Introduction

The *Second Step* program for Kindergarten through Grade 5 is a universal, classroom-based program designed to increase students' school success and decrease problem behaviors by promoting social-emotional competence and self-regulation. It teaches skills that strengthen students' ability to learn, have empathy, manage emotions, and solve problems. The *Second Step* program targets key risk and protective factors linked to a range of problem behaviors. Equipping students with *Second Step* skills helps a school create a safer, more respectful learning environment that promotes school success for all.

Social-Emotional Competence and School Success

Social-emotional competencies are key academic enablers that help form the bridge between instruction and learning. Social-emotional and cognitive development are interdependent (Flook, Repetti, & Ullman, 2005), and 20 years of research has shown that children need a strong foundation of social-emotional competence to succeed in school (Raver, 2002). Students who are socially and emotionally skilled earn higher GPAs (DiPerna & Elliott, 1999; Welsh, Parke, Widaman, & O'Neil, 2001; Wentzel, 1993) and score higher on standardized tests (Malecki & Elliott, 2002; Teo, Carlson, Mathieu, Egeland, & Sroufe, 1996; Wentzel, 1993). Compared to their peers, students who participate in social-emotional learning programs like school more, feel more connected to school; have more positive attitudes toward themselves and others; show more positive social behaviors in school; have fewer conduct problems, lower levels of emotional distress—such as anxiety—and depressive symptoms, and significantly better school grades; and score on average 11 percentile points higher on measures of academic achievement (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Social-Emotional Competence and Successful Relationships

Socially and emotionally competent children reap tremendous benefits from their ability to make friends and get along with peers and adults. Many research studies have shown that children with better social skills have higher academic achievement (Malecki & Elliott, 2002; Miles & Stipek, 2006; Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008; Welsh et al., 2001; Wentzel, 1993). There many of ways in which social competence can affect academic success. Children's social relations affect their feeling of connectedness at school, which affects their sense of academic competence (Guay, Boivin, & Hodges, 1999). A lack of acceptance by peers can lead to lower academic self-concept and more problems with internalizing symptoms, which can then lead to lower academic performance (Flook et al., 2005). Rejection by peers can negatively affect work habits and academic achievement, but social acceptance can actually help children overcome the effects of early academic difficulty (O'Neil, Welsh, Parke, Wang, & Strand, 1997).

Students' academic achievement is predicted at least as well by their early interpersonal skills as by their intellectual abilities. The effects of students' verbal ability on their academic competence has been shown to be dependent on their knowledge of their own and others' emotions (Izard et al., 2001). Researchers found that students' academic achievement in eighth grade could be predicted by their ability to empathize, cooperate, help others, and share in third grade (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000). These third-grade prosocial behaviors actually predicted students' eighth-grade achievement better than third-grade academic achievement did. Another long-term study found that students' early peer competence and emotional health predicted their scores on standardized achievement tests in both sixth grade and at age 16, over and above the effects of their earlier cognitive ability (Teo et al., 1996).

Students who are socially and emotionally competent have more friends and more connections with positive peers, and are less likely to be rejected, isolated, and bullied. Children with friends are both happier and more successful

in school (Guay et al., 1999; Wentzel & McNamara, 1999); they get in less trouble, have better grades and higher test scores, and are more involved in school activities (Berndt & Keefe, 1995). On the other hand, students who are bullied have lower academic achievement and worse school attendance (Juvonen, Nishina, & Graham, 2000; Schwartz & Gorman, 2003; Slee, 1994), use more alcohol and drugs (Pepler, Craig, Connolly, & Henderson, 2002), and are more likely to bring weapons to school (Berthold & Hoover, 2000), have lower self-esteem, and feel more lonely and anxious (Graham & Juvonen, 1998). Social-skills training programs have been shown to decrease antisocial behavior (Lösel & Beelmann, 2003).

Social-Emotional Competence and School Connectedness
Social-emotional competence improves students' relationships with teachers and peers. The result is increased school connectedness (Wilson, 2004), which is a powerful support for academic success and protects students from health-compromising behaviors. Students who are bonded to school have higher levels of academic achievement, behave better in school, and are less likely to repeat a grade (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004); they are more motivated for academic success and more engaged in class (Wingspread, 2004). School connectedness is also stronger for students in organized and well-managed classrooms where they feel supported and respected (McNeely & Falci, 2004), but effective classroom management is an easier task for teachers with socially and emotionally competent students.

Students' ability to form positive connections with teachers and staff and engage with school can also influence whether they stay in school long enough to finish (Rumberger, 2001). Only 68 percent of all public school students in the United States graduate from high school, and African-American, Hispanic, and Native American students are as likely to drop out as to receive a high school diploma (Swanson, 2004). Although fewer than one third of dropouts leave because of difficulty with schoolwork (Hymel & Ford, 2003), half leave school because they don't get along with teachers and other students (Lee & Burkam, 2003). When 40 to 60 percent of students are "chronically disengaged" (Wingspread, 2004), the ability of students to connect with teachers and other school staff is critically important. The "most important finding" of one large study of dropouts was that students from poor and disadvantaged families and neighborhoods are likely to stay in school when they have positive interactions with teachers and school staff (Lee & Burkam, 2003).

