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

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



POSITIVE BEHAVIOR SUPPORT INITIATIVE

*Walk the Peaceable Walk*

**Paul Caldarella**

**Lynnette Christensen**

**K. Richard Young**

**Thomas Kramer**

**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

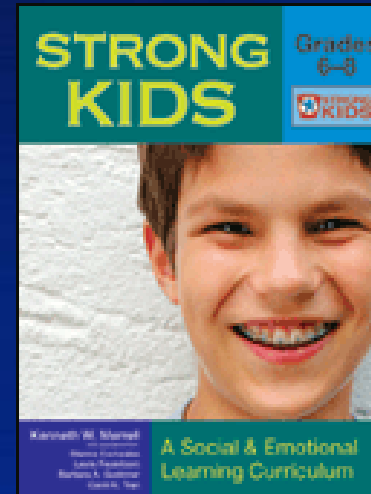




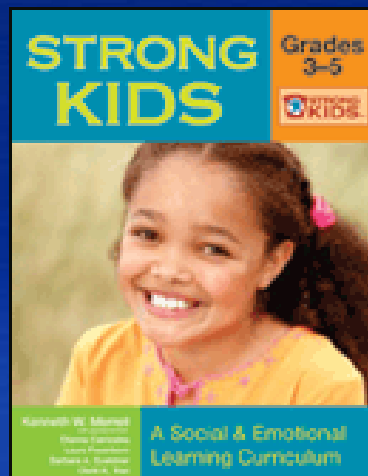
# Intervention – Strong Kids



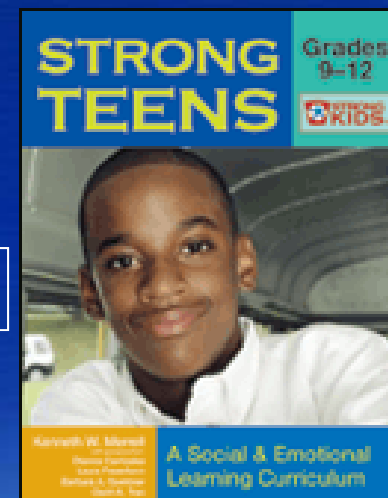
(ages 5-8)



(ages 12-14)



(ages 8-12)



(ages 14-18)



