



Leveling the Playing Field: Promoting Readiness to Learn among Economically Disadvantaged Preschoolers with the REDI Program



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Acknowledgments

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Overview

- Provide a Brief History of the REDI project
- Describe the Core Curriculum Components & Teaching Strategies of REDI
- Review Program Effects on Teaching Quality
- Review Program Effects on Child Outcomes
- Discuss Implications for Policy & Practice

Inter-agency School Readiness Consortium

- In 2003, the ISRC was developed. Key partners were:
 - ◆ National Institute of Child Health and Human Development (NICHD)
 - ◆ Administration for Children and Families (ACF)
 - ◆ Assistant Secretary for Planning and Evaluation (ASPE) within the Department of Health and Human Services (DHHS)
 - ◆ Office of Special Education and Rehabilitation Services (OSERS) of the U.S. Department of Education.

- The goal: Expand the capacity of early education programs to “close the gap” in educational attainment, by fostering the cognitive and social-emotional school readiness for at-risk children.

Key Questions of the ISRC

- Are the instructional approaches needed to support development in social-emotional and cognitive domains different; must we prioritize one over the other?
- Or, will a dual-focus, integrative approach have synergistic effects?
- What types of professional development supports are needed to promote teacher competencies and improve instructional practices across these domains?

Primary Goals of the REDI Intervention



- Build on the strong foundation of Head Start (High Scope/Creative Curriculum)
- Foster the integration of research-based practices to support social-emotional and language /emergent literacy skills.
- Support teachers' professional development with a curriculum (scope & sequence) of activities & individual mentoring.

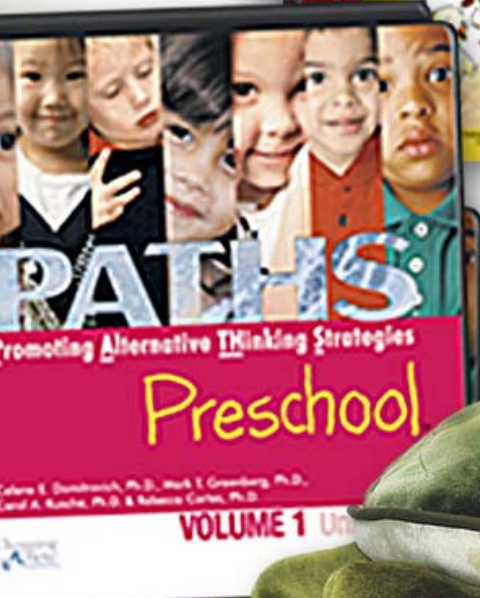
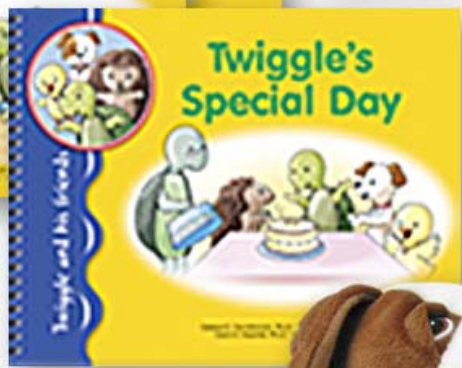
How to do Turtle



What do friends do?

