graders' end-of-year grades in reading and mathematics. Relationship skills play significant roles in predicting promotion and retention after 1st grade (Agostin & Bain, 1997). In fact, children with relationship skills are at increased risk of dropout. Thus, social

behaviors appear to form a solid foundation for early school success.

## Overview of Strategies

The foregoing discussion boldly underscores the importance of SEL for children's success at important developmental tasks. Concurrently, young children who master developmentally appropriate facets of SEL are better equipped to be invested in play, initiate peer interaction, and master preliteracy and numeracy skills. They feel better about themselves and succeed in many age-appropriate experiences. Their SEL also predicts success at the next level of developmental tasks as they enter school – thriving academically and in the demanding world of peers. Early SEL attainment set them on a course for even later well-being, mental health, and other positive outcomes.

Because of this crucial nature of early childhood SEL and the considerable risk associated with their lack, there has been a call for primary prevention programs targeted at preschoolers' emotional and social competence needs. For those at special risk and for children in general, the learning of emotional and social competence should not be left to chance. In fact, theoretical and empirical evidence reviewed so far suggests the utility of universal prevention programming to maximize young children's short- and long-term relationship and academic success. Efforts to provide programs focusing on these goals for preschool children are increasing, although historically early childhood educators' concerns with SEL often remain implicit.

What overarching principles can inform prevention programs to promote SEL and deter early behavior problems and their sequelae? Durlak and colleagues' meta-analyses (Durlak & Wells, 1997; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011) provide guidelines for successful prevention programs. First, programs must work from a theoretical perspective and implement specific, SEL-focused strategies to alter developmental trajectories. Durlak et al. (2011, p. 410; see also Denham & Burton,

2003; Elias, Zins, Graczyk, & Weissberg, 2003) note that these strategies should be executed using a "connected and coordinated set of activities," using active, varied, and engaging learning approaches. Such components must be monitored for effective implementation (Elias et al., 2003). Intervening in multiple contexts is necessary, to facilitate both person-centered and environmental change by involving peers, parents, teachers, principals and other personnel, and school district leaders. SEL should become a goal for the school's entire climate and a key element in learning standards of the system. Further, to be effective, programs should span multiple years. Realistically, it takes time to assist development and change existing behavior patterns. To be able to evaluate the effectiveness of programs, experimental or quasi-experimental designs should be utilized, and the fidelity and dosage of implementation must be specified. Finally, "the earlier the better" are the watchwords for primary prevention of deficits in social and emotional learning.

Although the focus of the preceding discussions of strategies and following review of effective programming is the universal promotion of SEL among young children, it is important to recognize other, more targeted ways of promoting SEL as well. Current strategic thinking has broadened from the blanket intervention approach to include a "Teaching Pyramid" model with a multitiered approach to programming (Hemmeter, Ostrosky, & Fox, 2006). The four components of the Teaching Pyramid move from a foundation of building positive relationships with children, families, and colleagues, to designing supportive and engaging environments, then teaching social and emotional skills within these environments, and, when necessary, developing individualized interventions for children with the most challenging behavior. At the same time, the pyramid's early education programs' efforts at promoting SEL are implemented at four multitiered levels of service, which *universal* promotion strategies to promote SEL for all children, *selected* prevention strategies for addressing the SEL instructional needs of children at risk for challenging behavior, and *targeted* implementation of assessment-based

behavior support plans for children with persistent challenging behavior.

At the top level of the Teaching Pyramid, young children show difficulties in SEL and need careful assessment, intervention, and monitoring to achieve cessation of difficult behaviors and increases in SEL. The process used to develop such assessment-based plans for the individualized intervention to improve persistent challenging behavior (i.e., at the selected or targeted level) is described as positive behavior support (PBS; Dunlap & Fox, 1996). The individualized application of PBS is an effective process that includes functional behavioral assessment, individualized behavior support plans appropriate for implementation by caregivers and professionals within natural contexts, and response to intervention (RTI) assessment informing further refinement of support plans.

