A review of the literature on social and emotional learning for students ages 3–8: Outcomes for different student populations and settings (part 4 of 4)

What's Known

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Social and emotional learning (SEL) is the process by which children and adults learn to understand and manage emotions, maintain positive relationships, and make responsible decisions. This is the fourth in a series of four related reports about what is known about SEL programs for students ages 3–8. The report series addresses four issues raised by the Regional Educational Laboratory (REL) Mid-Atlantic's Early Childhood Education Research Alliance: characteristics of effective SEL programs (part 1), implementation strategies and state and district policies that support SEL programming (part 2), teacher and classroom strategies that contribute to social and emotional learning (part 3), and outcomes of social and emotional learning among different student populations and settings (part 4). This report presents the outcomes of social and emotional learning in different student populations and settings.

Why this review?

To thrive in a social world, students must learn social and emotional skills, such as controlling their impulses, interpreting and understanding emotions, motivating themselves, and developing positive attitudes toward school and community (Pianta & La Paro, 2003; Raver, 2002). Therefore, early childhood

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programs aim to help students develop socially and emotionally in addition to fostering academic school readiness.

This process, referred to as social and emotional learning, centers on "the development of five interrelated sets of cognitive, affective, and behavioral competencies" (CASEL, 2012). These five competencies include self-awareness, self-management, social awareness, relationship skills, and responsible decisionmaking (see box 1 for definitions).

What the review examined

Because of recent policy interest in social and emotional learning, a large amount of information is available about SEL programs and approaches, including literature reviews, research syntheses, practice guides, and meta-analyses. Members of REL Mid-Atlantic's Early Childhood Education Research Alliance identified the need for an organized summary that addresses school-based social and emotional learning for the general population of students ages 3–8, synthesizes the body of literature, and enables educators to easily identify the programs and strategies that are most appropriate for their setting and student population.

Research questions

With these goals in mind, the alliance developed four research questions to guide the project:

1. What are the characteristics of effective SEL programs?
2. What implementation strategies and state and district policies support SEL programming?
3. What teacher and classroom strategies contribute to social and emotional learning?
4. What outcomes have SEL programs demonstrated among different student populations and settings?

Box 1. Five competencies define social and emotional learning

The Collaborative for Academic, Social, and Emotional Learning (CASEL) identifies these five interrelated competencies as central to social and emotional learning:

Self-awareness. Knowing what one feels, accurately assessing one's interests and strengths, and maintaining a well-grounded sense of self-confidence.

Self-management. Regulating one's emotions to handle stress, control impulses, and motivate oneself to persevere in overcoming obstacles, setting and monitoring progress toward the achievement of personal and academic goals, and expressing emotions appropriately.

Social awareness. Being able to take the perspective of and empathize with others, recognizing and appreciating individual and group similarities and differences.

Relationship skills. Establishing and maintaining healthy and rewarding relationships on the basis of cooperation and resistance to inappropriate social pressure; preventing, managing, and constructively resolving interpersonal conflict; and seeking help when needed.

Responsible decisionmaking. Making decisions based on a consideration of all relevant factors, including applicable ethical standards, safety concerns, and social norms; the likely consequences of taking alternative courses of action; and respect for others.

Source: CASEL, 2012.

These four research questions guided REL Mid-Atlantic's systematic search, review, and synthesis of recent (2008–15) research reviews and meta-analyses (rather than original studies and sources) on the topic of social and emotional learning.[1] The review found 83 research syntheses that met the study inclusion criteria, including peer-reviewed journal articles, book chapters, reports, and online publications. Each synthesis was coded for criteria such as research question, methodology, relevant populations/ages, and settings. (The methodology and coding results are described in appendix A of part 1. The literature is mapped to the relevant research questions in appendix B of part 1; O'Conner, De Feyter, Carr, Luo, & Romm, 2017a.)