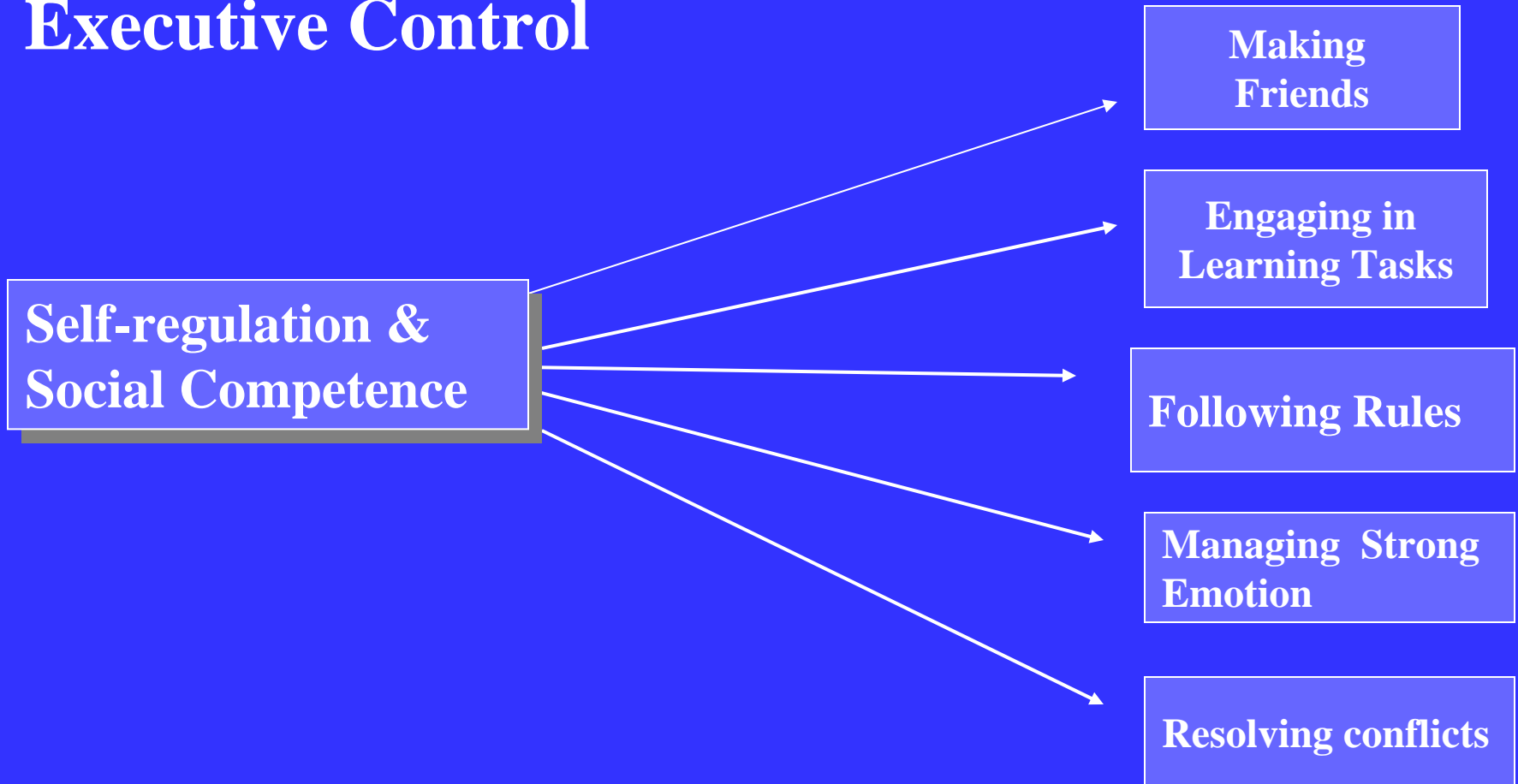


Our Feelings Chart



Prefrontal Cortex Executive Control

Key Competencies



PATHS: Focus on Emotion Knowledge

Basic Feelings

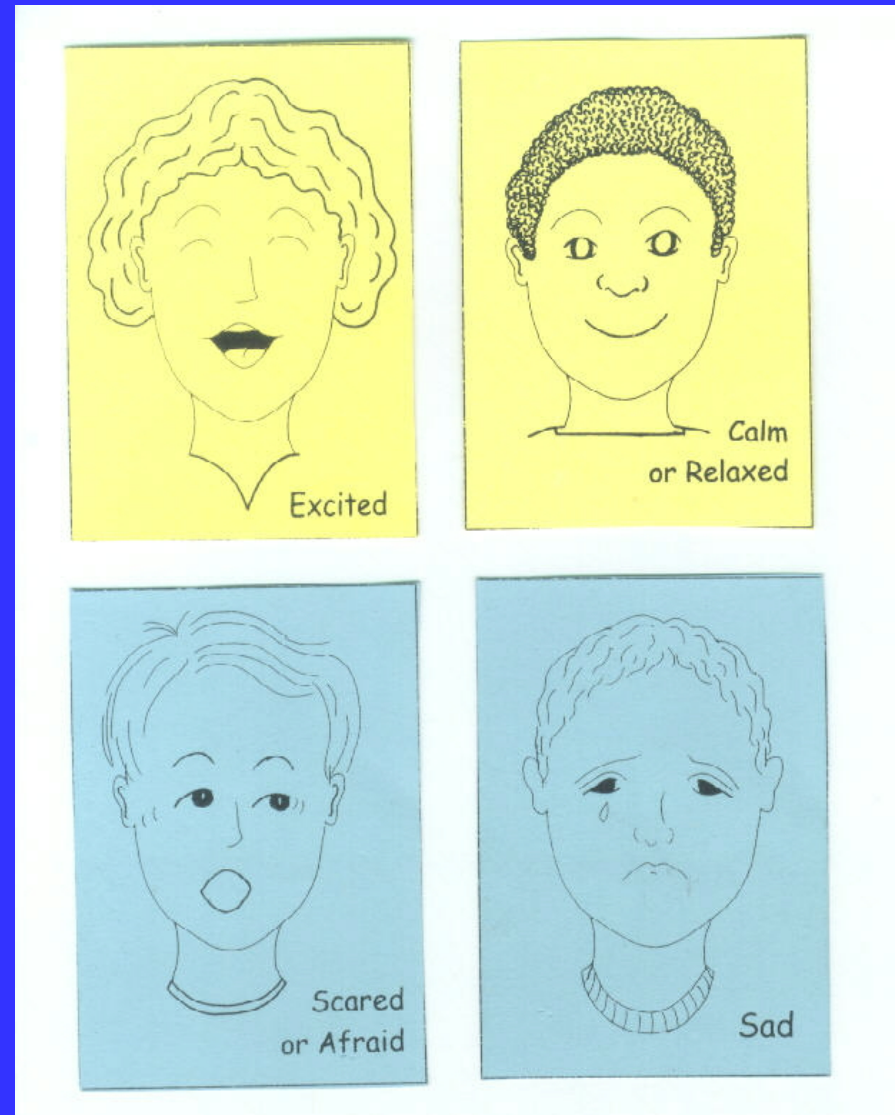