Although the Teaching Pyramid puts forward a blueprint for SEL promotion and problem behavior cessation that could fit all children during early childhood and acknowledges many of the issues mentioned by Durlak et al. (1997, 2011), it and the PBS/RTI approaches originate in special education contexts. As such, their potential broader usefulness is only partially realized. These approaches have not as yet fully integrated the lessons from basic science on SEL and the accompanying universal and targeted applications that will be described here.

## What Works

There are relatively few programs that fully and directly address the promotion of SEL during early childhood, according to the guidelines set out by Durlak and colleagues (1997, 2011). Fewer still have been rigorously and systematically evaluated, and only some of these can be seen as effective (Joseph & Strain, 2003). However, efforts are mounting to identify more clearly the elements of effective and promising programming. For example, The Head Start CARES (Classroom-based Approaches and Resources for Emotion and Social skill promotion; MDRC, 2012) project is currently using a randomized design to test the effects of four evidence-based strategies designed to improve children's SEL in Head Start classrooms. We will focus here on two programs whose effectiveness in increasing SEL in young children has been supported by multiple rigorous studies: Promoting Alternative THinking Strategies (Preschool PATHS) and the Incredible Years curriculum.

*The Preschool PATHS* curriculum is a younger extension of an effective elementary school program (PATHS; Greenberg & Kusché, 1998). Its theoretical underpinnings emphasize that SEL milestones do not unfold automatically; on the contrary, they are heavily influenced, even at the neuronal level, by environmental inputs throughout early childhood. This curriculum is grounded in the understanding that much of the individual variation in the components of children's emotional competence derives from experiences within the family and preschool classroom. Hence, this SEL programming maximizes the environmental conditions that nurture and reward the development and application of SEL skills.

The preschool version of PATHS delivers 30 "circle time" lessons to promote social and emotional competences including compliments, basic and advanced feelings, problem-solving, and the "Turtle Technique" to increase preschoolers' self-control. As with the original PATHS program for older children, the preschool curriculum aims to develop children's awareness of their own and other's emotions, teach self-control, increase children's self-concept and peer relations, develop problem-solving skills, and create an overall positive classroom environment supporting SEL. Crucial to the success of the PATHS curriculum is the training of teachers to use extension activities and integrate PATHS concepts throughout the preschool day. Children's learning and use of newly acquired social-emotional skills are scaffolded by teachers throughout the day whenever they experience an emotional reaction or a challenging situation.

The original curriculum was evaluated multiple times with elementary school samples. The Conduct Problems Prevention Research Group study (1999) showed significant differences

between the control group and the PATHS group in peer-related aggression, teacher's ratings of conduct problems, and overall positive classroom atmosphere. A second study by Kam, Greenberg, and Kusché (2004) used a randomized control methodology to find that children participating in the PATH curriculum were more likely to demonstrate self-control and choose non-confrontational solutions to peer problems, had a larger affective vocabulary, and were less likely to be rated by their teachers as displaying internalizing and externalizing behavior problems. Finally, the preschool version of the PATHS curriculum (Domitrovich, Cortes, & Greenberg, 2007) increased children's emotion knowledge, social skills, social competence, and social independence and decreased social withdrawal when compared to the control group.

*The Incredible Years* curriculum spans both age and contexts to reduce challenging behaviors in children from infancy to early adolescence by reinforcing programmatic themes both in school and at home. The program integrates parent education on play interaction and relationship skills, teacher training workshops on classroom management techniques and promoting children's prosocial behavior, and child training emphasizing empathy, emotional literacy, problem-solving, and self-control. The Incredible Years curriculum is grounded in social learning theory and recognizes the value of adults modeling appropriate interactions and behaviors for children's development; thus the program incorporates both the home and school environments in the positive socialization process (The Incredible Years Inc., 2012).