The power of school connectedness vividly illustrates how young people's interpersonal, school, and life success are interwoven. Greater connection to school keeps students safe and out of trouble and increases school achievement and graduation rates. Feeling connected to teachers protects students from the influence of antisocial peers (McNeely & Falci, 2004). Students who are connected to school are less likely to use alcohol and illegal drugs, engage in violent or deviant behavior, become pregnant, experience emotional distress (Blum, McNeely, & Rinehart, 2002; Wilson, 2004), or commit school violence (Wingspread, 2004). School connectedness has powerful protective effects that last. Students who are more bonded to school in the elementary grades are less likely to become serious criminals or join a gang in middle school, and less likely to drink, smoke, or have a drinking problem by age 21 (Catalano et al., 2004).

Self-Regulation and School Success

To be successful in school, students need to be able to cooperate with adult rules and requests, participate constructively in classroom activities, and get along with their peers (Thompson & Raikes, 2007). This requires self-regulation, the ability to control and manage emotions, thoughts, and behaviors (Barkley, 2004; McClelland, Ponitz, Messersmith, & Tominey, 2010). Self-regulation helps students focus their attention, remember directions, stay on task, cope with emotional challenges, and get along with teachers and other students. Unfortunately, many children enter school without adequate levels of these skills (Lin, Lawrence, & Gorrell, 2003; Raver & Knitzer, 2002). In one large national study, 46 percent of kindergarten teachers reported that over half of their students had inadequate

self-regulation skills (Rimm-Kaufman, Pianta, & Cox, 2000). Children with poor self-regulation are at increased risk for low academic achievement, emotional and behavioral problems, peer rejection, and school dropout (Duncan et al., 2007; Eisenberg, Fabes, Guthrie, & Reiser, 2000; Shaw, Gilliom, Ingoldsby, & Nagin, 2003; Vitaro, Brendgen, Larose, & Tremblay, 2005) and have high rates of expulsion from school, particularly in preschool classrooms (Gilliam & Shahar, 2006).

The *Second Step* program is designed to strengthen students' self-regulatory abilities in multiple ways. Two of the skill sets traditionally addressed in the *Second Step* program are central to improving students' self-regulation: emotion management and problem solving. The skills taught in the Emotion Management Unit contribute directly to self-regulation. The steps and skills taught in the Problem-Solving Unit increase students' self-regulation and teach them how to apply those skills to avoid or cope with conflicts and improve peer relations. Material throughout the program also contributes to the development of self-regulation. For example, learning to recognize their own emotions (covered in the Empathy Unit) provides part of the foundation students need to learn emotion-management skills. Although the *Second Step* program has always worked to build skills important for self-regulation, this fourth edition of the program contains two important new elements designed to further strengthen students' self-regulation: Brain Builders and Skills for Learning.

Brain Builders

Research has shown that teachers can positively affect children's self-regulatory ability by developing students' attention, working memory, and inhibitory control. These skills, sometimes referred to as executive-function skills, are critical to classroom success. Attention refers to the ability to direct, focus, and shift attention while screening out or ignoring distractions (Barkley, 1997; Rothbart & Posner, 2005). Working memory involves the ability to remember and use information, such as a teacher's directions or the directions for an activity (Demetriou, Christou, Spanoudis, & Platsidou, 2002; Ponitz, McClelland, Matthews, & Morrison, 2009). Inhibitory control helps children stop automatic but inappropriate responses or actions and remember appropriate behaviors, such as raising a hand before speaking (Blair, 2002; Rennie, Bull, & Diamond, 2004).

Students' attention-focusing skills at the beginning of elementary school predict their academic achievement (Duncan et al., 2007; Howse, Lange, Farran, & Boyles, 2003; Trentacosta & Izard, 2007). Young boys with good attention control have been shown to be more likely to avoid aggression by using non-hostile verbal responses when angry (Eisenberg, Fabes, Nyman, Bernzweig, & Pinulas, 1994). A large study of over 1,000 children found that the ability to sustain attention and inhibit impulses helped buffer the effects of negative family environment on preschoolers' school readiness (NICHD Early Child Care Research Network, 2003). Multiple studies have found that inhibitory control affects academic achievement (Blair & Razza, 2007; St. Clair-Thompson & Gathercole, 2006). Working memory has also been shown to be connected to early math, reading, and cognitive skills in elementary students (Gathercole & Pickering, 2000; Kail, 2003; St. Clair-Thompson & Gathercole, 2006).

Attention, working memory, and inhibitory skills can all be improved through experiences in the classroom (Morrison, Ponitz, & McClelland, 2009). One way to develop these abilities is through games that directly challenge and provide practice for these skills (Burchinal, Peisner-Feinberg, Bryant, & Clifford, 2000). Games with explicit rules can help children build skills useful for academic learning (Bodrova & Leong, 2007). The Kindergarten through Grade 3 *Second Step* program includes games, known as Brain Builders, in every lesson. This approach has been inspired partly through consultative collaboration with Dr. Megan McClelland, based on her work developing tools for evaluating and improving classroom-specific aspects of children's self-regulation (McClelland, Acock, & Morrison, 2006; McClelland et al., 2007). Her work has included research showing that games like the Brain Builders can be used successfully to improve children's self-regulation skills (Tominy & McClelland, 2010).