- ❖ Comfortable/Uncomfortable
- ❖ Happy
- ❖ Sad
- ❖ Mad
- ❖ Scared

Intermediate Feelings

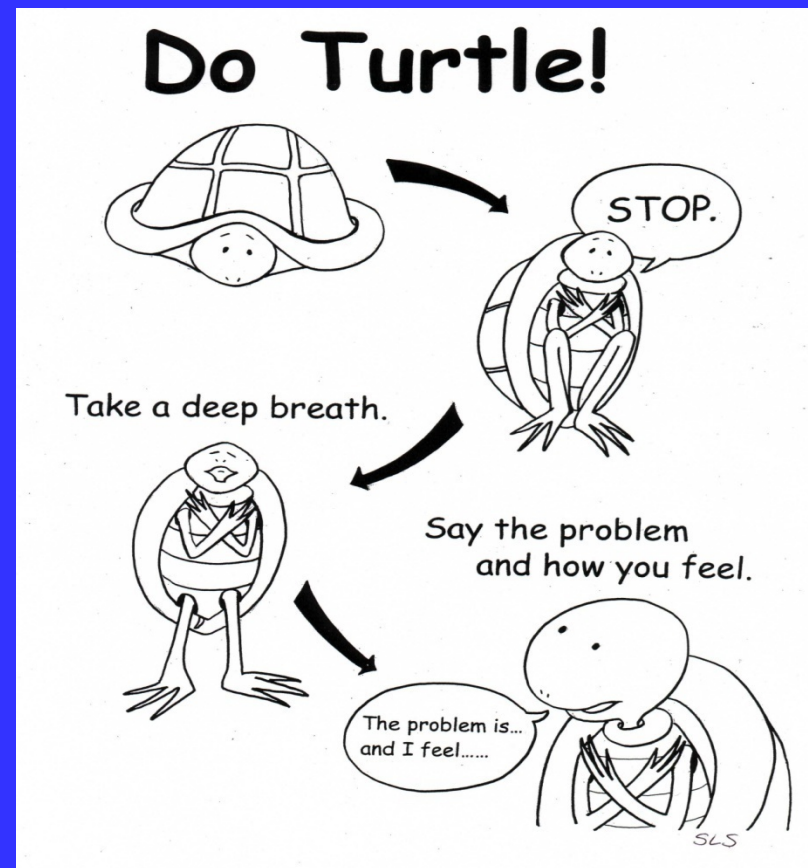
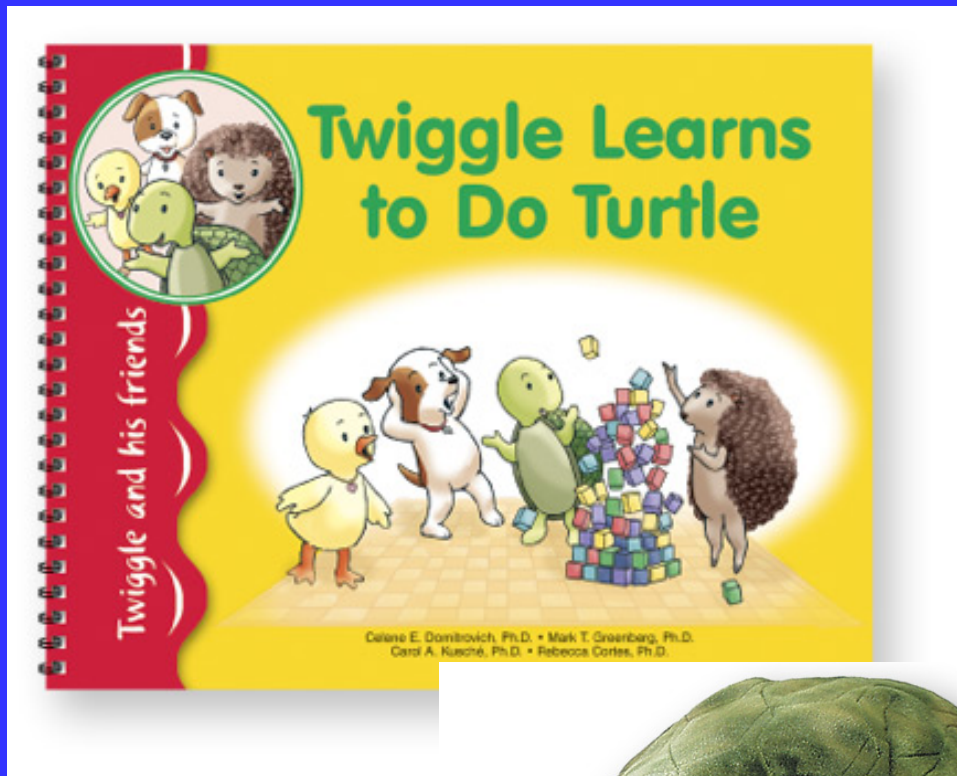
- ❖ Frustrated
- ❖ Proud
- ❖ Excited
- ❖ Tired