Posttests immediately following the conclusion of the program (Webster-Stratton, Reid, & Hammond, 2004) have shown decreases in mother's negative parenting, improvements in child conduct problems at home and at school, and improvements in social competence with peers when compared to the control groups. Working with a sample of preschoolers at risk for antisocial behavior, Brotman et al. (2005) found improvements in families' provision of stimulation for learning and children's engaging behaviors in the treatment groups in addition to replicating the decreases in negative parenting behaviors previously discussed. Finally, Webster-Stratton, Reid, and Stoolmiller (2008) used a quasi-experimental design with random assignment of Head Start students and found improvements in teaching style, children's school readiness, positive classroom atmosphere, along with positive changes in children's problem-solving skills.

## What Is Promising

The growing recognition, over the past two decades, of SEL's importance during early childhood has led to the development of several promising programs. Following we will discuss four such programs that we believe could be contenders with additional rigorous study – Al's Pals: Kids Making Healthy Choices, I Can Problem Solve, the Emotions Course, and Second Step.

*Al's Pals*: *Kids Making Healthy Choices* (Geller, 1999) is a resilience-based early childhood curriculum and teacher training program that develops social, emotional, and behavioral skills in children 3–8 years old. Al's Pals uses twice weekly puppet-based discussions, role playing, songs, and movement to introduce social-emotional skills and decrease precursors to aggressive behavior. An evaluation of the program showed promising results. Lynch, Geller, and Schmidt (2004) conducted a randomized control multiyear trial of the program and found that intervention children received better behavior ratings by teachers. Additionally, teachers rated children lower on problem behavior scales such as antisocial/aggressive, social withdrawal, and anxiety. Although promising, this evaluation relied on teacher reports of child behavior, which the authors acknowledge may be positively biased within the intervention group. The addition of observational measures or direct child assessment will strengthen future evaluations of this curriculum.

The program *I Can Problem Solve (ICPS;* Shure, 1993) was originally introduced under the name Interpersonal Cognitive

Problem-Solving in the 1970s. The three age components (preschool, kindergarten and early elementary, and intermediate elementary) together have been implemented in schools, after-school programs, and community centers. As the name suggests, this program focuses on teaching children a problem-solving vocabulary, to understand their own as well as others' feelings, to think of alternative solutions, and to think through the consequences associated with their action choices. By impacting children's conceptualizations of their conflicts with others, ICPS aims to reduce impulsivity and enhance positive peer relationships.

Several evaluations of ICPS have been conducted over the decades since its original implementation. Positive impacts on cognitive problem-solving have been found immediately following the intervention as well as 6 and 12 months afterwards (Shure & Spivack, 1982). Although differences did not immediately appear in children's problem behaviors, posttests at 1 year and 5 years after participating in the ICPS program showed fewer problem behaviors and better classroom behavior overall (Shure, 1993). In older students, participation in the early elementary school version of ICPS has also been linked to increases in school bonding (Kumpfer, Alvarado, Tait, & Turner, 2002).

However, evaluations of ICPS by its original developers and independent investigators have shown mixed results. Several studies have suffered from poor instrument reliability, missing data, inconsistent adherence to the curriculum, and lack of independent observers and reports (Boyle & Hassett-Walker, 2008; Kumpfer et al., 2002; Shure & Spivack, 1982).

*The Emotion-Based Prevention Program (EBP)* for Head Start children (Izard, Trentacosta, King, & Mostow, 2004; Izard et al., 2008) uses Differential Emotions Theory to teach preschool-aged children how to understand, regulate, and utilize emotions appropriately (i.e., effective and constructive use of emotion motivation, as when modulated, vicarious sadness promotes sympathy). As with other programs discussed, EBP uses puppets, vignettes, storybooks, and interactive reading to help structure children's learning. Unique to this program is the substantial focus on the four "basic" emotions: happiness, sadness, anger, and fear, as well as its reliance on the intrinsic rewards associated with greater emotional competence (Izard et al., 2008).