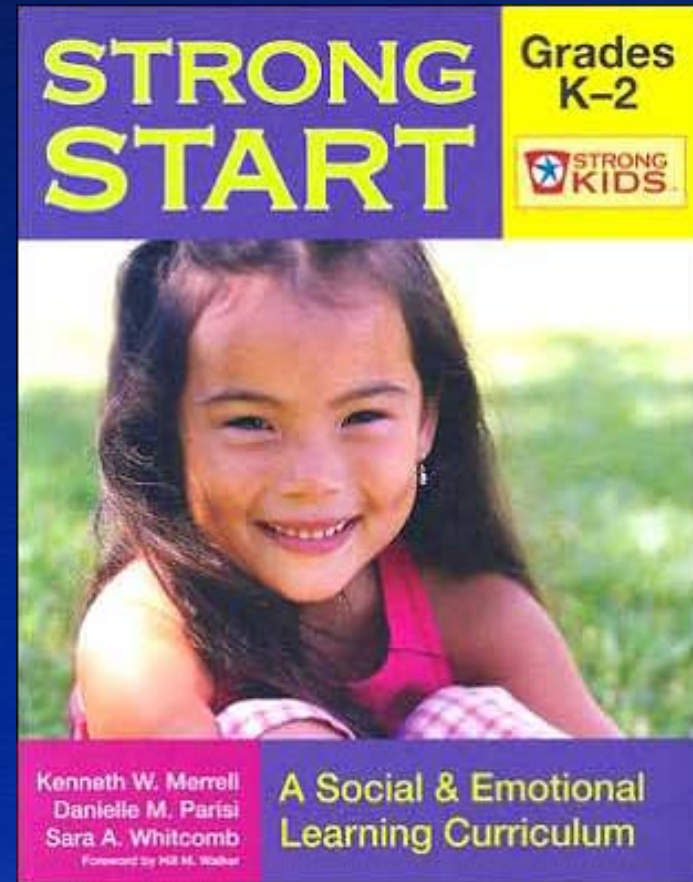
## Research Questions

1. What effect does *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

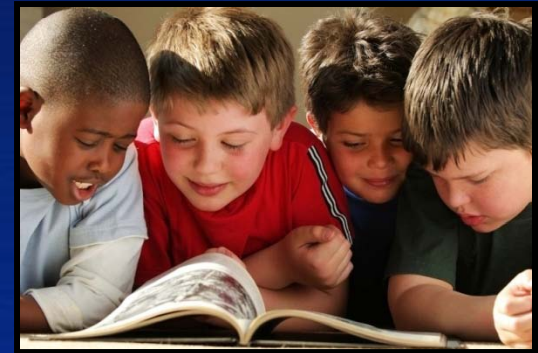
- Direct Instruction
- Discussions
- Guided/Independent Practice
- Children's Literature
- Creative Activities





# 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

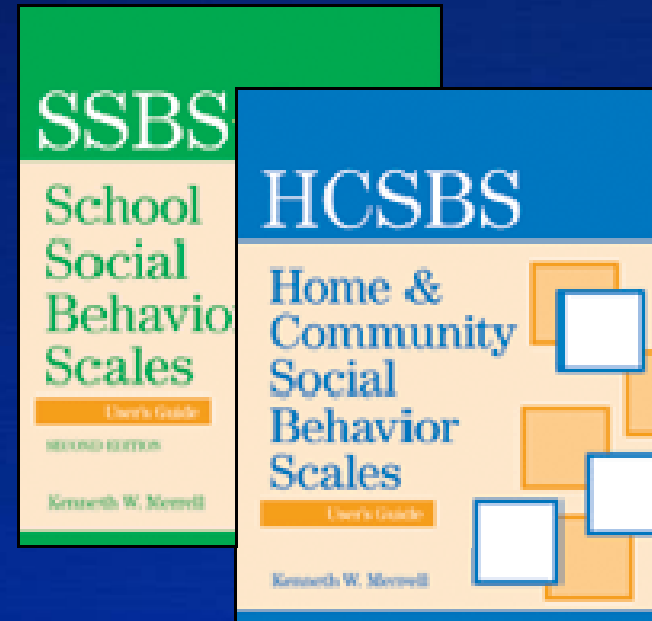


# Measures

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

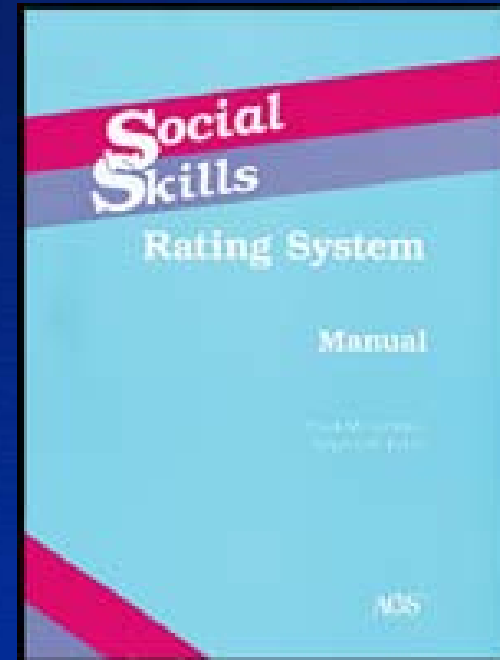




# Measures

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

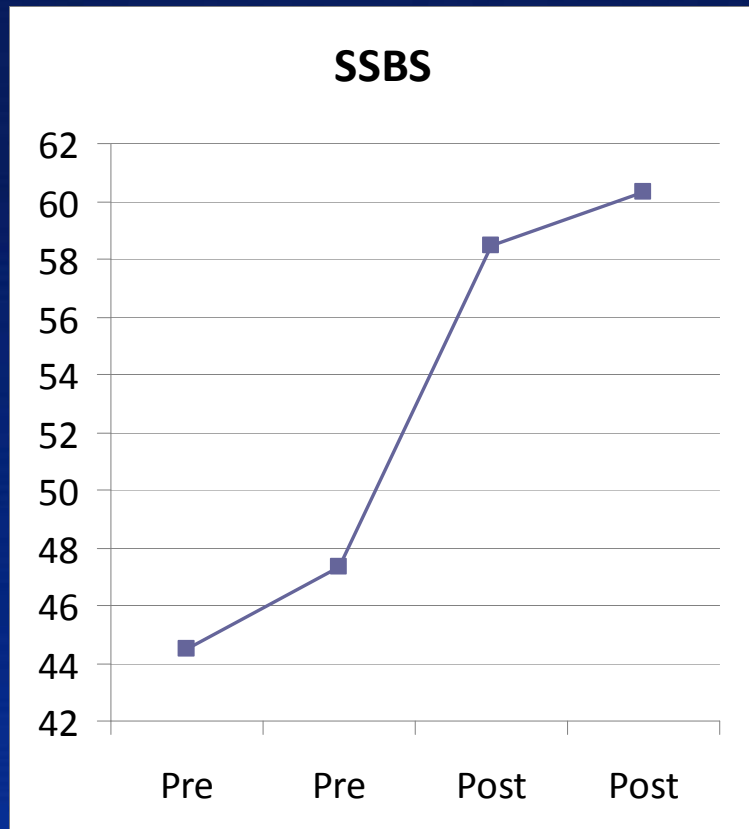
- Repeated measures ANOVA and simple contrasts
- Compared pretest and posttest means
- Effect sizes calculated using Cohen's *d*.