Advanced Feelings

- ❖ Love
- ❖ Worried
- ❖ Disappointed
- ❖ Jealous
- ❖ Furious
- ❖ Guilty



PATHS: Focus on Intentional Inhibitory Control and Problem Solving



Strands of Literacy Development

Comprehension

Background Knowledge

Vocabulary

Grammar

Verbal Reasoning

Literacy Knowledge

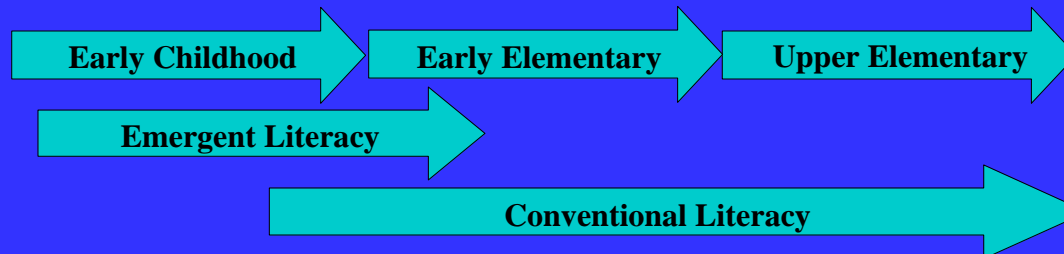
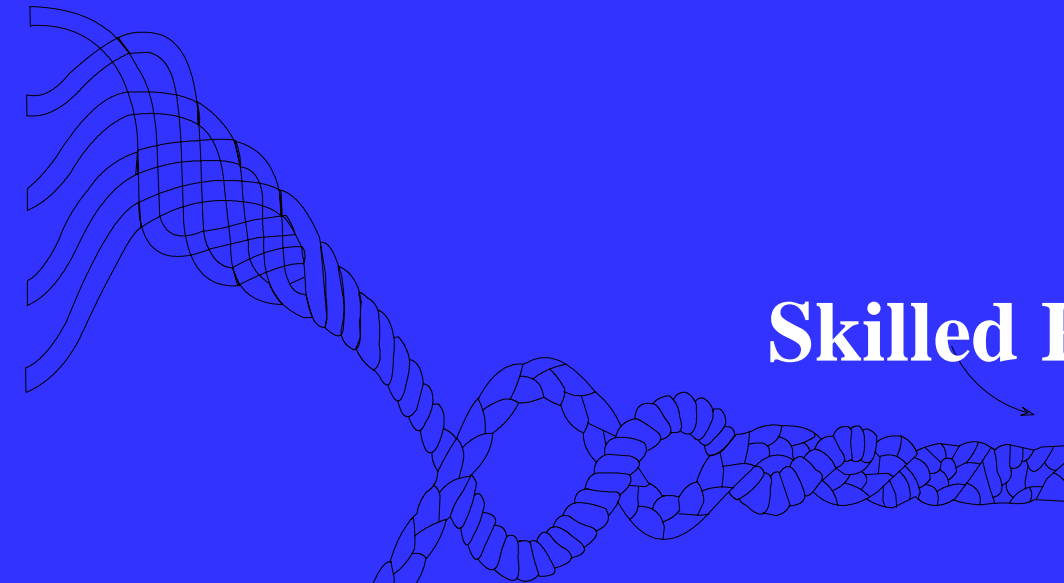
Decoding

Phonological Awareness

Alphabetics (Phonics)

Sight Words

Skilled Reading



Decoding Skills

- Translating print into sounds and sounds into print
- Phonological awareness
 - ◆ Breaking “streams of sound” into words, syllables and individual sounds; blending sounds into words
- Alphabetics
 - ◆ Letters, letter-sounds, phonics
- “Sight” words
 - ◆ Common words (such as “the” and “is”)

Comprehension Skills

- Understanding the **meaning** of something
 - ◆ Background knowledge
 - ◆ Vocabulary
 - ◆ Grammar
 - ◆ Verbal reasoning
 - ◆ Literacy knowledge



Head Start REDI Language & Literacy Curriculum

	Alphabet Center	Sound Games	Language Coaching Strategies	Dialogic Reading & Extension Activities
Decoding	Letter identification	Phonological awareness		
Comprehension			Vocabulary, Grammar	Vocabulary, Grammar

REDI Schedule and Program Integration

- PATHS lesson during circle time (1X/week)
- PATHS activity during center time (1X/week)
- PATHS theme in dialogic reading (2X/week)
- Open theme in dialogic reading (2X/week)
- Sound Games during transition/
activity time (3X/week)
- Alphabet center open daily
(monitor 1X/week)



Professional Development Support

- Initial 3-day training workshop
- Mid-year 1-day booster training workshop
- Weekly classroom visit from REDI trainer
- Weekly meeting with REDI trainer

Model of change: Promote positive classroom practice with curriculum-based activities & guide; support generalization with coach models and self-reflection

