

A Preschool Pilot Study of *Connecting with Others: Lessons for Teaching Social and Emotional Competence*

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Abstract Social-emotional learning in early childhood sets the stage for students' future behaviors in schools. The current study examined the effects of a social-emotional skills curriculum on the behavior of students in an early childhood program. The children received instruction in social and emotional skills using the *Connecting with Others: Lessons for Teaching Social and Emotional Competence* program. Pre-test and post-test scores for the BASC-2 Rating Scale and the Connecting with Others Rating Scale were used to determine if the children demonstrated progress in their behaviors by the end of the intervention. The results indicated that the social skills curriculum *Connecting with Others: Lessons for Teaching Social and Emotional Competence* was associated with positive changes in the children's behaviors.

Keywords Social skills · Character education · Emotional skills · Early childhood · Preschool

Early childhood is a time when young children develop numerous social and emotional competencies, including the capacity to control their emotions, a budding value system, self-confidence, and social skills (Berk 2010). Social and emotional competencies are important for successful adjustment. For example, Bornstein et al. (2010) found that lower social competence during the preschool years predicted both internalizing and externalizing

problems in early adolescence. Without explicit instruction and coaching in these social and emotional skills, students may not be able to manage their feelings and behaviors successfully.

Young children who lack social and emotional competence frequently demonstrate discipline problems in school and are at risk for not achieving future academic success (McClelland 2006). For example, conduct difficulties increase the risk of school dropout, substance abuse, delinquency, and violent behavior (Hawkins et al. 1999). Consequently, fostering social and emotional development is just as important for helping students attain positive life outcomes as it is for helping students to advance academically (Richardson 2000).

Social-Emotional Learning Programs

Competence in managing feelings and social relationships contributes to success in the classroom, at home, and in life in general. For example, people with this competency are attentive to emotional cues, listen well, show sensitivity, and understand others' perspectives (Goleman 1995). Educating the whole child involves integrating psychomotor, cognitive, and affective domains. Drawing on the work of Salovey and Mayer (1990), Goleman (1995) brought particular attention to the affective domain by suggesting that emotional intelligence was as important as cognitive intelligence in determining success across the lifespan. Goleman conceptualized emotional intelligence as comprising several abilities: knowledge of one's emotions, management of these emotions, self-motivation, recognition of and empathy for others' emotions, and management of others' emotions. In subsequent work, Goleman (2006) more explicitly included social skills as critical tools for

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success. Many educators would agree that learning both emotional and social skills is an essential part of early childhood development.

An increased emphasis on integrating social and emotional skills into general education has been promoted by the Collaborative for Academic, Social, and Emotional Learning (CASEL 2005). CASEL suggests that social-emotional learning comprises the following skills: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (2005). CASEL researchers (Payton et al. 2008) conducted three meta-analyses of 317 studies that examined the impact of programs that aimed to foster these skills in students in kindergarten through eighth grade. Significant and moderate effects of social-emotional learning programs were found for a variety of outcomes, including skill competence, academic achievement, conduct problems, and emotional distress. Other studies have found similar findings with regard to students' attitudes and behaviors (e.g., Ragozzino et al. 2003) as well as academic achievement and motivation (e.g., Roeser et al. 2000).

Social-Emotional Learning in Early Childhood Education

School success today requires that young children be taught more than just academics (Taylor and Dymnecki 2007). Preschool teachers identify disruptive behaviors as the biggest challenge that they face while trying to manage their classrooms (Jalongo 2006). Research has shown that the prevalence of aggressive behavior in preschool children is about 10% and could be as high as 25% for children who come from low socioeconomic backgrounds (Webster-Stratton and Reid 2004). Young children who are aggressive can easily establish a stable pattern of social problems by the time they reach lower elementary school. Many children who demonstrate behavioral problems are being asked to leave schools or daycare settings by the time they are 6 years old (Webster-Stratton and Reid 2003). Therefore, interventions to reduce or prevent behavioral problems must begin at an early age. Indeed, serious behavioral problems can intensify when an early intervention is not implemented, thus placing the child at higher risk for peer rejection and deficits in his or her social development (Webster-Stratton and Reid 2003).

