# Implementation of the Incredible Years® Dina Dinosaur Treatment Program in Schools for Early Elementary Students with Self-Regulation Difficulties

**Desiree W. Murray, Doré R. LaForett and the SRSS Team**
Frank Porter Graham Child Development Institute
University of North Carolina at Chapel  Hill

## FPG Brown Bag

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# Acknowledgements

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  - Jessica James Reed          Molly Marus
  - Rachel Mills-Brantley      Jennifer Kurian
  - Laura Kuhn and DMAC

- And our co-I's/consultants:  Katie Rosanbalm, Christina Christopoulos, Mike Willoughby, Carolyn Webster-Stratton

- Many graduate and work study students as well as data collectors who helped with implementation and assessment

# Disclosures

Dr. Murray is a trained mentor in the Incredible Years Teacher Classroom Management Program, and receives compensation from community organizations for providing trainings and consultation.
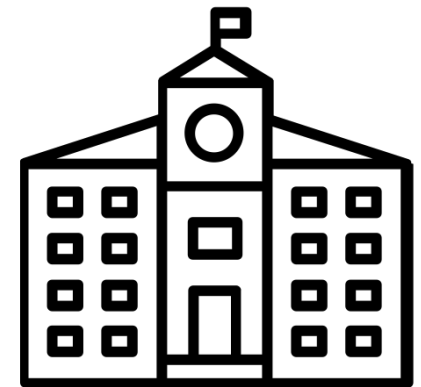
The contents of this presentation are those of the authors and do not represent views or policies of the IES

# Presentation Objectives

1. Describe adaptations made and implementation supports developed for delivery of the Incredible Years ® (IY) Dina Dinosaur program in schools

2. Report implementation, fidelity, and satisfaction with program across 3 years and 11 schools

3. Summarize feasibility and "lessons learned" from the delivery of this clinical program in schools

# The Significance of Delivering Mental Health Services in Schools

- 1 in 5 students has a diagnosable emotional or behavioral disorder; only 20% of these will receive any treatment

- Schools are ideal settings for enhancing access to mental health services, but fewer than half provide specific mental health programs

  - Programs are often not evidence-based

  - Evidence-based programs are often not delivered at full dosage, are not well-integrated into schools, and school staff receive little training



**The 20/20 Problem**

**20%** of children have a mental health disorder

**20%** of those get the help they need



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# Potential Advantages of School-Based Delivery of Clinic-Based Social-Emotional Programs

- Access to students allows for more frequent meetings than typically once per week clinic visits
  - More opportunities for skills instruction & reinforcement
  - Ideal for learning in young children

- May facilitate prompting & reinforcement of child skills throughout the day by school staff

- May provide opportunities for mental health staff to support positive school climate in the classroom & school
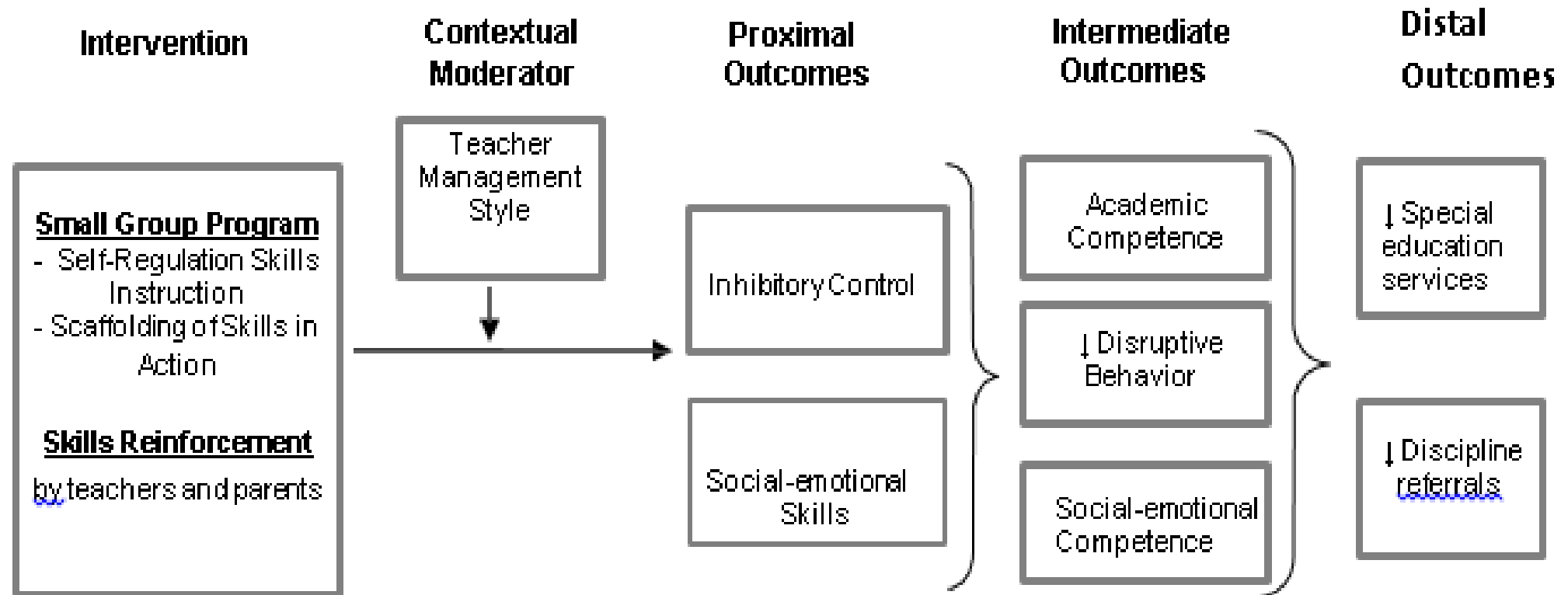  - May enhance effects of small group skills training for students