The social and emotional learning report series

Four related reports summarize the literature addressing each of the four research questions. This report (part 4 of 4) focuses on the fourth research question on the outcomes of SEL programs. The other three reports identify several key components of effective programs and offer guidance on program selection (part 1); offer guidance on program implementation and identify trends toward integrating this learning at the school, district, and state levels (part 2); and describe teacher and classroom strategies (part 3; O'Conner et al., 2017a, b, c).

Each report can stand alone as a summary of the research literature on a specific topic. The reports can be read in any order. The first section (Why this review?) and this section (What the review examined) of each report provide similar introductory information, with more detail on social and emotional learning and how it is related to executive functioning and self-regulation presented in part 1 (O'Conner et al., 2017a).

What the review found

Research shows that SEL programs can have positive effects on student academic, social, and emotional outcomes. This report reviews the literature on outcomes for the general student population and for student subgroups, including students in low-income families, racial/ethnic minority students, male and female students, English learner students, and students from urban and rural locales.

Social and emotional learning improves social skills and academic performance for the general population of students ages 3–8 in school settings

Decades of developmental and educational research show that students' social and emotional competence is not only important in its own right (early behavior problems are the greatest predictor of long-term negative outcomes like incarceration, substance abuse, and unemployment), but also improves students' academic performance (Center for Evidence-Based Practice, 2004; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The positive social and academic outcomes found by six recent meta-analyses on the effectiveness of social and emotional learning and behavioral intervention programming are shown in table 1.

The outcomes of social and emotional learning for student subpopulations are mixed

A large body of research shows cultural differences in social and emotional processes, such as how emotions are conveyed, interpreted, and regulated (Thompson, Winer, & Goodvin, 2005; Tsai, Knutson, & Fung, 2006; Tsai, Levenson, & McCoy, 2006). Furthermore, students from certain subgroups are more likely to experience factors that put them at risk for poor social, emotional, and behavioral development and thus for negative life outcomes such as school dropout and delinquency (Durlak et al., 2011).

Table 1. Positive impacts of social and emotional learning programs from six meta-analyses

Meta analysis	Number of studies and publication dates	Target area	Positive social and emotional outcomes	Positive academic outcomes
Center for Health and Health Care in Schools (2014)	28 studies, 2001–13	Behavioral health interventions	• Enhanced resilience and emotional functioning (increased academic motivation, self-efficacy, commitment to school, and stability during grade-level transitions). • Reduced violence, bullying, and other problem behaviors among students.	• Improved academic achievement (higher grades, standardized test scores, grade point averages, and teacher-rated academic competence). • Improved behaviors related to academic success (increased on-task learning behavior, better time management, strengthened goal-setting and problem-solving skills, and decreased rates of absenteeism and suspensions).
Diekstra (2008)	19 meta-analyses, 1997–2008	Universal, school-based social and emotional learning (SEL) or skills for life programs	• Enhanced social and emotional skills (social competence, conflict resolution skills). • Increased positive self-image (self-efficacy, self-esteem) and prosocial behavior (altruistic behavior, helping). • Reduced or prevented substance abuse and mental health problems (internalizing symptoms, anxiety, depression, suicidality).	• Improved school grades and test scores in core subjects like reading and math.
Durlak et al. (2011)	213 studies, 1970–2007	Universal, school-based SEL programs	• Improved emotion recognition, stress management, empathy, problem solving, decisionmaking skills, self-concept, bonding to school, and classroom behavior. • Fewer conduct problems (disruptive classroom behavior, aggression, bullying, delinquent acts). • Reduced emotional distress (depression, stress, social withdrawal).	• Improved academic performance, including grades and test scores. • Average effect size of SEL programs on academic achievement (0.27) translates into an 11 percentile point gain in achievement.
Farahmand, Grant, Polo, & Duffy (2011)	17 studies, 2000–09	School-based mental health and behavioral programs for low-income urban youth	• Improved competence and social skills. • Reduced internalizing behaviors (depression, anxiety) and externalizing behaviors (aggression, conduct problems).	• Improved academic outcomes.
January, Casey, & Paulson (2011)	28 peer-reviewed journal articles, 1981–2007	Classroomwide social skills interventions	• Improved social competence (small but positive effects).	• Not examined.
Sklad, Diekstra, Ritter, Ben, & Gravesteijn (2012)	75 studies, 1995–2008	Universal, school-based social, emotional, and behavioral programs	• Increased social skills, positive self-image, and prosocial behavior. • Reduced antisocial behavior, substance abuse, and mental health problems.	• Improved academic achievement (grade point average of core academic subjects, reading achievement score, California Achievement Test score, and teacher-rated academic competence).