Second Step Program Units That Build Social-Emotional Competence and Self-Regulation

Skills for Learning

The *Second Step* program focuses on four self-regulation skills that students need in order to be successful learners. These are called Skills for Learning, and they are focusing attention, listening, using self-talk, and being assertive. These skills support school readiness and academic achievement, and students need to learn to integrate and apply these skills to be successful in the classroom (McClelland et al., 2010). Kindergartners with higher levels of these Skills for Learning have higher math, literacy, and vocabulary skills (Kroesbergen, Van Luit, Van Lieshout, Van Loosbroek, & Van de Rijt, 2009; Ponitz et al., 2009) and are ultimately more likely to graduate from high school (Vitaro et al., 2005). The benefits of the four self-regulatory skills taught in the Skills for Learning Unit go beyond academics; they also support the rest of the program content by providing a critical foundation for the development of elementary students' social-emotional competence (McClelland et al., 2006). The Skills for Learning are introduced and practiced in a separate unit in Kindergarten through Grade 3 and integrated into the Grades 4 and 5 lessons across all units.

Empathy

Empathy is a central aspect of emotional intelligence (Mayer & Salovey, 1997) and emotional competence (Saarni, 1997). In the *Second Step* program, empathy is seen as having both an affective and cognitive dimension (Cohen & Strayer, 1996; Jolliffe & Farrington, 2004). Students learn that empathy means "the ability to feel and understand what someone else is feeling" and develop skills for identifying emotions in themselves and others, labeling these emotions, and taking on others' perspectives.

Empathy is related to social competence and academic success. Being able to identify, understand, and respond in a caring way to how someone is feeling provides the foundation for helpful and socially responsible behavior, friendships, cooperation, coping, and conflict resolution. For example, children who are better at labeling and describing emotions are also better accepted by their peers (Crick & Dodge, 1994; Fabes et al., 1994). Being able to identify emotions accurately in themselves and others helps prepare children to start school successfully (Raver & Knitzer, 2002). Empathic students with good perspective-taking skills are less likely to be physically, verbally, and indirectly aggressive toward peers (Kaukiainen et al., 1999). Research shows that young children with higher levels of empathy tend to be less aggressive, better liked, and more socially skilled, and make greater academic gains than children with lower levels of empathy (Arsenio, Cooperman, & Lover, 2000; Crick & Dodge, 1994; Denham, McKinley, Couchoud, & Holt, 1990; Izard et al., 2001; Katsurada & Sugawara, 1998). Children with better perspective-taking skills are more likely to offer emotional support to others (Carlo, Knight, Eisenberg, & Rotenberg, 1991; Litvack-Miller, McDougall, & Romney, 1997), which is associated, in turn, with better grades and higher academic achievement (Wentzel, 1991, 1993).

Increasing students' empathy also helps create a foundation for the units that follow. In the Empathy Unit, students build their emotional literacy in part through increasing their ability to identify their own feelings. In addition to building empathy, this skill helps prepare students for the Emotion-Management Unit by increasing their awareness of what they are feeling so they can identify and cope with strong emotions. Empathy also provides a critical interpersonal foundation for carrying out the skills learned in the Problem-Solving Unit, because students need to take others' emotions into account and think about others' perspectives in order to solve interpersonal problems.

Emotion Management

A child who manages emotions well has the self-regulation to cope with strong emotions and express them in socially acceptable ways (Eisenberg, Cumberland, & Spinrad, 1998). Emotion-management skills can be used for both positive emotions (for example, inhibiting the impulse to run excitedly in the hallway) and negative or distressing emotions (for example, inhibiting the impulse to hit another child who takes a toy or ball away). Children who can manage their feelings in emotionally charged situations are more successful in the transition to formal schooling (Raver & Knitzer, 2002). Effective emotion management is related to decreased levels of aggression and substance abuse (Brady, Myrick, & McElroy, 1998; Underwood, Coie, & Herbsman, 1992; Vitaro, Ferland, Jacques, & Ladouceur, 1998) and increased levels of social-emotional competence (Eisenberg, Fabes, & Losoya, 1997). Children who have a hard time managing their emotions are more likely to have difficulties behaving in socially skilled ways (Eisenberg et al., 1997). Students with poor emotion-management skills are also prone to act impulsively on their emotions rather than using problem-solving skills such as analyzing situations, anticipating consequences, and planning (Donohew et al., 2000; Simons, Carey, & Gaher, 2004).

Research shows that children can learn a variety of cognitive-behavioral strategies to manage their emotions (Nelson & Finch, 2000) and cope with stressful situations. For example, they can learn techniques to distract themselves, relax, or deliberately alter their thoughts and "self-talk" related to a situation. As children develop, they typically begin by using "private speech"—words spoken aloud to themselves—then eventually internalize this skill and use the "inner speech" form of self-talk by using words silently to focus or coach themselves (Bodrova & Leong, 2007). Research shows that preadolescents can benefit from universal, school-based interventions that model and teach these kinds of coping strategies (Cunningham, Brandon, & Frydenberg, 2002). Aggressive youth who receive instruction in emotion-management strategies have also been shown to reduce both their aggressive behaviors and the likelihood that they will abuse alcohol and other drugs in the future (Lochman, 1992; Lochman, Burch, Curry, & Lampron, 1984). Together, these findings suggest that teaching students to recognize strong feelings and use positive self-talk and other stress-reducing strategies to "stay in control" can be effective ways to increase coping and reduce aggression and other problem behaviors.