This program was first tested by Izard and colleagues in rural Head Start centers (Izard et al., 2004), and then a second study using inner city Head Starts reevaluated the program after some adaptations were made based on previous results. Both studies used randomized controlled trials of the EBP program and study 2 added the comparison of EBP to the established treatment program, I Can Problem Solve (ICPS; Shure, 1993). Results of the two studies were drawn from teacher report, direct child assessment, and independent observation and showed that EBP increased emotion knowledge and regulation in participating children when compared to the control groups. Additionally, EBP had beneficial impacts positive social behaviors in study 2 and on maladaptive and aggressive behaviors in study 1. It is not yet clear why there was variability in the specificity of findings from the two studies (although operationalizations of emotion knowledge and emotion regulation did differ between them); additional research will need to evaluate the final version of the program to determine necessary duration of treatment and implementation feasibility.

*Second Step*: *A Violence Prevention Curriculum* (Frey, Hirschstein, & Guzzo, 2000) is a school-based universal intervention program developed to reduce aggressive behavior through three separate curricula for preschool/kindergarten, elementary, and middle school children. All three age levels of the programs build on cognitive behavioral intervention models and social learning theory to teach children social-emotional skills to reduce impulsive and aggressive behavior while increasing social competence. Classroom lessons include labeling emotions, managing emotional reactions, decision-making, and choosing positive goals. Younger students are encouraged to interact with the Impulsive Puppy, Slow Down Snail, and Be-Calm Bunny puppets and toys throughout the curriculum.

In elementary and middle school populations, Second Step has been linked to decreases in observed antisocial behavior and increases in prosocial behavior when compared to the control groups (Grossman et al., 1997; Taub, 2002). McMahon, Washburn, Felix, Yakin, & Childrey (2000) examined the effectiveness of the Second Step program in improving social skills knowledge and social competence among urban low-income, ethnically diverse children in preschool and kindergarten. Teacher ratings, child reports, and observational data were used to assess children's social skills knowledge and social competence over a year. After 1 year of program involvement, children demonstrated increased knowledge of social skills and decreased observed behavioral problems. Although promising, there is limited research evaluating the implementation of Second Step in early childhood classrooms.

## What Does Not Work

The admonitions and recommendations in Durlak and colleagues' meta-analyses (1997, 2011), as well as Denham and Burton's 2003 book and Elias and colleagues' 2003 article, are clear. Early childhood SEL programming takes the planning and commitment of all personnel in childcare programs, preschools, and schools housing kindergartens, as well as careful training, implementation, and evaluation. Short-term programs don't work. Most programs begun now, as opposed to those of the 1970s and 1980s, try to heed this caveat. Isolated behavior modification programs or add-on programming that is not fully integrated into daily activities of classroom are unlikely to succeed in promoting long-lasting social and emotional learning. Similarly, social skills training alone (i.e., teaching children to increase their competence in specific skills but not from an overarching SEL approach) may work, but only in the short term. Long-term impacts of behavior and relationships will only come from incorporating multiple components of SEL consistently across multiple developmental contexts (home, child care, school, etc.) Finally,

behavioral interventions are often methodologically rigorous, showing high effectiveness, but there are definite concerns about ecological validity, fading delivery fidelity, and the generalization of the behavior change as well as its simplistic nature.

## Summary

A case has been made for the importance of SEL during early childhood and thereafter. Further, many necessary qualities of effective SEL programming in early childhood, and several effective programs, have been introduced. Thus, although there is much evidence-based research to support the importance of early childhood SEL, as well as growing support for specific SEL practices during early childhood, even more focused research attention on evaluating effective SEL programming and its successful implementation is needed. Making the need for SEL programming explicit within early childhood education, rather than implicit, is a priority that we can no longer postpone. Governmental and nongovernmental entities alike (e.g., kindergartens within state school systems, private childcare centers) must have standard goals for young children's SEL development and work to meet them. The scientific and education communities are coming together to bring early childhood SEL programming to scale. Our children deserve this care.

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