Note: Universal, school-based programs are delivered in a classroom setting to all the students in the class; students are not selected individually for participation in the program.

Source: Authors' analysis of meta-analyses listed in the table.

While research on SEL programs suggests that social and cultural differences may influence outcomes of social and emotional learning for different populations, only a handful of SEL studies have systematically attempted to consider the cultural, linguistic, and social context of the students. For instance, in a recent meta-analysis on the effects of SEL programs, nearly one-third of studies contained no information on student ethnicity (31 percent) or socioeconomic status (32 percent; Durlak et al., 2011).

The following discussion summarizes the research findings of SEL programs for subgroups including students in low-income families, racial/ethnic minority students, male and female students, English learner students, and students from urban and rural locales. While more evidence is needed, these findings may be useful in the development, selection, and implementation of SEL programs with diverse student populations.

Students in low-income families. Exposure to multiple poverty-related risks increases the odds that students who are socioeconomically disadvantaged will demonstrate less social and emotional competence, lower executive functioning skills, and more behavior problems (Webster-Stratton & Reid, 2008). Social services for low-income students with emotional and behavioral problems are inadequate, and childcare providers and teachers are often overburdened by the level of support these students need in the classroom (Cooper, Masi, & Vick, 2009). Moreover, teachers serving students from predominantly low-income homes tend to use significantly harsher, more detached, and more insensitive teaching strategies than teachers serving students from middle-income families (Webster-Stratton & Reid, 2008).

Direct research on social and emotional learning in low-income populations is limited, with studies showing mixed effects (Diekstra, 2008; Durlak et al., 2011; Farahmand et al., 2011; Garner, Mahatmya, Brown, & Vesely, 2014; McCabe & Altamura; 2011; Morris et al., 2014). Research findings suggest that, overall, SEL programs are just as effective or more effective for students in low-income families as for students in middle- to high-income families (Diekstra, 2008; Durlak et al., 2011; Farahmand et al., 2011). However, effectiveness for students in low-income families appears to be very program- and study-specific. Differences in results may be due to contextual and community factors, program designs and components, or methodological factors like the cultural validity of measures used to assess outcomes. More research is needed on the implementation and effectiveness of SEL programs for students in low-income families.

Racial/ethnic minority students. Although most racial/ethnic minority students do not develop long-term social and emotional difficulties, some researchers have found lower social and emotional competence and greater behavior problems among Black and Hispanic students than among White or Asian American students (Garner et al., 2014). These differences emerge in the early years and are likely caused by a complex set of socioeconomic and social and cultural factors (Garner et al., 2014; Farahmand et al., 2011). The research indicates that young racial/ethnic minority students (ages 0–5) are over-represented in the child welfare system and are disproportionately more likely to experience factors that put them at risk for poor social, emotional, and behavioral development (Cooper et al., 2009):

- 22 percent of Hispanic students and 21 percent of Black students were victimized.
- 21 percent of Black students were maltreated, compared with 14 percent of all students.
- 25 percent of Black students and 14 percent of Hispanic students received specialty mental health services in preschool.
- Black students are three to five times more likely to be expelled from preschool than are their peers.
- Black students are 8.5 times more likely to have a parent incarcerated than are White students.