Head Start REDI Evaluation Design

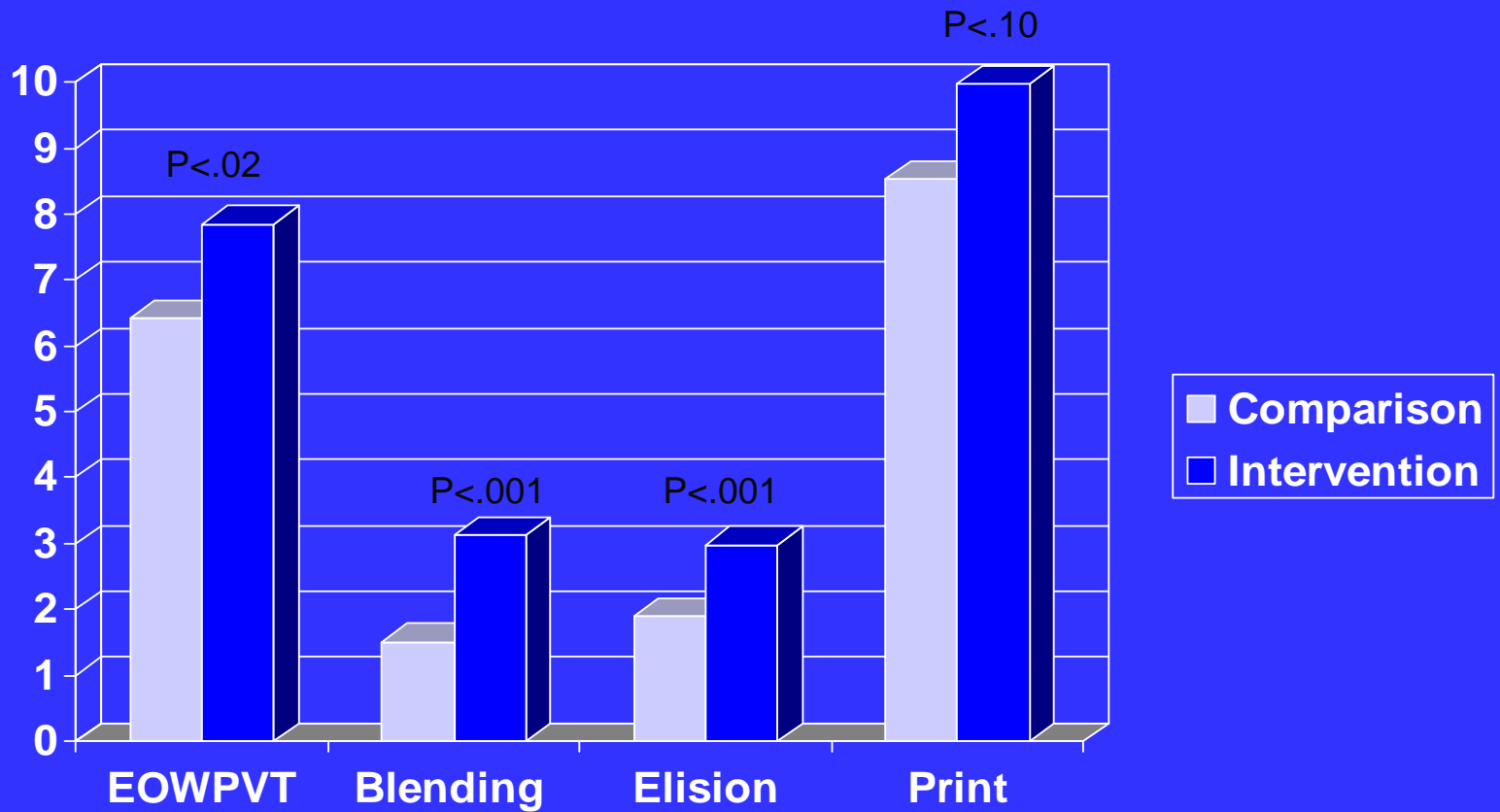
- 356 4-year-old children in 44 Head Start classrooms
- Classrooms stratified on location, demographics, length of day & randomized to intervention or “usual practice”
- Assessments at the beginning and end of the Head Start pre-kindergarten year.
- 94% completed follow-up assessments (in 204 kindergarten classrooms)

Intervention Effects on Teaching Practices

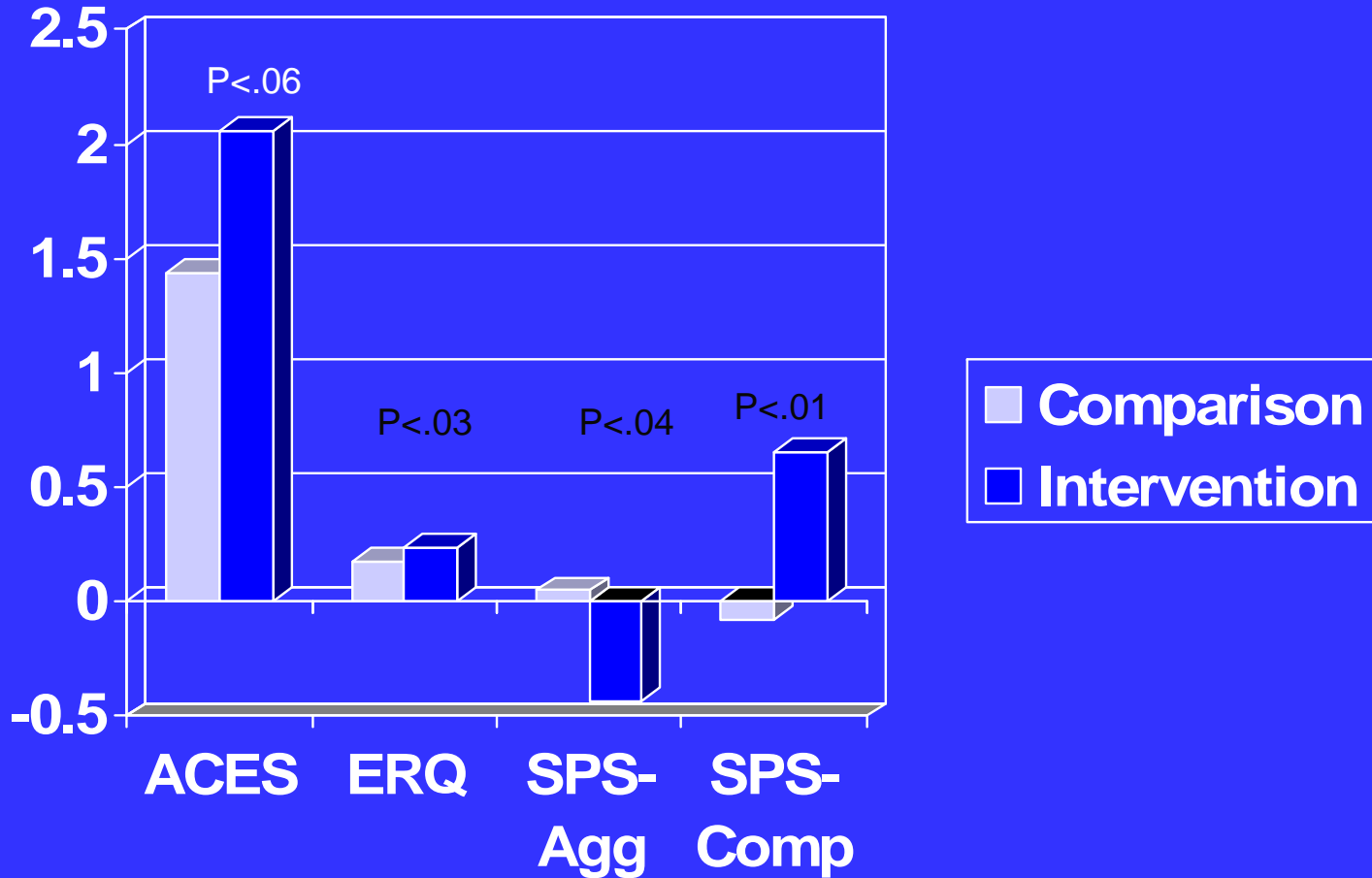
Teaching Quality	Effect	P-Value
■ Positive Emotional Climate (TSRS)	.42	.05
■ Emotional Support (CLASS)	.49	.11
■ Positive Class Management (TSRS)	.40	.06
■ Positive Discipline (TSRS)	.66	.002
■ Instructional Support (CLASS)	.54	.08