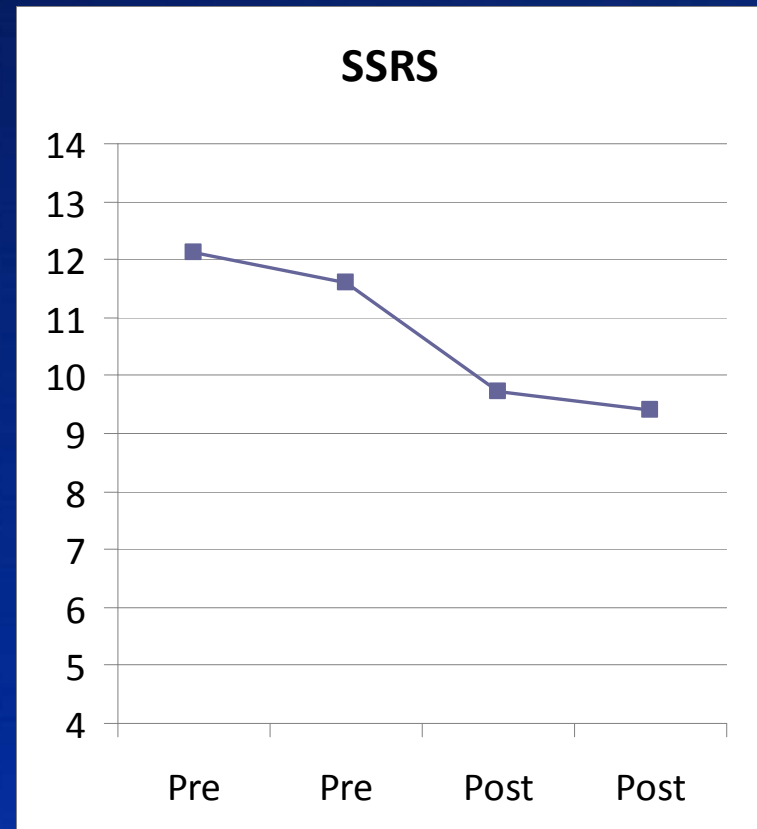
# Teacher Ratings

## Prosocial behaviors



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

## Internalizing behaviors

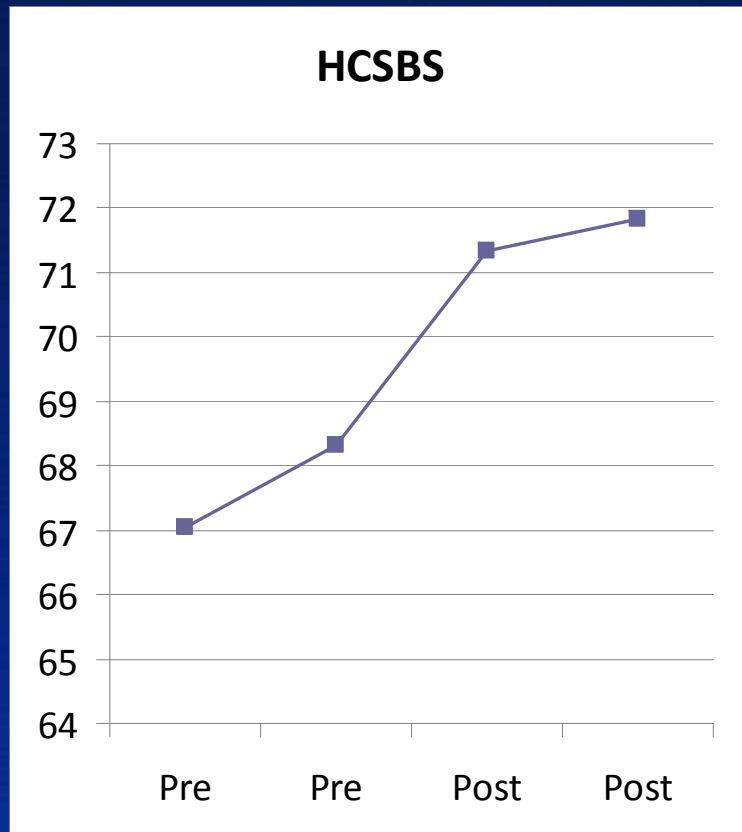


$F(3, 198) = 13.86, p < .001, \eta^2 = .17$   
Simple contrasts:  $P_1, P_2 > Post_{1\&2} (p < .001)$



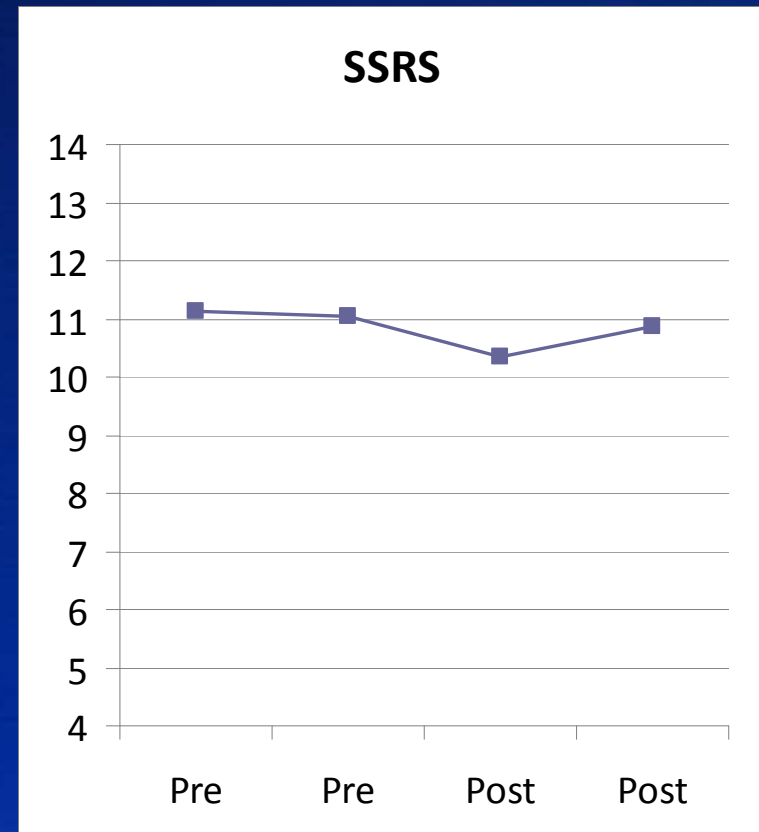
# Parent Ratings

## Prosocial behaviors



$F(3, 168) = 9.52, p < .001, \eta^2 = .15$   
Simple contrasts:  $P_1, P_2 < Post_1, Post_2 (p < .01)$

## Internalizing behaviors



$F(3, 168) = 1.47, p = .23, \eta^2 = .03$



# Means and ANOVA results for parent and teacher ratings

	Pre <sub>1</sub>		Pre <sub>2</sub>		Post <sub>1</sub>		Post <sub>2</sub>		<i>F</i>	<i>d</i>
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )		
<b>Teacher<sup>a</sup></b>										
SSBS	44.52	(11.71)	47.36	(10.12)	58.46	(9.40)	60.33	(9.91)	138.06*	1.39
SSRS	12.13	(5.87)	11.61	(5.56)	9.72	(4.59)	9.40	(3.99)	13.86*	.48
<b>Parent<sup>b</sup></b>										
HCSBS	67.05	(11.74)	68.32	(11.18)	71.33	(11.23)	71.82	(9.92)	9.52*	.44
SSRS	11.14	(3.82)	11.04	(4.18)	10.35	(3.52)	10.88	(3.93)	1.47	.18

<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



## POSITIVE BEHAVIOR SUPPORT INITIATIVE

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