Second Step emotion management lessons emphasize coping with situations that provoke strong feelings. Students are taught proactive strategies, such as deep, centered breathing and positive self-talk, to prevent strong feelings from escalating into negative behavior. When students use self-talk to focus and stay calm, they may be more likely to think about a situation before responding, rather than acting on their first impulse. It is important that children learn to take positive action early in their conflicts so that they can calm down before they are overwhelmed by emotion. Once the emotion becomes overwhelming, strong physiological reactions keep children from being able to reason well, and they have trouble using emotion-management strategies (Metcalfe & Mischel, 1999). It can then take several minutes for their bodies and minds to return to normal. The ability to keep from escalating and being driven by strong emotions allows students the chance to employ many of the other skills taught in the program, such as effective communication, assertiveness, negotiation and compromise, and problem solving.

Having the skills to manage strong emotions such as anger, embarrassment, anxiety, fear, and jealousy can improve students' ability to get along with their peers and make good choices. Students who are being bullied can use self-talk and other calming strategies to avoid crying, retaliating, or responding in other ways likely to mark them as easy targets for continued victimization (Kochenderfer & Ladd, 1997; Schwartz, Dodge, & Coie, 1993). Children who struggle with anxiety and are thus more likely to lack effective coping skills and misperceive situations as threatening (Greenberg, Domitrovich, & Bumbarger, 1999) may also benefit from *Second Step* lessons on calming down in stressful situations.

Finally, *Second Step* lessons encourage students to use and increase their feelings vocabulary. Research on affective education programs has shown that children's verbal fluency in labeling and discussing emotions can be increased, and that such gains are linked to improved self-control and interpersonal problem solving (Greenberg, Kusche, Cook, & Quamma, 1995).

Problem Solving

Research shows that students' social problem-solving skills can be improved (Denham & Almeida, 1987). Teaching these skills reduces impulsive behavior, improves social adjustment, and prevents violence and other problems that affect the success of children and youth (Hawkins, Farrington, & Catalano, 1998; Shure & Spivack, 1980, 1982; Tolan & Guerra, 1994). The skills taught in the *Second Step* program, adapted from cognitive-behavioral research based on a social information-processing model (Crick & Dodge, 1994; Spivack & Shure, 1974), are designed to scaffold students' ability to handle interpersonal conflicts effectively. Students can improve their self-regulation by applying the skills taught in the Emotion Management Unit to challenging situations with peers and then apply the cognitive and interpersonal skills taught in the Problem-Solving Unit.

In this unit, children are taught that when they are having a problem with peers, it is useful to calm down first, and then apply a set of Problem-Solving Steps. The sequence of Problem-Solving Steps is based on what we know about effective patterns of thinking in social situations. Aggressive children have different patterns of thinking than less aggressive children do when they interact with their peers (Crick & Dodge, 1994; Rubin, Bream, & Rose-Krasnor, 1991), and are especially vigilant for threats in the environment. One significant problem is that aggressive children are more apt to interpret others' behaviors toward them as being hostile (Dodge & Frame, 1982). Their negative interpretations are important, because when children believe that peers are treating them hostilely, they are more likely to choose aggression in response.

In the Emotion Management Unit, children are taught and given the opportunity to practice strategies they can use to calm down when they are feeling strong emotions. After having become familiar with the Calming-Down Steps in earlier lessons, in the Problem-Solving Unit children learn a specific set of Problem-Solving Steps. These consist of four steps that children can use to think through problems: (1) S: Say the problem; identify the problem in a non-blaming way; (2) T: Think of solutions; generate safe and respectful solutions; (3) E: Explore consequences; evaluate positive and negative consequences for each solution; and (4) P: Pick the best solution; select a solution and make a plan for how to carry it out. In the course of practicing the final Problem-Solving Step, students get practice making realistic plans and checking them against criteria for a good plan. Planning is a useful skill that can help students develop self-regulation and that they can use to handle regular classroom challenges and problem situations (Bodrova, Leong, Paynter, & Semenov, 2002).

These steps lead children through constructive prosocial thought processes that are consistent with the social information-processing model described by Crick and Dodge (1994). Children must become aware of social cues, which is the focus of the Empathy Unit. Children are taught that when they have problems with their peers, they should examine the social cues in the situation and think about how the other person is feeling. Children also need to "read" the social situation. To help children with this skill, *Second Step* lessons direct children to "Say the problem" in order to encourage them to think through the situation. The lessons also emphasize neutral, non-blaming explanations for social problems. In addition, children are encouraged to select prosocial goals for social interactions. This perspective is taught indirectly in the *Second Step* lessons when children learn to generate possible solutions that are both safe and respectful. The Problem-Solving Steps themselves explicitly direct children through the remaining thought process skills from Crick and Dodge's model: generating possible solutions to the situation, evaluating the solutions, and selecting a solution that meets prosocial goals.