Teacher Language Use	Effect	P-Value
■ Statements (CLEO)	.72	.001
■ Questions (CLEO)	.77	.001
■ Decontextualized Talk (CLEO)	.62	.001
■ Rich-sensitive Talk (CLEO)	.62	.004

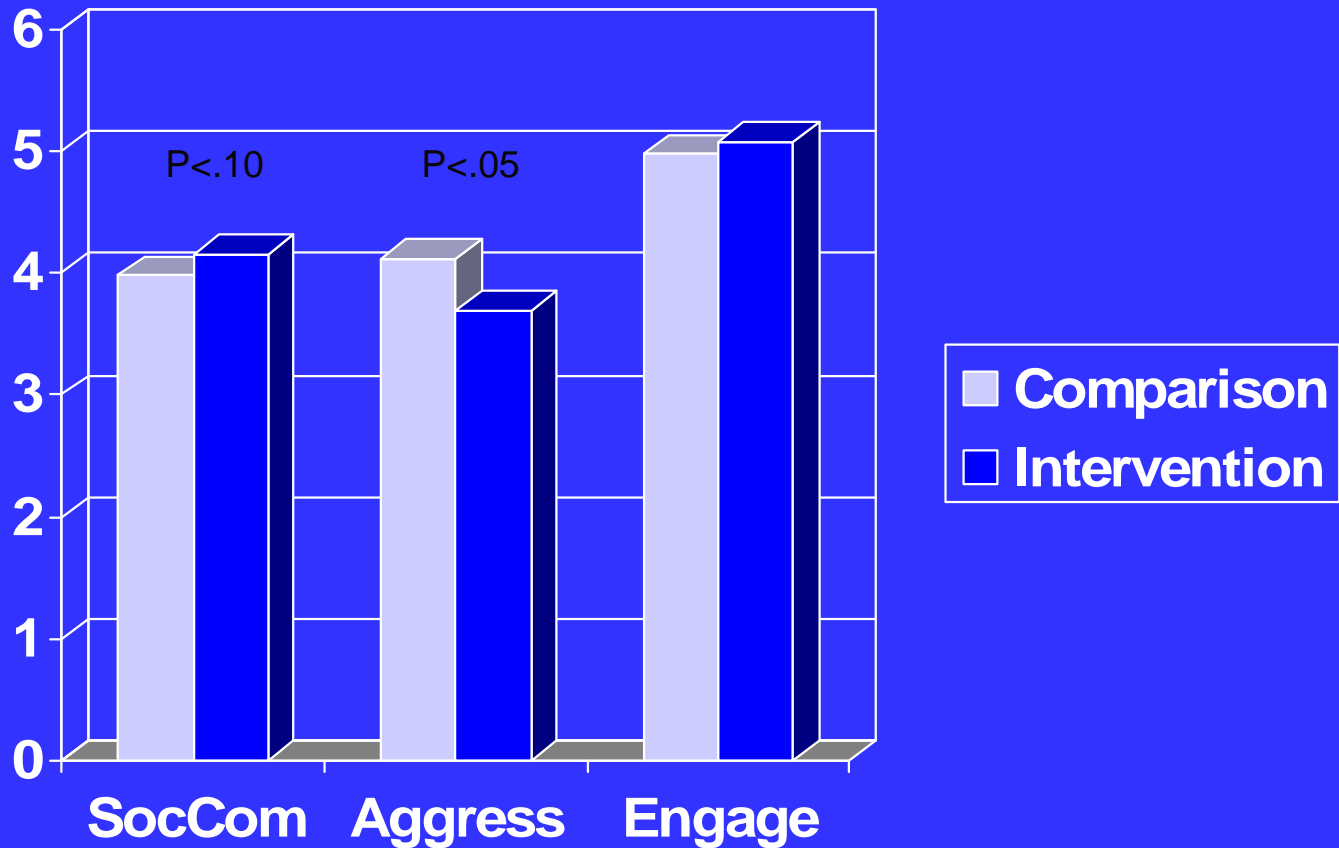
Language & Emergent Literacy Skills



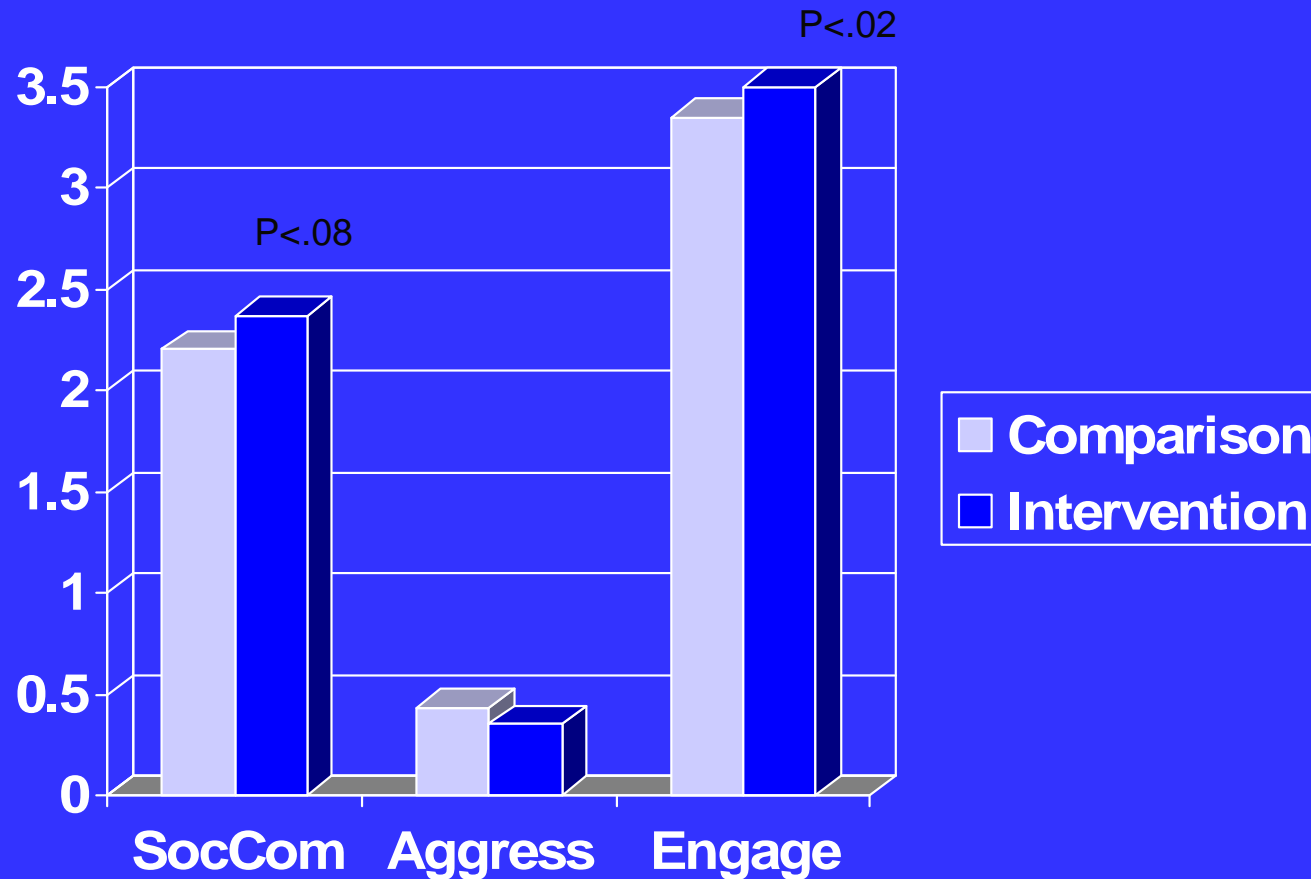
Emotional Understanding and Social Problem-Solving Skills



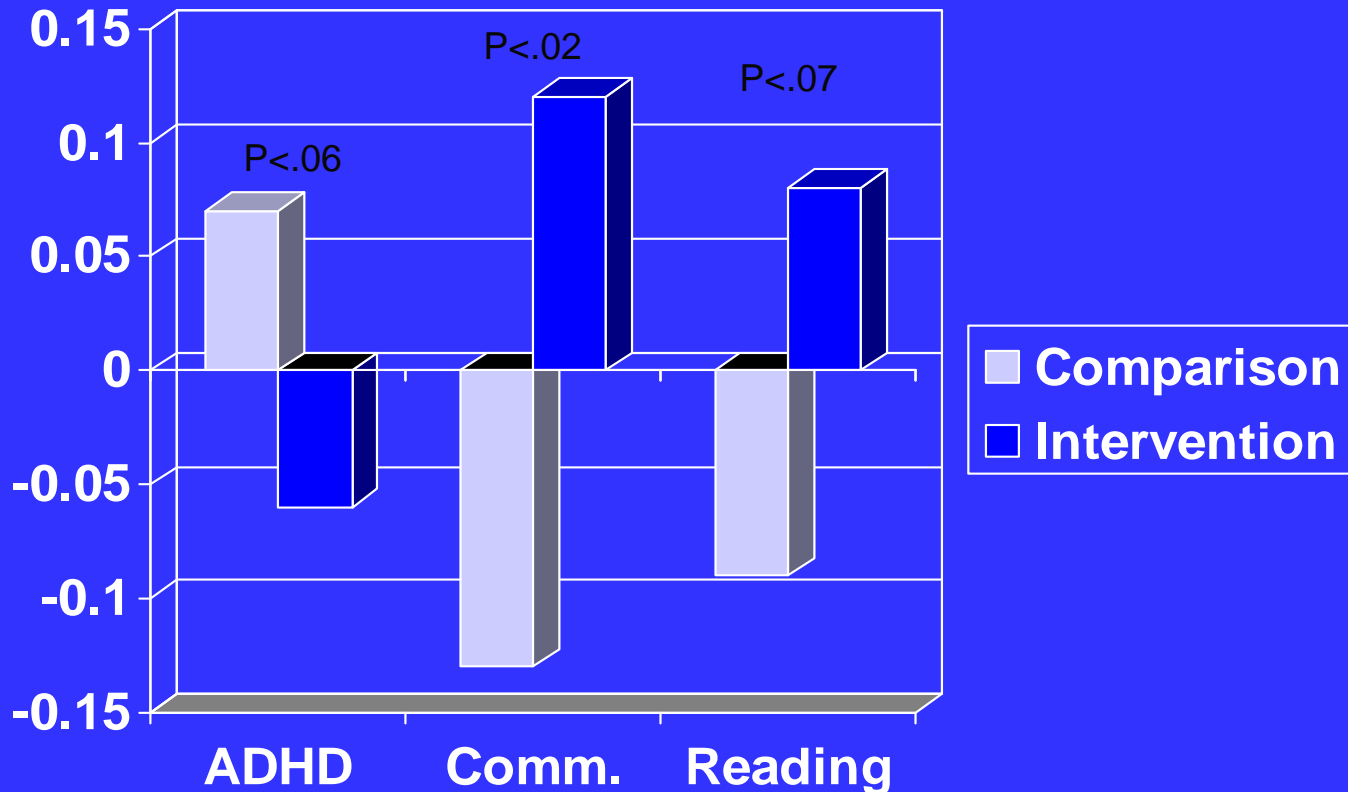
Teacher Ratings of Social Competence, Aggression, Learning Engagement