The research evidence on SEL interventions with racial/ethnic minority students is mixed. A meta-analysis of low-income, urban youth found no significant differences in the effectiveness of school-based mental health and behavioral programs as a function of race/ethnicity (Farahmand et al., 2011). However, some research indicates that SEL interventions can mitigate factors that put students at risk for poor social,

emotional, and behavioral development by improving areas of personal, social, and academic life (Payton et al., 2008). Since social and emotional competence predicts later school performance, racial/ethnic minority students may benefit from having SEL interventions available to them early (Garner et al., 2014).

Teachers and staff should understand that racial/ethnic minority students may behave in ways that are specific to their own social and cultural background and that these behaviors may not match the norm of the mainstream culture (Farahmand et al., 2011). When working with students from diverse backgrounds, it is important to know their backgrounds well enough to be able to judge whether they will find the values, beliefs, and skills in the SEL intervention to be useful. If students perceive the program as irrelevant, they are unlikely to benefit from the lessons (Merrell & Gueldner, 2010).

Male and female students. It is well-known that parents socialize boys and girls differently with respect to whether it is acceptable to express their emotions (for example, boys are taught to minimize the expression of emotions like sadness, and girls are socialized to express more emotion in general; Macklem, 2008). Gender differences in self-regulating behavior can be observed in students as young as three, with preschool boys being four times more likely than girls to be expelled (Cooper et al., 2009; Macklem, 2008).

There is little data on the relationship between gender and the effectiveness of SEL programs (Diekstra, 2008). The few large studies that have reported gender effects have either found that effects do not vary greatly with gender or have found mixed effects (Diekstra, 2008; Macklem, 2008). Although well-known differences exist in the gender socialization of emotion, more research is needed on differential effects of SEL programming according to gender.

English learner students. A large body of research attests to cultural and linguistic differences in the ways emotions are conveyed, interpreted, or regulated (Honigsfeld & Lupeke, 2010). English learner students may experience more difficulty identifying emotions in their second language and may struggle in the social arena (Garner et al., 2014). Moreover, culturally and linguistically diverse students tend to be exposed to major life stressors at higher rates than students from the mainstream culture (Merrell & Gueldner, 2010). Culturally and linguistically diverse students are more likely to be poor, live in violent neighborhoods, to be undocumented immigrants, and to have limited English proficiency. All of these factors have been linked to negative social outcomes such as high dropout rates, teenage parenthood, and delinquent behavior (Merrell & Gueldner, 2010).

Direct research on SEL programs with English learner students is limited. However, individual programs have reported strategies for implementing social and emotional learning with this group of students. Effective social and emotional learning for English learner students involves either completely translating the SEL lesson into the students' home language or adapting the lesson in ways that incorporate best practices for the instruction of these students (such as use of more visuals, frequent repetition of key concepts, and constant checks for understanding; Merrell & Gueldner, 2010). Other strategies that can boost personal and interpersonal skills among English learner students include role playing, peer tutoring, cooperative learning, journal writing, and use of children's literature (Honigsfeld & Lupeke, 2010). By carefully scaffolding learning opportunities for English learner students, teachers can encourage the growth of social and emotional competence along with language and literacy skills.

Students in urban schools. Students in urban areas or under-resourced areas are surrounded by added stressors that make it difficult for them to learn, including higher rates of homelessness, unemployment, and crime (Farahmand et al., 2011). Because of these factors, SEL programs and program studies commonly take place in urban areas. In a recent meta-analysis, just under half the studies (47 percent) were conducted in urban schools (Durlak et al., 2011). Because many studies have looked at the effects of SEL

on populations that are both urban and low income, it is difficult to distinguish the impacts of urban locale from the impacts of poverty. In general, meta-analyses have found no differences in the effectiveness of SEL programs for urban students than for students in other locales (Durlak et al., 2011; Farahmand et al., 2011).