# Self-Regulation Skills for Success (SRSS) Study Objectives

- Evaluate the Incredible Years® Dina Dinosaur Treatment program

  - Delivered in schools for 1st & 2nd graders with self-regulation difficulties

- Outcomes compared to services as usual in RCT design:

  - Self-regulation skills (inhibitory control, emotion regulation, executive functioning)

  - Disruptive and disengaged classroom behavior, discipline referrals

  - Learning behaviors, academic competence, and report card grades

  - Peer interactions and social competence

# Theory of Change



Intervention → Contextual Moderator → Proximal Outcomes → Intermediate Outcomes → Distal Outcomes

**Intervention**

**Small Group Program**
- Self-Regulation Skills Instruction
- Scaffolding of Skills in Action

**Skills Reinforcement**
by teachers and parents

**Contextual Moderator**

Teacher Management Style

**Proximal Outcomes**

Inhibitory Control

Social-emotional Skills

**Intermediate Outcomes**

Academic Competence

↓ Disruptive Behavior

Social-emotional Competence

**Distal Outcomes**

↓ Special education services

↓ Discipline referrals

# Sample Demographics

11 diverse schools recruited from 4 local districts
Chapel Hill Carrboro 2015-16 (n=1), Lee County 2015-17 (n=1),
Chatham County 2015-18 (n=2), Durham Public Schools 2016-18 (n=7)

| | |
|---|---|
| **Total number students (across 3 years and all schools)** | **172** (87 intervention; 85 comparison) |
| **Race/Ethnicity** | |
| **African American** | 53.5% (n = 92) |
| **White** | 25.6% (n = 44) |
| **Multiracial** | 8.1% (n=14) |
| **Latino** | 12.8% (n = 22) |
| **Receive Free/Reduced Lunch** | 72.1% (n = 124) |
| **Demonstrate clinical difficulties by teacher ratings** | 65.9% (n = 91/138)* |
| **% with impaired peer relations** | 43.4% (n = 60) |
| **% with impaired academic/learning progress** | 68.1% (n = 94) |
| **% with impaired classroom behavior** | 56.5% (n = 78) |

*Not available for Cohort 1

# The Incredible Years® Dina Dinosaur Treatment Program

- **Developed for delivery in clinics:**
  - Small groups of 4-6 children meet weekly with 2 therapists
  - 18-20 weeks of 2 hour sessions, delivered with parent program
  - Teacher consultation recommended
- **Instructional Methods**: Developmentally-appropriate active learning strategies:
  - Puppets, videos, role-plays, and small group activities

- **Students learn**:
  - How to be successful in school
  - Understanding feelings in self and others
  - Calming down when upset or frustrated
  - Getting along with friends and problem-solving

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# SRSS Adaptations for Schools

- **Co-leader model:** SRSS mental health staff partner with school counselors to deliver

- **Delivery structure:** Twice weekly 45 minute sessions during non-core instructional time

  - 27 vs. 36 hours of targeted session time

  - Very little difference in session content with exceptions of omitting "coached play" and possibly fewer vignettes

- **Intervention supports for skill generalization:**

  - Recess coaching (adds "dosage")