Children are given repeated practice in carrying out these steps so that they begin to make this problem-solving sequence into a strong and consistent habit. In this unit, several social situations are presented to children to give them practice in using emotion-management skills and Problem-Solving Steps. The situations used are circumstances that are commonly problematic for children. These differ by grade level and may include interrupting politely, making conversation, apologizing, keeping a promise, and dealing with peer pressure. Students use these situations to practice applying the Problem-Solving Steps, generate their own solutions, and practice the behaviors that they generate. This also gives students the opportunity to learn useful ways to respond to situations that are otherwise problematic.

Risk and Protective Factors

Over the past several decades, researchers have identified factors in multiple areas of children's lives that either support their healthy development or increase their risk of involvement in problems such as violence, delinquency, substance abuse, or school failure. The *Second Step* program targets a range of risk and protective factors linked to positive and negative outcomes for children and youth.

Risk factors increase the likelihood that children will experience problems or engage in problem behavior. Protective factors buffer children from the effects of risk and improve their chances for success. Protective factors may also prevent the onset of harmful behavior in the future (Hawkins et al., 2000; Jessor, 1993).

Research on risk and protective factors has shown that interventions can be designed to target multiple problem behaviors simultaneously (Coie, Terry, Lenox, & Lochman, 1995; Greenberg, Domitrovich, & Bumbarger, 2001). For example, many of the same risk and protective factors are related to substance abuse, violence, delinquency, and school failure (Hawkins, Catalano, & Miller, 1992; Resnick, Ireland, & Borowsky, 2004). The importance of reducing risk and increasing protection to safeguard youth from a wide range of problems and promote healthy development is central to the design and scope of the *Second Step* program. By targeting risk and protective factors, the *Second Step* program not only supports healthy development, but also can protect students from a range of problems.

The *Second Step* program focuses on the risk and protective factors best addressed where the lessons are delivered: in the classroom. Factors targeted by classroom lessons are:

Protective factors:
- Social skills
- School connectedness

Risk factors:
- Peer rejection
- Impulsiveness
- Inappropriate classroom behavior, such as aggression and impulsivity
- Early initiation of a problem behavior
- Peer rewards for antisocial behavior

References

Arsenio, W. F., Cooperman, S., & Lover, A. (2000). Affective predictors of preschoolers' aggression and peer acceptance. *Developmental Psychology, 36,* 438–448.

Barkley, R. A. (1997). *ADHD and the nature of self-control.* New York: Guilford Publications.

Barkley, R. A. (2004). Attention-deficit/hyperactivity disorder and self-regulation: Taking an evolutionary perspective on executive functioning. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 301–323). New York: Guilford Press.

Berndt, T. J., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development, 66*(5), 1312–1329.

Berthold, K. A., & Hoover, J. H. (2000). Correlates of bullying and victimization among intermediate students in the Midwestern USA. *School Psychology International, 21*(1), 65–78.

Blair, C. (2002) School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist, 57,* 111–107.

Blair, C., & Razza, R. P. (2007). Relating effortful control, executive function, and false belief under standing to emerging math and literacy ability in kindergarten. *Child Development, 78*(2), 647–663.

Blum, R. W., McNeely, C. A., & Rinehart, P. M. (2002). Improving the odds: The untapped power of schools to improve the health of teens. Minneapolis: University of Minnesota, Center for Adolescent Health and Development.

Bodrova, E., & Leong, D. J. (2007). *Tools of the mind: The Vygotskian approach to early childhood education*, 2nd ed. New York: Prentice-Hall.

Bodrova E., Leong, D. J., Paynter, D. E., & Semenov, D. (2002). A framework for early literacy instruction: Aligning standards to developmental accomplishments and student behaviors—pre/k through kindergarten. Aurora, CO: Mid-Continent Research for Education and Learning.

Brady, K. T., Myrick, H., & McElroy, S. (1998). The relationship between substance use disorders, impulse control disorders, and pathological aggression. *American Journal on Addictions, 7,* 221–230.

Burchinal, M. R., Peisner-Feinberg, E. S., Bryant, D. M., & Clifford, R. M. (2000). Children's social and cognitive development and child care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Developmental Science, 4*(3), 149–165.

Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science, 11*(4), 302–306.

Carlo, G., Knight, G. P., Eisenberg, N., and Rotenberg, K. J. (1991). Cognitive processes and prosocial behaviors among children: The role of affective attributions and reconciliations. *Developmental Psychology, 27,* 456–461.

Catalano, R. F., Haggerty, K. P., Oesterle, S., Fleming, C. B., & Hawkins, J. D. (2004). The importance of bonding to school for healthy development: Findings from the Social Development Research Group. *Journal of School Health, 74*(7), 252–261.

Cohen, D., & Strayer, J. (1996). Empathy in conduct-disordered and comparison youth. *Developmental Psychology, 32,* 988–998.

Coie, J., Terry, R., Lenox, K., & Lochman, J. (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. *Development and Psychopathology, 7*(4), 697–713.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin, 115,* 74–101.

Cunningham, E. G., Brandon, C. M., and Frydenberg, E. (2002). Enhancing coping resources in early adolescence through a school-based program teaching optimistic thinking skills. *Anxiety, Stress, and Coping, 15*(4), 369–381.

Demetriou, A., Christou, C., Spanoudis, G., & Platsidou, M. (2002). The development of mental processing: Efficiency, working memory, and thinking. *Monographs of the Society of Research in Child Development, 67* (Serial No. 268).