One notable finding is that universal SEL programs may be more effective with this population than those that target only students with behavior problems (Farahmand et al., 2011). Universal SEL programs have broad social and emotional focus and are delivered to all students. In contrast, targeted SEL programs have a narrow focus (for example, anger management) and are delivered to students with identified problems. One interpretation of this finding is that stressors endemic to urban poverty, such as exposure to community violence, limit the effectiveness of targeted SEL programs (Farahmand et al., 2011). Particular caution is warranted when implementing programs that target negative behavior directed toward others, such as aggression or bullying among urban students, because these programs have been found to have negative effects such as increasing aggression and conduct problems.

Students in rural schools. Although some studies have included students from rural locations, little is known about the overall effect of geographic location on SEL programs (Garner et al., 2014). Individual programs have reported helpful strategies for implementing SEL in rural locations, including more engagement with the community and with students' families, more focus on process than content, and careful selection of the modes of delivery (Garner et al., 2014). More research is needed on the effectiveness of SEL programs and strategies in rural locations.

Implications of the review findings

The results of six meta-analyses on the effects of social and emotional learning programs show positive effects on a wide range of social and academic outcomes for the general student population. This includes increased academic motivation, self-efficacy, emotion recognition, empathy, and bonding to school. SEL programs increased conflict-resolution skills and reduced antisocial behaviors and behavior problems. Students who participated in SEL programs also had higher grades and test scores.

While research suggests that social and cultural differences may influence outcomes of social and emotional learning for different populations, only a handful of studies have systematically attempted to consider the cultural, linguistic, and social context of the students. Students in low-income families, racial/ethnic minority students, English learner students, and students who live in urban settings are likely to experience factors that put them at risk for poor social, emotional, and behavioral development. Overall, research has found that SEL programs are at least as effective for these subpopulations as for the full population of students. While some successful strategies for implementing social and emotional learning with diverse populations have been identified, more research is needed.

Implications of the social and emotional learning report series

Decades of SEL research have begun to answer some of the questions educators, researchers, and policymakers have asked about what really works in supporting students' overall development, keeping them engaged in school, and giving them the knowledge and skills to thrive from childhood through adulthood. However, although great strides have been made, some SEL research areas remain largely uncharted. This SEL report series identified five areas where additional focus would strengthen knowledge about evidence-based practices:

- Some research syntheses have identified general quality issues with the literature base, such as reliance only on self-reports or lack of data on the reliability and validity of measures (Durlak et al., 2011; Humphrey, 2013).

- Only a small number of studies report data on implementation, and even fewer connect implementation data with outcomes.
- Few studies report on how outcomes differ by social and cultural factors or by gender.
- SEL assessments have been designed and used mostly for a homogeneous White population, and rarely have efforts been made to assess the applicability of the instruments to students in different racial/ethnic or language groups.
- Finally, because schools and teachers implement social and emotional learning within real-world circumstances and constraints, components must sometimes be adapted to fit specific requirements. More research is needed on exactly which components of individual programs can be adapted without jeopardizing program outcomes and which need to be implemented exactly as prescribed.

The promise of social and emotional learning as an educational approach is only as strong as the methods used to understand and develop it. Attention to these key research gaps will provide better evidence and therefore better services to support students and families.

Note

1. The goal of the literature search was to summarize research syntheses and identify useful resources for stakeholders. The aim was not to conduct an exhaustive search and analysis of original research studies, which has already been done.

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REL 2017–248

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February 2017

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-IES-12-C-0006 by Regional Educational Laboratory Mid-Atlantic administered by ICF International. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

O'Conner, R., De Feyter, J., Carr, A., Luo, J. L., & Romm, H. (2017). *A review of the literature on social and emotional learning for students ages 3–8: Outcomes for different student populations and settings (part 4 of 4)* (REL 2017–248). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Mid-Atlantic. Retrieved from http://ies.ed.gov/ncee/edlabs.

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