  - Teacher in-service meetings, consultation

  - Parent educational meetings, phone calls



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# Implementation Considerations for School Delivery

*Delivering programs in schools is about a lot more than the program!*

- Scheduling & space
- Group composition
- Variability in school counselor skills
- Teacher stress/School climate
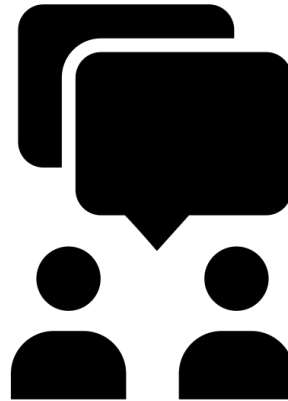- Alignment between program philosophy and school policy

# Implementation Supports to Address Challenges



Created by Jenny Chisnell
from Noun Project

**Monthly "coaching" in a Professional Learning Community (PLC)**

Created by Oksana Latysheva
from Noun Project

**Regular and proactive communication with school leadership**

Created by Artem Kovyazin
from Noun Project

**Developed relationships with school district liaisons**

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# Video Demonstration

- What do you notice about the teaching strategies used by the group leaders?

- How might this approach be effective with

  young children with self-regulation difficulties?

https://hml.fpg.unc.edu/Play/3230

# Preliminary Implementation Data*

- **Child Group Sessions**:
  - Average of <u>36</u> sessions to complete all 18 lessons (range = 32-40)
  - 90% student attendance across 10 groups and 9 schools (range 15%-100% across students)
  - 4 of 59 students did not participate/dropped out of the program
- **Parent Attendance at 2-3 Meetings**:
  - 33-43% attendance rate (71% of parents came at least once)
- **Recess Coaching**:
  - Average of 14 recess coaching sessions per student (range = 2-20)
- **Teacher Consultation**:
  - Average of 6 contacts per teacher (range = 2-11)
- **Teacher In-service**:
  - Average of 4.6 teachers/school at each session (25% without students in program)
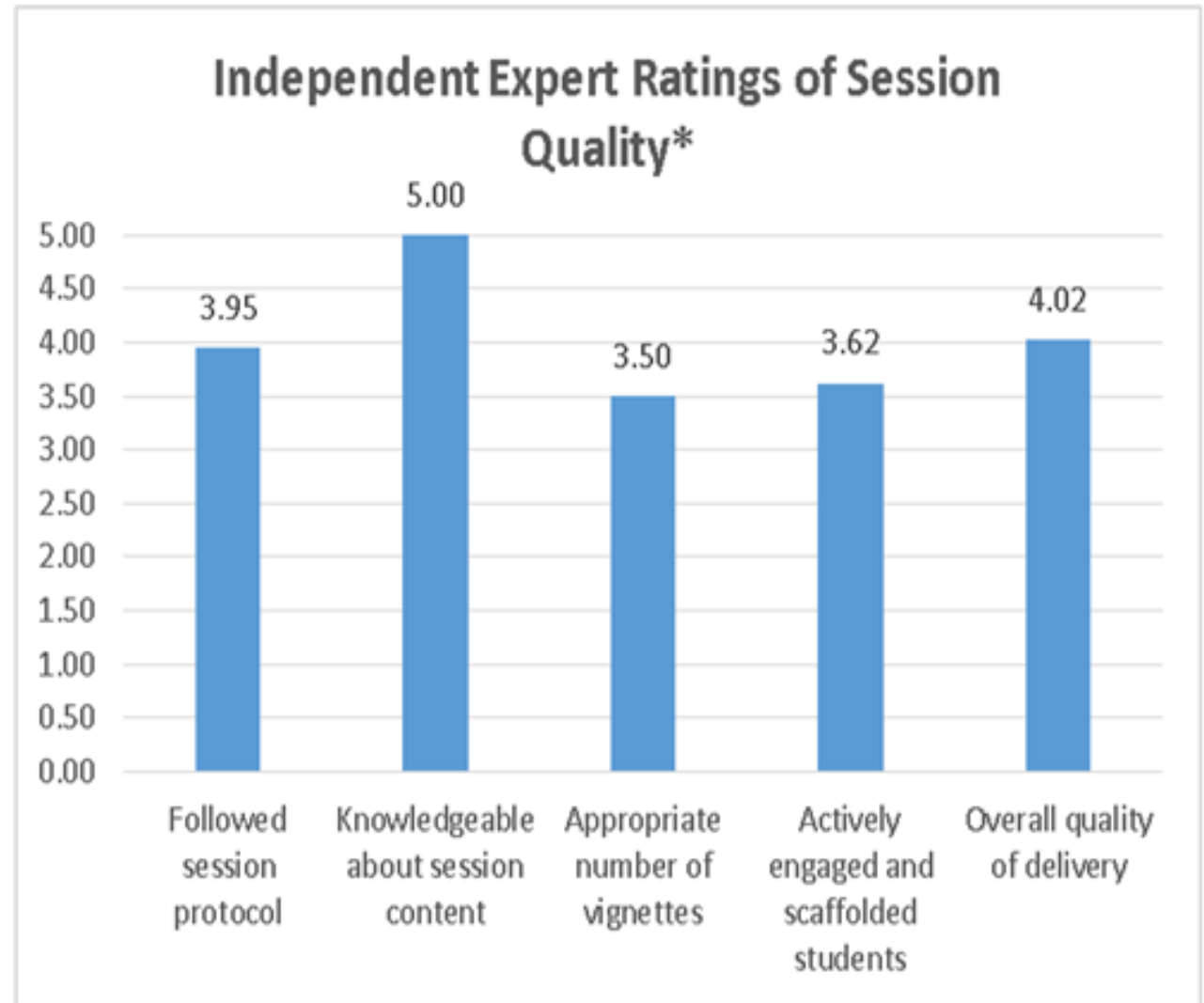
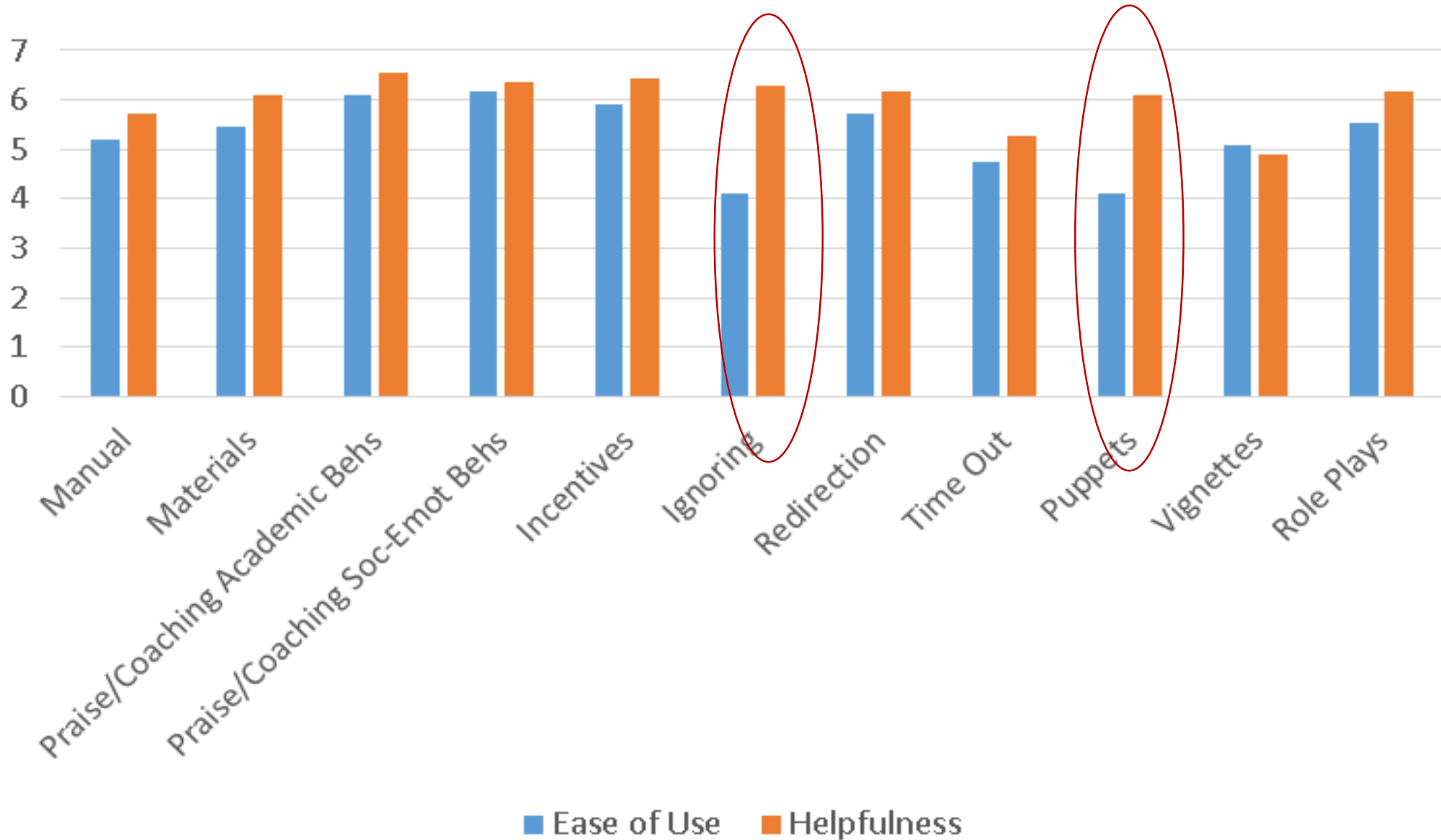*Based on Years 1 & 2, includes 4 drop outs