In summary, given that children's behaviors tend to stabilize around the age of eight (Berk 2010), teaching children how to effectively express emotions and engage in positive relationships before and during early childhood education may decrease their risk for developing academic, behavioral, and mental health problems. One method of interrupting problematic behavior in early childhood is to

teach social and emotional skills *explicitly*. The theory supporting this approach is based on a body of research indicating that children need to be systematically taught how to interact with others when they display cognitive and behavioral social skills deficits (Webster-Stratton and Reid 2003). For example, direct social skills intervention improves the social skills of both preschool and elementary-aged children (Caldarella et al. 2009; Kamps and Ellis 1995). These interventions can result in significant improvements in both parents' and teachers' interactions with children and positively influence children's academic and social competence. Young children expressing disruptive behaviors need to be targeted for early intervention because the development of social skills is not automatic for them, as it may be for socially competent children (Webster-Stratton and Reid 2003).

In addition to targeting children who are at risk, researchers (e.g., Greenberg et al. 2003) have suggested that social-emotional learning programs should be broadly integrated into the school curriculum so that all children may have a chance to benefit. Although several programs have been found to be effective in early childhood education settings (e.g., PATHS: Greenberg et al. 1998; Second Step: Frey et al. 2000), there is still much to be discovered about which programs work for whom and under what circumstances.

Current Study

The current pilot study explored outcomes associated with the *Connecting with Others: Lessons for Teaching Social and Emotional Competence, K-2* program (Richardson 1996a) in a preschool classroom. The hypothesis was that the program would be associated with improvements in pro-social behaviors and decreases in disruptive behaviors.

Method

Participants

The sample for the current study consisted of 18 children who attended preschool at a family service center in Northeast Nebraska. In general, the participants had a low socio-economic status, as the preschool program is designed for low-income and/or at-risk families and is federally funded. Participation in the preschool program was voluntary, and families had to meet eligibility guidelines related to income and at-risk status. Approximately 15% of the children who attended the preschool program had disabilities.

The ages of the participants ranged from 3 to 5 years. The participants were selected based on enrollment into the preschool program, and parental permission was obtained for all students. Of the 18 children who participated, 3 were African American, 8 were Caucasian, and 7 were Hispanic American. The gender of participants was equally divided (i.e., 50% male and 50% female). The supervising preschool teacher had been working with each participant for 1–3 years, depending on the participant's age, and therefore knew the participants well.

Instruments

The supervising preschool teacher completed two instruments to evaluate social and behavioral aspects of each child pre- and post-intervention. The first outcome measure was the *Behavior Assessment System for Children, 2nd Edition* (BASC-2; Reynolds and Kamphaus 2006), a well-established, psychometrically sound instrument measuring both positive and negative behaviors. The BASC-2 has been compared to several related behavioral assessment tools: the Achenbach System of Empirically Based Assessment Caregiver-Teacher Report Form (ASEBA; Rescorla 2005), the Conners' Teacher Rating Scale-Revised (CTSR-R; Conners et al. 2004), and the previous version of the BASC (Reynolds and Kamphaus 1992). In general, correlations between subscales were high (in the .70 and .80s) when they addressed similar content. The BASC-2 focuses on the following areas within the classroom setting: hyperactivity, aggression, anxiety, depression, somatization, atypicality, withdrawal, attention and conduct problems, adaptability, social skills, leadership, and functional communication (Reynolds and Kamphaus 2006). The scale consists of 100 questions. Each statement is evaluated by circling "N" (never), "S" (sometimes), "O" (often), or "A" (always).

The second measure of social and behavioral functioning was the *Connecting with Others Rating Scale* (Richardson 1996b), a 25-item teacher-administered rating scale that was designed to address the five of the six skills taught in Richardson's (1996a) *Connecting with Others: Lessons for Teaching Social and Emotional Competence* program (i.e., all areas except for Empathy/Caring). Each statement is evaluated by circling a number: 0 (*not applicable*), 1 (*never*), 2 (*some of the time*), 3 (*most of the time*), and 4 (*all of the time*). A pre-test for each child was completed by the supervising preschool teacher prior to the intervention and the same measure was administered as a post-test following the completion of the social skills instruction. The responses to the 25 items described the degree to which participants displayed the social skills in school. The scale included scores for the five subscales as well as an overall score. In this study, the internal consistency of the subscales

as well as the overall score was excellent, with Cronbach's alphas ranging from .80 to .98 across pre and post measurement points.