Observer Ratings of Social Competence, Aggression, Learning Engagement



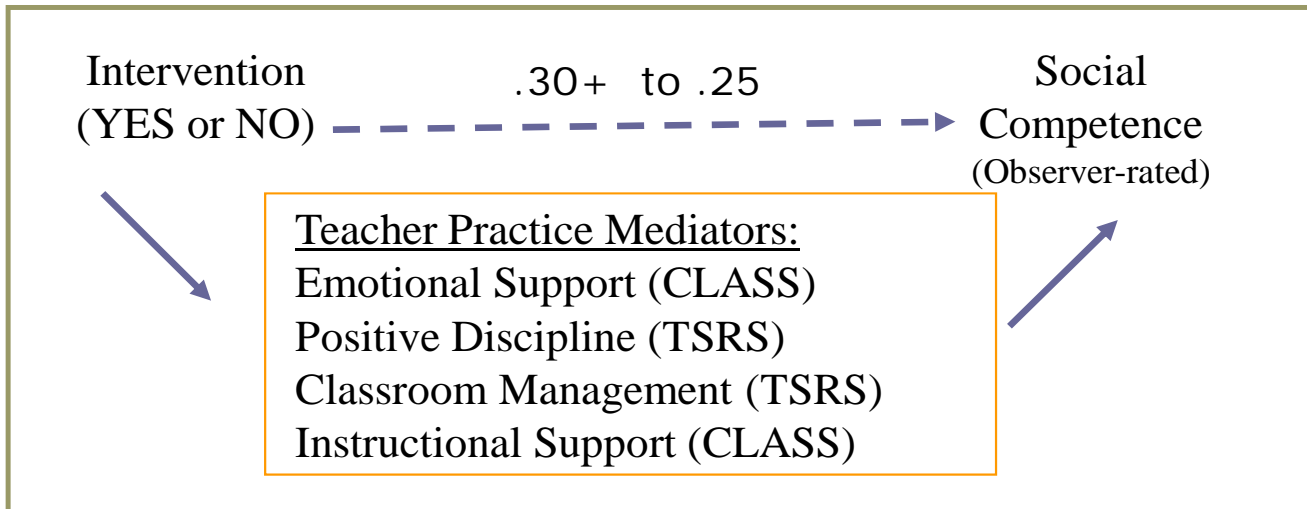
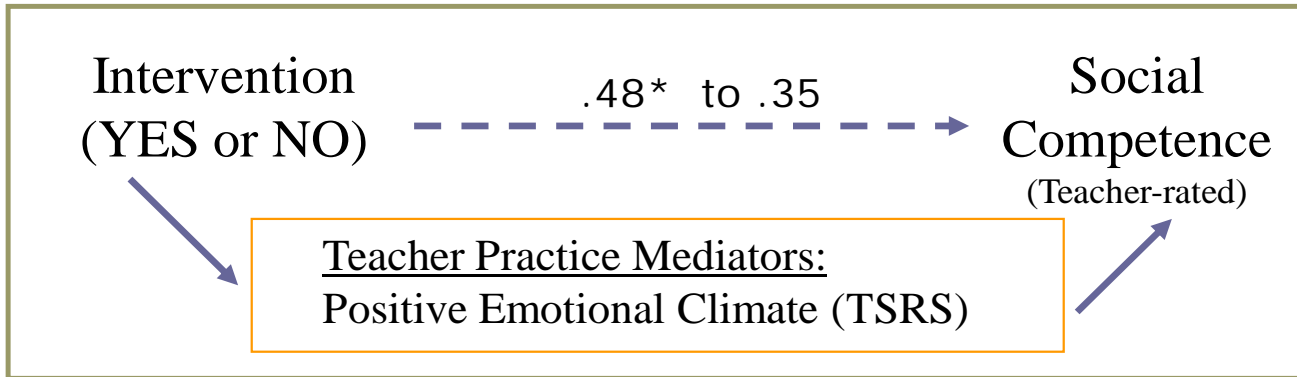
Parent Ratings of Attention Problems, Communication & Reading Involvement



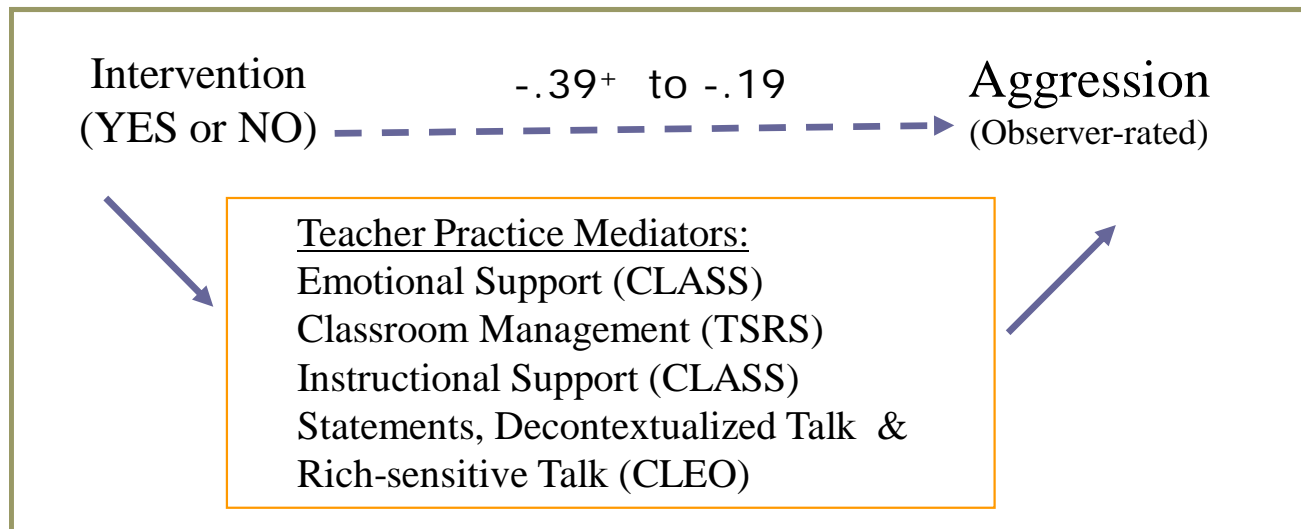
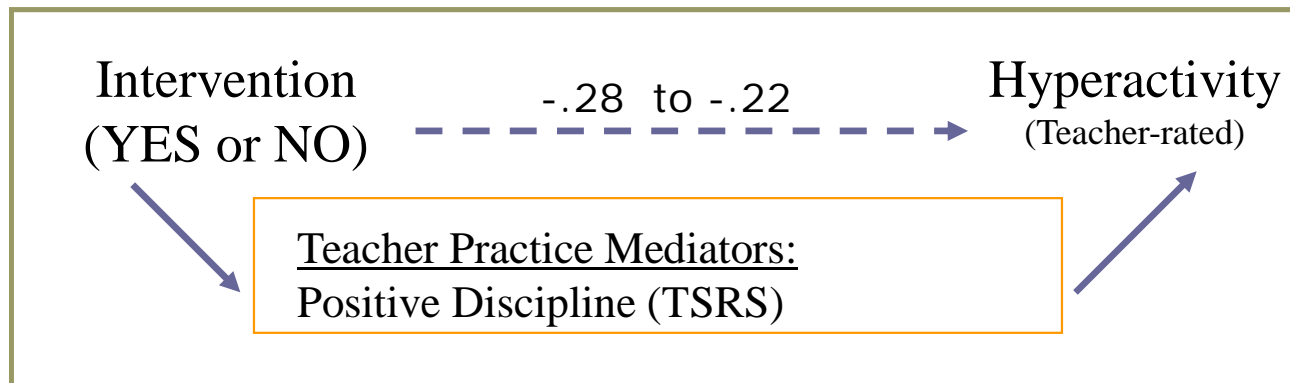
Significant Relations: Teaching Practices and Child Skills