# Fidelity

## Group Leader Adherence Report

% of session content completed across 12 groups

## Independent Expert Ratings of Session Quality*

- Followed session protocol: 3.95
- Knowledgeable about session content: 5.00
- Appropriate number of vignettes: 3.50
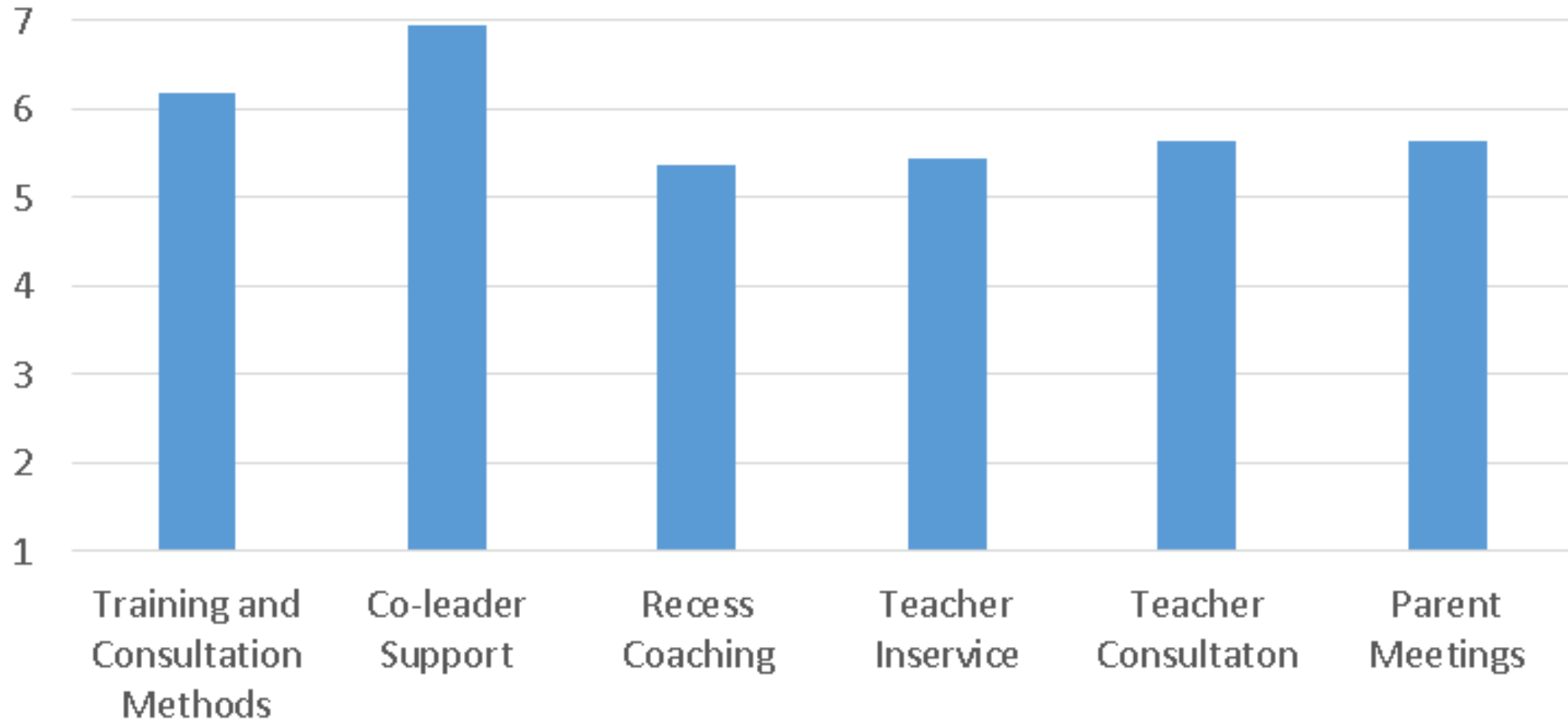- Actively engaged and scaffolded students: 3.62
- Overall quality of delivery: 4.02

