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Social and Emotional Learning in Kindergarten: Evaluation of the Strong Start Curriculum

Paul Caldarella
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Ryan Shatzer
Social and Emotional Learning (SEL)

- Children begin to recognize and regulate emotion by preschool.
- Social and emotional competencies do not unfold automatically.
- Influenced by child’s early learning environment.
Emotional and Behavioral Problems

Children often acquire maladaptive coping strategies (i.e. externalizing & internalizing behaviors)

Problems often persist, much less treatable if not addressed early, before age 8

20% of students have emotional or behavioral problems
SEL promotes competence by teaching the skills

- Recognize and manage emotion
- Develop care and concern for others
- Make responsible decisions
- Form positive relationships
- Handle challenging situations effectively
SEL programs can be part of a school-wide PBS model

Universal prevention

- Looks at “big picture”
- Needs of all students
- Moves resources towards those not experiencing severe difficulties
- Addresses potential problems before severe
Social and Emotional Learning

Effective:

- School and after school settings
- Students with/without emotional & behavioral problems
- K-8 grade range
- Effects were maintained over time
- More effective when conducted by teachers rather than researchers
- Racially and ethnically diverse students
- Urban, rural, and suburban settings
SEL Programs

*Improved* students’:
- Social and emotional skills
- Attitudes about self and others
- Connection to school
- Positive social behavior
- Academic performance
- Achievement test scores by 11-17 percentage points

*Reduced* students’:
- Conduct problems (e.g., aggression, disruptiveness)
- Emotional stress (i.e., anxiety, depressive symptoms)
Challenges

• Many schools are still reluctant to implement SEL programs
• Research-to-practice gap
• Teachers feel non-essential programs would compete with other academic demands
Feasibility

Program unlikely to be adopted or implemented effectively if:

• Too time intensive
• Requires too many materials or personnel
• Too costly
Intervention – Strong Kids

- **Strong Start (ages 5-8)**
- **Strong Kids (ages 8-12)**
- **Strong Kids (ages 12-14)**
- **Strong Teens (ages 14-18)**
Research Questions

1. What effect does \textit{Strong Start} have on students’ social and emotional competence?

2. Can kindergarten teachers achieve implementation integrity?

3. Do teachers and parents view the curriculum as socially valid?
Strong Start

- Designed for grades K-2
- Promotes social and emotional resiliency and competence
- Low-cost, low-technology, and school-based
- Can be taught by existing school staff, i.e. teachers
- Practical, brief
10 Strong Start Lessons

- Understanding your feelings
- When you are angry, happy, or worried
- Understanding other people’s feelings
- Being a good friend
- Solving people problems
Strong Start

- Direct Instruction
- Discussions
- Guided/Independent Practice
- Children’s Literature
- Creative Activities
Teaching Activities

- Overhead transparencies
- Small groups
- Model examples
- Role-play
- Read and discuss children’s literature
- Create drawings/posters
- Parent bulletin
Required Materials

✓ Overhead projector
✓ Transparencies
✓ Handouts
✓ Chalk or marker board
✓ Stuffed animal mascot
Setting and Participants

- Suburban Utah elementary school
- 4 kindergarten teachers
- 67 students and parents
- 80% Caucasian,
  14% Hispanic
- 6% other ethnic groups
Procedure

Time-series design: x x o x x

- Two pretests (six weeks apart), treatment, two posttests
- Ratings completed by teachers & parents
- Response rate 100% for teachers, 96% for parents
- 10 lessons taught by classroom teacher over 10 weeks
Measures

School Social Behavior Scale, 2nd ed. (SSBS-2), 14 item peer-relations subscale

Home and Community Social Behavior Scale (HCSBS): 17 item peer-related prosocial skills

5-point Likert scale
Measures

Social Skills Rating System (SSRS)
Internalizing subscale

5-point Likert scale
Implementation Integrity

- 35 of 40 lessons observed and monitored (fidelity checklist)
- 92% of lesson components completed fully
- Students averaged 32 responses per lesson.
- Lesson time averaged 37 min (range 20 – 58 min)
Teacher Social Validity Questionnaire

26 items about the acceptability of goals, procedures, and outcomes.

Sample items:

• Students’ social and emotional concerns are great enough to warrant use of a curriculum such as Strong Start
• The length of lessons was appropriate for kindergarten students
• Strong Start was a good way to prevent social and emotional problems
Parent Social Validity Survey

6 questions regarding parents’

- Support of SEL efforts in schools
- Awareness of and participation in the program
- Changes in their child’s behavior
- If they would want their child to participate in an SEL program again
Data Analysis

- Repeated measures ANOVA and simple contrasts
- Compared pretest and posttest means
- Effect sizes calculated using Cohen’s $d$. 
Teacher Ratings

Prosocial behaviors

**SSBS**

![Graph showing Prosocial behaviors over time](image)

- \( F (3, 198) = 138.06, \ p < .001, \ \eta^2 = .68 \)
- Simple contrasts: \( P_1 < P_2 < \text{Post}_{1&2} \ (p < .001) \)

Internalizing behaviors

**SSRS**

![Graph showing Internalizing behaviors over time](image)

- \( F (3, 198) = 13.86, \ p < .001, \ \eta^2 = .17 \)
- Simple contrasts: \( P_1, P_2 > \text{Post}_{1&2} \ (p < .001) \)
Parent Ratings

Prosocial behaviors

HCSBS

F (3, 168) = 9.52, p < .001, η² = .15
Simple contrasts: P₁, P₂ < Post₁, Post₂ (p < .01)

Internalizing behaviors

SSRS

F (3, 168) = 1.47, p = .23, η² = .03
Means and ANOVA results for parent and teacher ratings

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<sup>a</sup> n = 67. <sup>b</sup>n = 57. *p < .001.
Social Validity Results

Teachers
- Goals: mean acceptability rating of 4.34
- Outcomes: 4.11
- Procedures: 3.29

Parents
- 75% reported improvement in child’s social-emotional knowledge and behavior
- 88% would want their child to participate in an SEL program again
- 95% agreed that SEL should be taught in schools
Teacher Comments

“SEL is definitely necessary, since often the kids are coming to us in pieces, and they can’t focus.”

“The strength of the curriculum was in providing students a way to talk about their issues using a common language”

“Students seem to be doing better at inviting other people to play and joining in activities”

“I am committed to teaching some kind of SEL each year”
Conclusions

- Meaningful changes in prosocial behavior reported by teachers and parents
- Teachers see slight, but significant decrease in internalizing behaviors
- Teachers are able to implement the curriculum as it was designed (implementation integrity)
- Teachers and parents view the curriculum as socially valid
- Support for Strong Start as a PBS intervention
Limitations

- Possible teacher rating bias
- Only subscales of the measures were used
- No child self-report ratings
- Sample relatively homogenous
- Lack of control group
http://education.byu.edu/pbsi/

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