Procedure

The social-emotional curriculum used in the study was the *Connecting with Others: Lessons for Teaching Social and Emotional Competence K-2* program (Richardson 1996a). The curriculum consists of 30 lessons that are divided into six skill areas: Concept of Self and Others, Socialization, Problem Solving/Conflict Resolution, Communication, Sharing, and Empathy/Caring (see Table 1 for lesson content). Each skill area integrates concepts from three theoretical frameworks: Transactional Analysis (Berne 1996), Cognitive Behavior Therapy (Meichenbaum 2007), and Positive Assertion (Alberti and Emmons 2008).

Each lesson follows a specific format that incorporates direct instruction, group activities, and independent activities. The instructional strategies and activities include storytelling, relaxation, modeling, scaffolding, behavior rehearsals, hypothetical dilemmas, creative visualization, creative expression (e.g., puppetry, role-playing, and art activities), self-regulation exercises, problem solving, and cooperative learning. These strategies are employed flexibly and are tailored to the individual needs of the class and of the students, in contrast to programs that rely primarily on uniform, methodical instruction. For example, each student's learning style and personality type are considered in selecting a strategy. Furthermore, the lessons can be integrated within the school's academic curriculum or taught separately.

The participants received instruction from the first author, a master's-level university student, during 8 weeks of the summer months of the preschool program. In addition to reading the *Connecting with Others* manual, the instructor discussed the curriculum with teachers who had used it in their classrooms and observed the implementation of the curriculum by other teachers. The instruction was delivered in hour-long lessons, and students received 1–2 lessons per week. Students received direct instruction as a class and were separated into small groups for group and independent activities. Assessment components for checking understanding followed the initial instruction and at the completion of each lesson.

Results

BASC-2 pre-test and post-test means and standard deviations were calculated for each student and can be found in Table 2. Data were analyzed using paired *t* tests with H_0 : difference = 0 and H_A : difference \neq 0, and effect size

Table 1 Connecting with others: lessons for teaching social and emotional competence, K-2 (Richardson 1996a) skill areas and lessons

Skill area 1	Skill area 2	Skill area 3	Skill area 4	Skill area 5	Skill area 6
Concept of self & others	Socialization	Problem solving & conflict resolution	Communication	Sharing	Empathy & caring
Lesson 1: I can do	Lesson 1: How do you do?	Lesson 1: What's in a problem?	Lesson 1: I'm listening	Lesson 1: Sharing is caring	Lesson 1: I do care
Lesson 2: A pat on the back	Lesson 2: Where and when?	Lesson 2: Look before you leap	Lesson 2: Body language	Lesson 2: I Have an idea	Lesson 2: Trust is a must
Lesson 3: I'm me and you are you	Lesson 3: We're in this together	Lesson 3: I didn't do it	Lesson 3: Don't touch	Lesson 3: Sharing time and skills	Lesson 3: Loyalty is royalty
Lesson 4: Nobody likes me	Lesson 4: Are you joking?	Lesson 4: Let's agree to disagree	Lesson 4: I hear you	Lesson 4: Fair share	Lesson 4: People who need people
Lesson 5: Not my fault	Lesson 5: Are we having fun yet?	Lesson 5: Making up is not hard to do	Lesson 5: Let's chat	Lesson 5: What should I do?	Lesson 5: Lend a hand

Table 2 Pre-test and post-test results for behavior assessment system for children—2nd edition (BASC-2) subscales

Subscale	Pre <i>M</i>	Pre SD	Post <i>M</i>	Post SD	<i>t</i> (17)	<i>p</i>	<i>d</i>
Hyperactivity	40.33	5.87	37.61	3.68	2.41	.027	-.56
Aggression	44.89	6.99	41.06	5.49	3.13	.006	-.61
Conduct problems	41.83	5.12	39.56	4.89	2.46	.025	-.45
Anxiety	38.22	4.14	37.00	3.56	2.27	.037	-.32
Depression	42.39	4.41	38.11	1.84	4.01	.001	-1.27
Somatization	38.72	3.63	38.78	3.44	-.13	.899	.02
Attention problems	33.94	10.03	28.83	8.63	2.76	.013	-.55
Atypicality	39.44	3.35	37.67	2.09	2.22	.041	-.63
Withdrawal	41.56	7.59	38.50	6.00	1.93	.071	-.45
Adaptability	57.83	10.60	66.00	9.39	-3.98	.001	.82
Social Skills	48.00	11.92	52.56	11.12	-2.64	.017	.40
Leadership	59.33	13.52	61.50	12.14	-.93	.364	.17
Functional Communication	50.39	9.41	52.94	6.75	-1.68	.111	.31