1 = not at all, 3 = sometimes, 5 = frequently/extremely well
*Based on 39 ratings from Cohorts 1-2

Counselor Ratings of Methods

n = 11

Ease of Use  Helpfulness

Counselor Perceived Helpfulness of other Intervention Supports and Activities

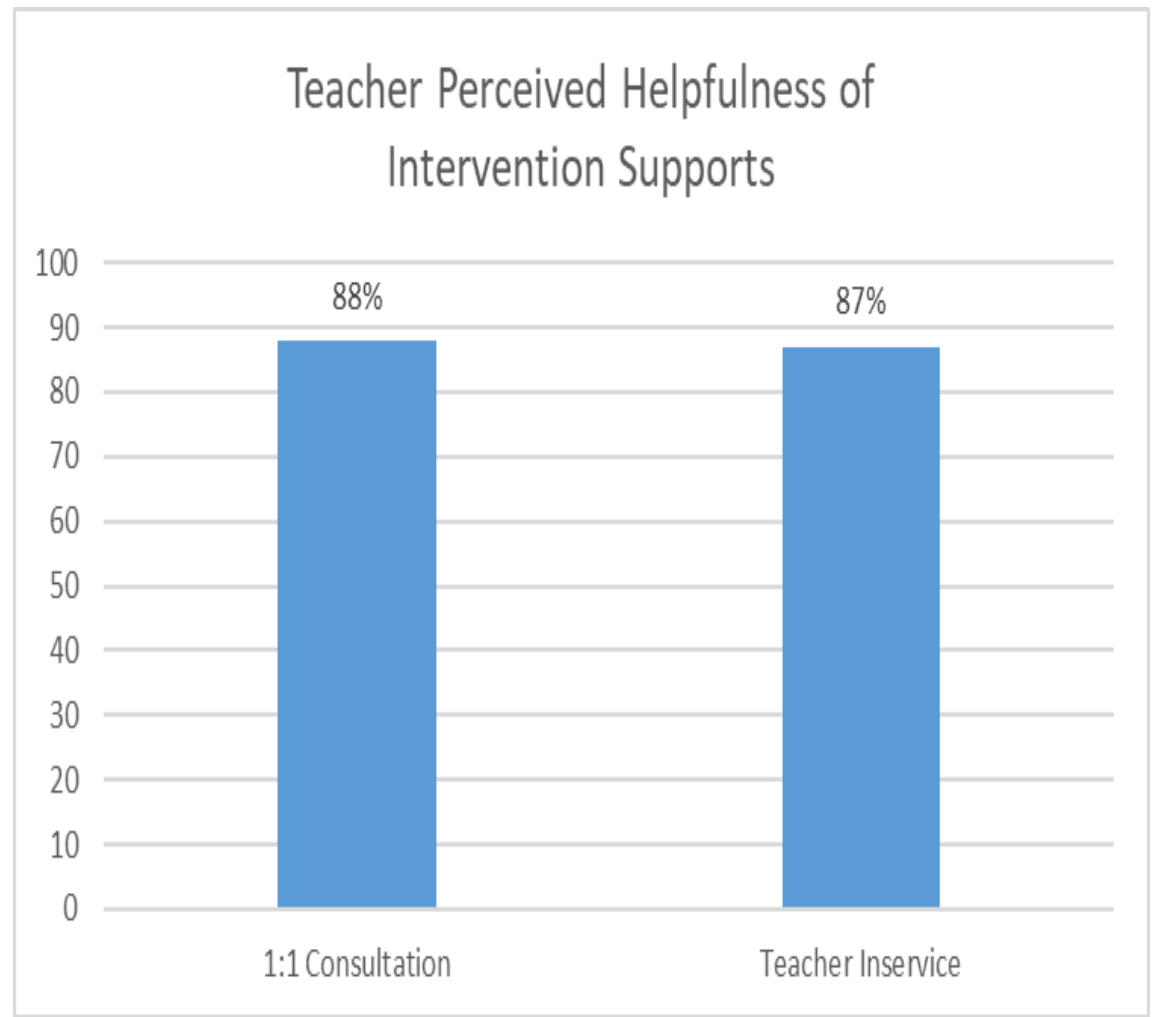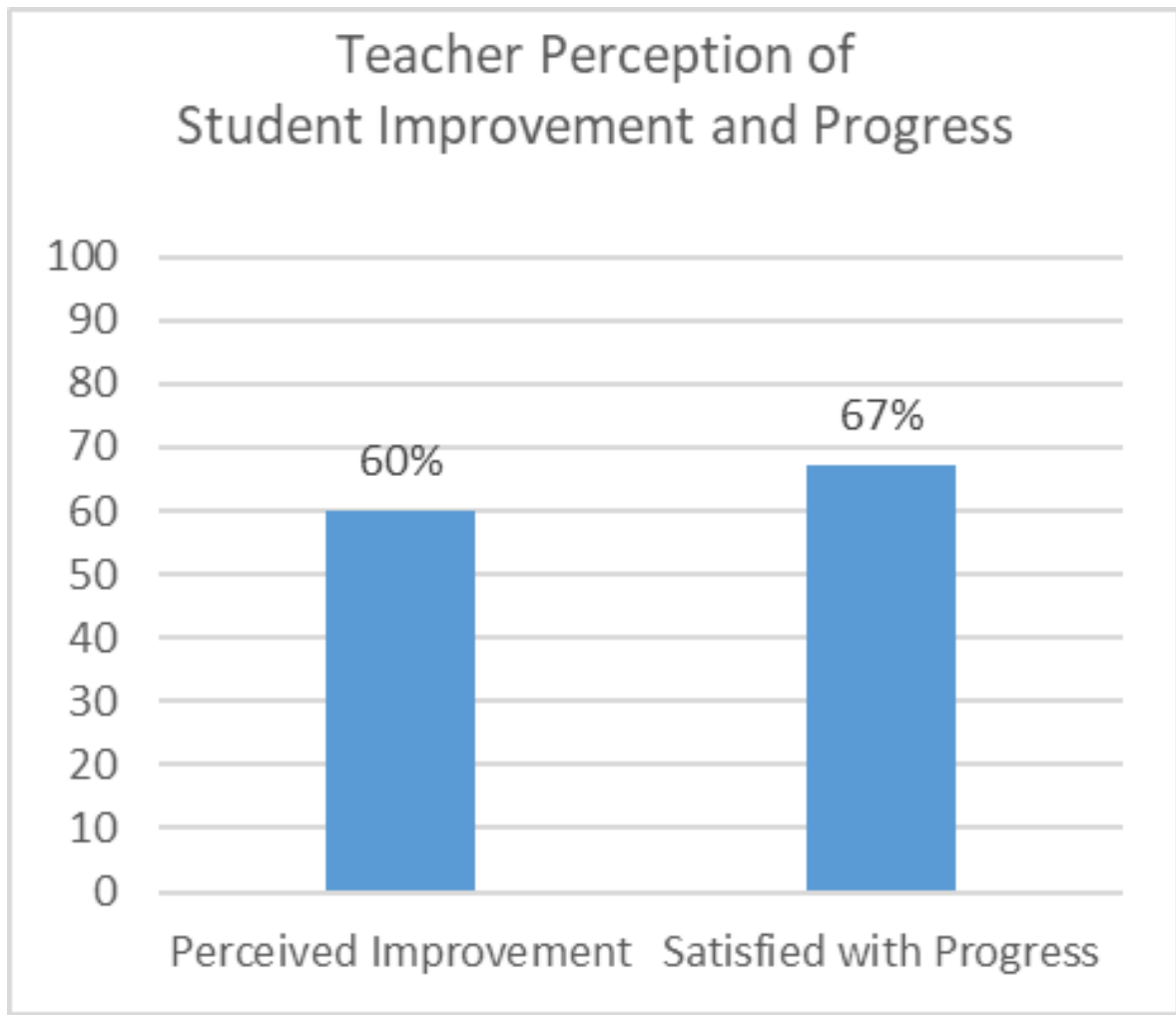1=extremely unhelpful, 4 = neutral, 7 = extremely helpful

n = 11

# Counselors' Perceived Benefits to their Learning and SEL Programming

- **Increasing skills** to manage behavior and more effectively praise and ignore students

- **Gaining understanding** of challenging students and how to teach them social-emotional skills in "fun" ways