Denham, S. A., & Almeida, M. C. (1987). Children's social problem-solving skills, behavioral adjustment, and interventions: A meta-analysis evaluating theory and practice. *Journal of Applied Developmental Psychology, 8,* 391–409.

Denham, S. A., McKinley, M., Couchoud, E., & Holt, R. (1990). Emotional and behavioral predictor of preschool peer ratings. *Child Development, 61,* 1145–1152.

DiPerna, J. C., & Elliot, S. N. (1999). Development and validation of the academic competence evaluation scales. *Journal of Psychoeducational Assessment, 17,* 207–255.

Dodge, K. A. & Frame, C. L. (1982). Social cognitive biases and deficits in aggressive boys. *Child of Development, 53,* 620–635.

Donohew, L., Zimmerman, R., Cupp, P. S., Novak, S., Colon, S., & Abbell, R. (2000). Sensation seeking, impulsive-decision making, and risky sex: Implications for risk-taking and design of interventions. *Personality and Individual Differences, 28*, 1079–1091.

Duncan, G. J., Dowsett, C. J., Claessens A., Magnuson, K., Huston, A. C., Klebanov, P., et al. (2007). School readiness and later achievement. *Developmental Psychology 43*(6), 1428–1446.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405–432.

Eisenberg, N., Cumberland, A., and Spinrad, T. L. (1998). Parental socialization of emotion. *Psychology Inquiry, 9,* 241–273.

Eisenberg, N., Fabes, R. A., Guthrie, I. K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology*, 78, 136–157.

Eisenberg, N., Fabes, R. A., & Losoya, S. (1997). Emotional responding: Regulation, social correlates, and socialization. In P. Salovey and D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 129–163). New York: BasicBooks.

Eisenberg, N., Fabes, R. A., Nyman, M., Bernzweig, J., & Pinulas, A. (1994). The relations of emotionality and regulation to children's anger-related reactions. *Child Development, 65,* 109–128.

Fabes, R. A., Eisenberg, N., Karbon, M., Bernzweig, J., Speer, A. L., & Carlo, G. (1994). Socialization of children's vicarious emotional responding and prosocial behavior: Relations with mothers' perceptions of children's emotional reactivity. *Developmental Psychology, 30,* 44–55.

Flook, L., Repetti, R. L., & Ullman, J. B. (2005). Classroom social experiences as predictors of academic performance. *Developmental Psychology, 41*(2), 319–327.

Gathercole, S. E., & Pickering, S. J. (2000). Working memory deficits in children with low achievement in the national curriculum at 7 years of age. *British Journal of Educational Psychology, 70*(2), 177–194.

Gilliam, W., & Shahar, G. (2006). Pre-kindergarten expulsion and suspension: Rates and predictors in one state. *Infants and Young Children, 19*(3), 228–245.

Graham, S., & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis. *Developmental Psychology, 34*(3), 587–598.

Greenberg, M. T., Domtrovich, C., Bumbarger, B. (1999). Preventing mental disorder in school-aged children: A review of the effectiveness of prevention programs. Report submitted to The Center for Mental Health Services (SAMHSA), Prevention Research Center, Pennsylvania State University.

Greenberg, M. T., Domtrovich, C., Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention and Treatment, 4,* Article 1a.

Greenberg, M. T., Kusche, C. A., Cook, E. T., & Quamma, J. P. (1995). Promoting emotional competence in school-aged children: The effects of the PATHS curriculum. *Development and Psychopathology, 7,* 117–136.

Guay, F., Boivin, M., & Hodges, E. V. E. (1999). Predicting change in academic achievement: A model of peer experiences and self-system processes. *Journal of Educational Psychology*, 91, 105–115.

Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*(1), 64–105.

Hawkins, J. D., Farrington, D. P., & Catalano, R. F. (1998). Reducing violence through the schools. In Eliot, D. S., Hamburg, B. A., & Williams, K. R. (Eds.) *Violence in American schools* (pp. 188–216). Cambridge: Cambridge University Press.

Hawkins, J., Herrenkohl, T., Farrington, D., Brewer, D., Catalano, R., Harachi, T., et al. (2000, April). Predictors of youth violence. *Juvenile Justice Bulletin*. U.S. Department of Justice, Office of Justice Programs.

Howse, R. B., Lange, G., Farran, D. C., & Boyles, C. D. (2003). Motivation and self-regulation as predictors of achievement in economically disadvantaged young children. *Journal of Experimental Education*, 71(2), 151–174.

Hymel, S., & Ford, L. (2003). School completion and academic success: The impact of early social-emotional competence. In R. E. Tremblay, R. G. Barr, & R. D. Peters (Eds.), *Encyclopedia on early childhood development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development. Retrieved August 5, 2009, from http://www.enfant-encyclopedie.com/pages/PDF/ Hymel-FordANGxp.pdf

Izard, C., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*, 18–23.

Jessor, R. (1993). Successful adolescent development among youth in high-risk settings. *American Psychologist*, 48, 117–126.

Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and Violent Behavior, 9,* 441–476.

Juvonen, J., Nishina, A., & Graham, S. (2000). Peer harassment, psychological adjustment, and school functioning in early adolescence. *Journal of Educational Psychology, 92*(2), 349–359.