was calculated using Cohen's *d*; results can be found in Table 2. Due to the use of multiple *t* tests, a Bonferroni correction was used to limit the likelihood of Type I error. Thus, the significance limit was set at .05/13: $\alpha = .003$. Two of the 13 subscales demonstrated statistically significant changes across time: Depression decreased ($p < .001$) and Adaptability increased ($p < .001$). Furthermore, changes in these subscales were large ($d = -1.27$ and $d = .82$, respectively). Although changes in the 11 remaining subscales did not reach significance using the more stringent criterion, six of these subscales demonstrated medium-sized effects (d values ranging from .45 to .63), suggesting that the intervention was associated with respectable improvements in social and emotional behavior.

Students' mean pre-test and post-test scores (and standard deviations) on the CORS are presented in Table 3. Data were analyzed with paired *t* tests, with alpha set at .05/6: $\alpha = .008$; results can be seen in Table 3. Both the overall score and the five subscale scores demonstrated significant improvement ($p < .001$). Effect sizes were large, suggesting changes of at least one standard deviation on each subscale as well as overall.

Discussion

The implementation of the selected social skills lessons was associated with increases in desirable social and emotional behaviors and decreases in more problematic

Table 3 Pre-test and post-test results for Connecting with Others Rating Scale (CORS) overall score and subscale scores

Subscale	Pre <i>M</i>	Pre SD	Post <i>M</i>	Post SD	<i>t</i> (17)	<i>p</i>	<i>d</i>
Overall CORS	60.39	12.35	81.89	15.86	9.67	<.001	1.51
Concept of self and others	13.83	3.13	20.11	4.46	8.53	<.001	1.63
Socialization	10.89	1.78	13.33	2.57	5.69	<.001	1.10
Problem solving/conflict resolution	11.67	3.07	15.78	3.41	6.80	<.001	1.27
Communication	12.72	2.93	17.33	3.14	6.01	<.001	1.52
Sharing	11.28	2.72	15.33	3.66	6.40	<.001	1.26

behaviors in preschool students, as measured by both the BASC-2 and the CORS. These findings are consistent with those of a study by Coombs-Richardson et al. (2009), which found that participating in socialization activities resulted in improvement in those skill areas of the *Connecting with Others* curriculum.

In light of the pilot nature of this work, the current study had several limitations. The relatively small sample included preschool students at a Northeast Nebraska family services center. Implementing the same social skills curriculum within a larger and more diverse group could provide further information about the generalizability of the findings. Furthermore, the time to teach the lessons was limited. If the program were to become part of a preschool's curriculum, it could possibly be associated with even greater levels of improvement.

A second major limitation was the lack of a control group. Without a control group, it is difficult to ascertain whether or not the curriculum was directly responsible for the gains observed. Although this pilot project demonstrated a substantial relationship between the curriculum and positive outcomes over a relatively short period of time, future well-controlled studies are necessary to establish a causal relationship. Similarly, although immediate positive changes in social and emotional competence were seen, potential long-term benefits have yet to be measured.

In addition, it is unknown whether the skills generalized to settings outside the preschool. Parent interviews and rating scales both during the study and afterwards could help to determine both the generalizability and the long-term effects of the program. Another limitation relates to the amount of measurement error for the outcome scales. The items on the CORS rating scale may have led the instructor to teach to the test rather than adhering closely to the program's curriculum. The fidelity of treatment implementation was not measured in this pilot study and should be examined in future investigations of the program.

The findings of this study are consistent with other studies addressing the importance of teaching social and emotional skills to students (e.g., Brophy-Herb 2007). The data suggest that a curricular approach for promoting

social-emotional learning in preschool children, as a proactive measure to reduce and prevent inappropriate behaviors, holds promise. Overall, the improvements on the BASC-2 rating scales and the CORS were medium to large, suggesting respectable and positive change. In particular, participants experienced a large decrease in depression symptoms and demonstrated large increases in adaptability. It is possible that the *Connecting with Others* curriculum may be most beneficial for reducing emotional distress and improving adjustment among preschool children; however, this must be investigated with a randomized, controlled design. Teaching social skills in early childhood sets the stage for future learning. The program used in this study appears to have been successful for the majority of participants and should be further studied with more rigorous research methods to establish its efficacy.

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