	<u>Social Competence</u>		<u>Problem Behaviors</u>	
	OBS	TEACHER	OBS AGG	TEACHER HYPER
Positive Emotional Climate (TSRS)		.27**		
Emotional Support (CLASS)	.25**		-.22*	
Positive Management (TSRS)	.25**		-.24*	
Positive Discipline (TSRS)	.25**			-.21*
Instructional Support (CLASS)	.18*		-.23*	
Statements			-.25*	
Decontextualized Talk			-.20*	
Rich-sensitive Talk			-.32**	

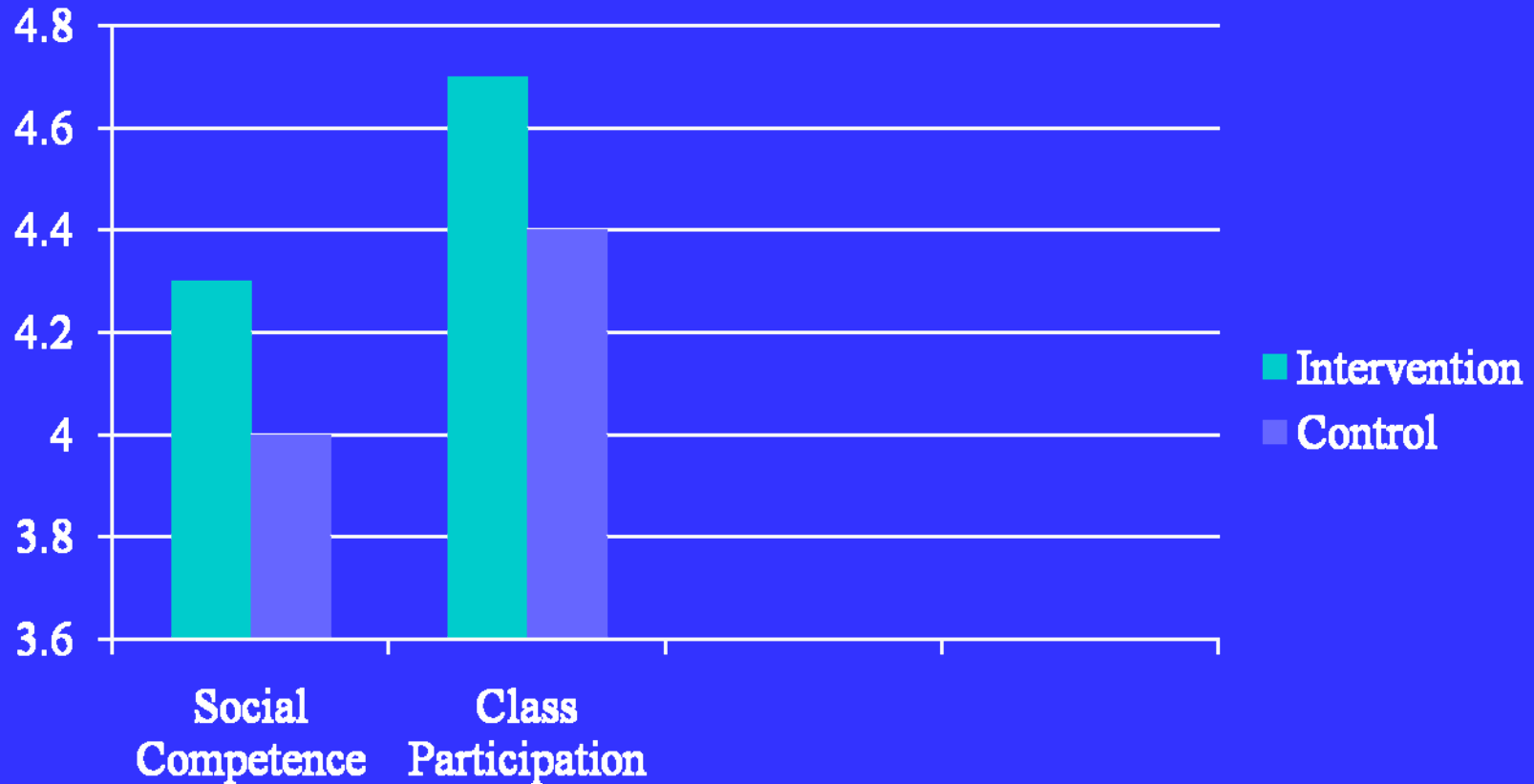
Mediated Intervention Effects: Social Competence



Mediated Intervention Effects: Problem Behavior



Impact on Kindergarten Adjustment





Summary

- With appropriate support, Head Start teachers implemented REDI with fidelity and improved children's outcomes in a one year period.
- Teachers increased high-quality language use, included brief didactic skill practice, and also created a more positive, emotionally supportive classroom climate
- Child social-emotional and cognitive skill gains were synergistic, and promoted enhanced adjustment to kindergarten.



REDI References

- Bierman, K.L., Domitrovich, C.E., Nix, R.L., Gest, S.D., Welsh, J.A., Greenberg, M.T., Blair, C., Nelson, K. & Gill, S. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI program. *Child Development, 79*, 1802-1877.
- Domitrovich, C. E., Gest, S. D., Gill, S., Bierman, K. L., Welsh, J. A., & Jones, D. J. (in press). Fostering high quality teaching with an enriched curriculum and professional development: Head Start REDI. *American Educational Research Journal*.
- Bierman, K.L., Nix, R.L., Greenberg, M.T., Domitrovich, C.E. & Blair, C. (2008). Executive functions and school readiness intervention: Impact, moderation, and mediation in the Head Start-REDI Program. *Development and Psychopathology, 20*, 821-843.

For More Information

<http://www.channing-bete.com/prevention-programs/paths-preschool/>

<http://headstartredi.ssri.psu.edu/>