Kail, R. V. (2003). Information processing and memory. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.), *Well-being: Positive development across the life course* (pp. 269–280). Mahwah, NJ: Lawrence Erlbaum.

Katsurada, E., & Sugawara, A. I. (1998). The relationship between hostile attributional bias and aggressive behavior in preschoolers. *Early Childhood Research Quarterly, 13,* 623–636.

Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Rothberg, S., et al. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior, 25,* 81–89.

Kochenderfer, B. J., & Ladd, G. W. (1997). Victimized children's responses to peers' aggression: Behaviors associated with reduced versus continued victimization. *Development and Psychopathology, 9,* 59–73.

Kroesbergen, E. H., Van Luit, J. E., Van Lieshout, E. C.,Van Loosbroek, E., & Van de Rijt, B. A. (2009). Individual differences in early numeracy: The role of executive functions and subitizing. *Journal of Psychoeducational Assessment*, 27(3), 226–236.

Lee, V. E., & Burkam, D. T. (2003). Dropping out of high school: The role of school organization and structure. *American Educational Research Journal, 40*(2), 353–393.

Lin, H. L., Lawrence, F., & Gorrell, J. (2003). Kindergarten teachers' views of children's readiness for school. *Early Childhood Research Quarterly, 18,* 225–237.

Litvack-Miller, W., McDougall, D., & Romney, D. M. (1997). The structure of empathy during middle childhood and its relationship to prosocial behavior. *Genetic, Social, and General Psychology Monographs, 123*(3), 303–324.

Lochman, J. E. (1992). Cognitive-behavioral intervention with aggressive boys: Three-year follow-up and preventive effects. *Journal of Consulting and Clinical Psychology, 60*(3), 426–432.

Lochman J. E., Burch P. R., Curry J. F., & Lampron, L. B. (1984). Treatment and generalization effects of cognitive-behavioral and goal-setting interventions with aggressive boys. *Journal of Consulting and Clinical Psychology*, 52, 915–916.

Lösel, F., & Beelmann, A. (2003). Effects of child skills training in preventing antisocial behavior: A systematic review of randomized evaluations. *The ANNALS of the American Academy of Political and Social Science*, 587(1), 84–109.

Malecki, C. K., & Elliott, S. N. (2002). Children's social behaviors as predictors of academic achievement: A longitudinal analysis. *School Psychology Quarterly, 17,* 1–23.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York: Basic Books.

McClelland, M., Acock, A. C., & Morrison, F. J. (2006). The impact of kindergarten learning-related social skills on academic achievement at the end of elementary school. *Early Childhood Research Quarterly, 21,* 471–490.

McClelland, M. M., Cameron, C. E., Connor, C. M., Farris, C. L., Jewkes, A. M., & Morrison, F. J. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. *Developmental Psychology, 43,* 947–959.

McClelland, M. M., Ponitz, C. C., Messersmith, E. E., & Tominey, S. (2010). Self-regulation: The integration of cognition and emotion. In R. Lerner (Series Ed.) & W. Overton (Vol. Ed.), *Handbook of lifespan human development, Vol. 4. Cognition, biology, and methods* (pp. 509–553). Hoboken, NJ: Wiley.

McNeely, C., & Falci, C. (2004). School connectedness and the transition into and out of health-risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Health, 74*(7), 284–292.

Metcalfe, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review, 106,* 3–19.

Miles, S. B., & Stipek, D. (2006). Contemporaneous and longitudinal associations between social behavior and literacy achievement in a sample of low-income elementary school children. *Child Development 77*(1), 103–117.

Morrison, F. J., Ponitz, C. C., & McClelland, M. M. (2010). Self-regulation and academic achievement in the transition to school. In S. Calkins & M. Bell (Eds.), *Child development at the intersection of emotion and cognition* (pp. 203–224). Washington, D.C.: American Psychological Association.

Nelson, W. M., III, & Finch, A. J., Jr. (2000). Managing anger in youth: A cognitive-behavioral intervention approach. In P. C. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (pp. 129–170). New York: The Guilford Press.

NICHD Early Child Care Research Network (2003). Do children's attention processes mediate the link between family predictors and school readiness? *Developmental Psychology, 39,* 581–593.

O'Neil, R., Welsh, M., Parke, R. D., Wang, S., & Strand, C. (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology, 26,* 290–303.

Pepler, D. J., Craig, W. M., Connolly, J., & Henderson, K. (2002). Aggression and substance abuse in early adolescence: My friends made me do it. In C. Wekerle & A. M. Wall (Eds.), *The violence and addiction equation: Theoretical and clinical issues in substance abuse and relationship violence* (pp. 151–166). Philadelphia: Brunner/Mazel.

Ponitz, C. C., McClelland, M. M., Matthews, J. S., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology, 45,* 605–619.

Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report, 16*(3), 3–18.

Raver, C. C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children* (Policy Paper No. 3). New York: National Center for Children in Poverty, Columbia University Mailman School of Public Health.

Rennie, D., Bull, R., & Diamond, A. (2004). Executive functioning in preschoolers: Reducing the inhibitory demands of the Dimensional Change Card Sort task. *Developmental Neuropsychology, 26,* 423–443.

Resnick, M. D., Ireland, M., & Borowsky, I. (2004). Youth violence perpetration: What protects? What predicts? Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, *35,* 424.e1–e10.

Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly, 15*(2), 147–166.

Rothbart, M. K., & Posner, M. I. (2005) Genes and experience in the development of executive attention and effortful control. In L. A. Jenson & R. W. Larson (Eds.), *New horizons in developmental theory and research* (pp. 101–108). San Francisco: Jossey-Bass.

Rubin, K. H., Bream, L. A., & Rose-Krasnor, L. (1991). Social problem-solving and aggression in childhood. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 219–248). Hilsdale, NJ: Lawrence Erlbaum Assoc.

Rumberger, R. W. (2001). *Why students drop out of school and what can be done.* Paper presented at the conference Dropouts in America: How severe is the problem? What do we know about intervention and prevention? Harvard Graduate School of Education, Cambridge, MA.

Saarni, C. (1997). Emotional competence and self-regulation in childhood. In P. Salovey and D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 35–66). New York: Basic Books.

Schwartz, D., Dodge, K. A., & Coie, J. D. (1993). The emergence of chronic peer victimization in boys' play groups. *Child Development, 64,* 580–588.

Schwartz, D., & Gorman, A. H. (2003). Community violence exposure and children's academic functioning. *Journal of Educational Psychology, 95*(1), 163–173.

Shaw, D. S., Gilliom, M., Ingoldsby, E. M., & Nagin, D. S. (2003). Trajectories leading to school-age conduct problems. *Developmental Psychology*, *39*(2), 189–200.

Shure, M. B., & Spivack, G. (1980). Interpersonal problem-solving as a mediator of behavioral adjustment in preschool and kindergarten children. *Journal of Applied Developmental Psychology, 1,* 29–44.

Shure, M. B., & Spivack, G. (1982). Interpersonal problem-solving in young children: A cognitive approach to prevention. *American Journal of Community Psychology, 10,* 341–356.

Simons, J. S., Carey, K. B., & Gaher, R. M. (2004). Lability and impulsivity synergistically increase risk for alcohol-related problems. *The American Journal of Drug and Alcohol Abuse, 30*, 685–694.

Slee, P. T. (1994). Situational and interpersonal correlates of anxiety associated with peer victimisation. *Child Psychiatry and Human Development, 25*(2), 97–107.

Spivack, G., and Shure, M. B. (1974). *Social adjustment of young children: A cognitive approach to solving real-life problems.* San Francisco: Jossey-Bass.

St. Clair-Thompson, H. L., & Gathercole, S. E. (2006). Executive functions and achievements on national curriculum tests: Shifting, updating, inhibition, and working memory. *Quarterly Journal of Experimental Psychology*, *59,* 745–759.

Swanson, C. (2004). *Who graduates? Who doesn't? A statistical portrait of public high school graduation, class of 2001.* Washington, DC: The Urban Institute.

Teo, A., Carlson, E., Mathieu, P. J., Egeland, B., & Sroufe, L. A. (1996). A prospective longitudinal study of psychosocial predictors of achievement. *Journal of School Psychology, 34,* 285–306.

Thompson, R. A., & Raikes, H. A. (2007). The social and emotional foundations of school readiness. In D. F. Perry, R. K. Kaufmann, & J. Knitzer (Eds). *Social and emotional health in early childhood: Building bridges between services and systems* (pp. 13–37). Baltimore, Maryland: Paul H. Brookes.

Tolan, P. H., & Guerra, N. G. (1994). Prevention of delinquency: Current status and issues. *Applied and Preventive Psychology, 3,* 251–273.

Tominy, S., & McClelland, M. M. (2010). Red light, purple light: Findings from a pilot intervention using classroom games to improve behavioral self-regulation. Manuscript submitted for publication.

Trentacosta, C. J., & Izard, C. E. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion, 7,* 77–88.

Underwood, M. K, Coie, J. D., & Herbsman, C. R. (1992). Display rules for anger and aggression in school-age children. *Child Development, 63,* 366–380.

Valiente, C., Lemery-Chalfant, K., Swanson, J., & Reiser, M. (2008). Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology, 100*(1) 67–77.

Vitaro, F., Brendgen, M., Larose, S., & Tremblay, R. E. (2005). Kindergarten disruptive behaviors, protective factors, and educational achievement by early adulthood. *Journal of Educational Psychology, 97*(4), 617–629.

Vitaro, F., Ferland, F., Jacques, C., & Ladouceur, R. (1998). Gambling, substance use, and impulsivity during adolescence. *Psychology of Addictive Behaviors, 12*(3)*,* 185–194.

Welsh, M., Parke, R. D., Widaman, K., & O'Neil, R. (2001). Linkages between children's social and academic competence: A longitudinal analysis. *Journal of School Psychology, 39*(6), 463–482.

Wentzel, K. R. (1991). Social competence at school: Relation between social responsibility and academic achievement. *Review of Educational Research, 61,* 1–24.

Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*(2), 357–364.

Wentzel, K. R., & McNamara, C. (1999). Interpersonal relationships, emotional distress, and prosocial behavior in middle school. *The Journal of Early Adolescence, 19*(1), 114–125.

Wilson, D. (2004). The interface of school climate and school connectedness and relationships with aggression and victimization. *Journal of School Health, 74*(7), 293–299.

Wingspread declaration on school connections (2004). *Journal of School Health, 74*(7), 233–234.