- **Suggesting more effective strategies** to teachers for challenging kids

- **Modeling effective strategies** for teachers

- Using **intervention materials** as part of classroom guidance

# Teacher Satisfaction
## (n=48)



Teacher Perception of Student Improvement and Progress: Perceived Improvement 60%, Satisfied with Progress 67%. Teacher Perceived Helpfulness of Intervention Supports: 1:1 Consultation 88%, Teacher Inservice 87%.
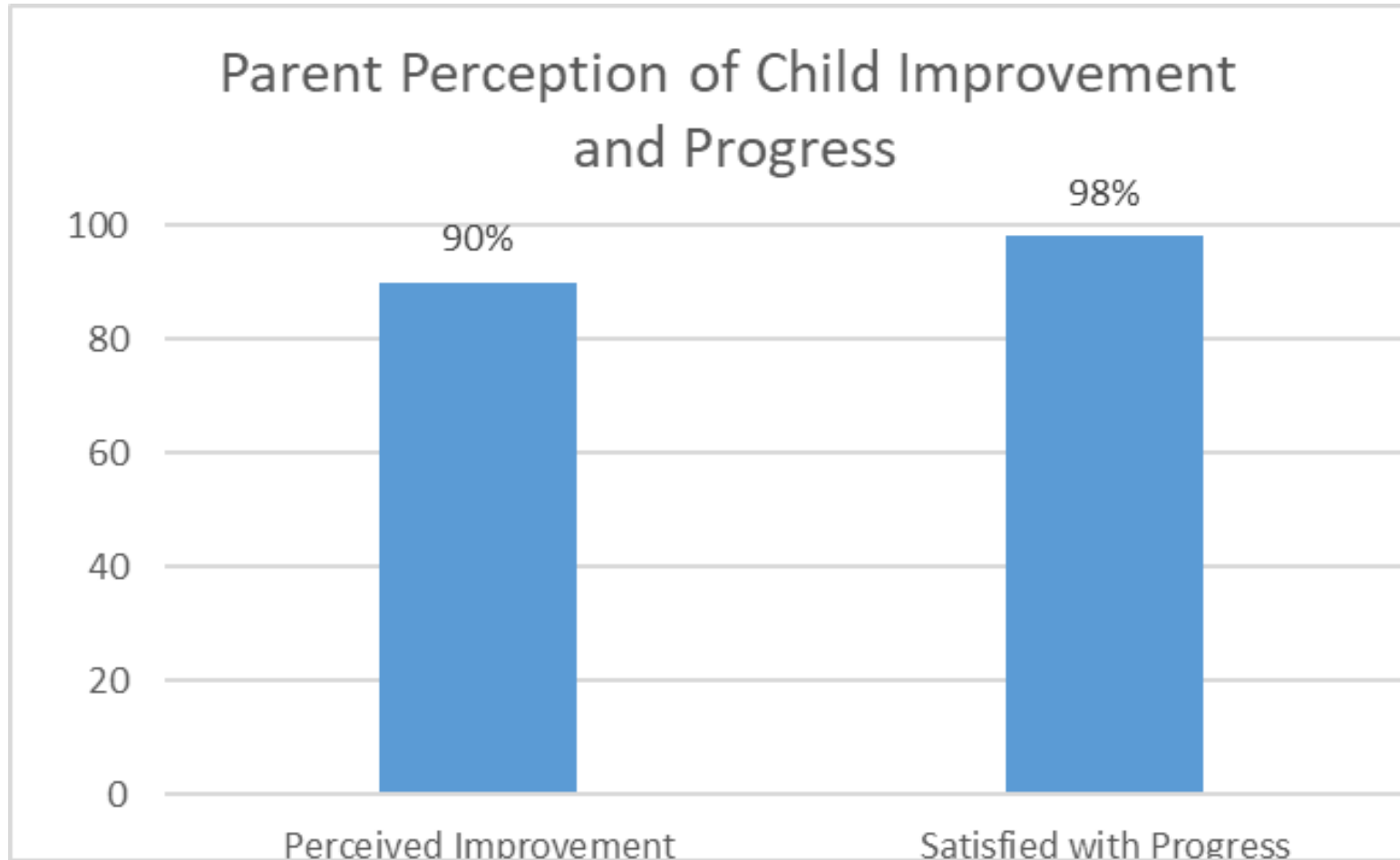
# Teacher Satisfaction

- Teacher satisfaction and perceptions of child improvement related to decreased ratings of hyperactivity/impulsivity

- Improvements in teacher ratings related to:
  - Ratings of 1:1 consultation with group leaders and teacher inservice
  - Also by other indicators of satisfaction with the program

- Open-ended responses suggest:
  - Teacher skill-building was most commonly identified as the most helpful aspect of program involvement
  - Increased opportunities for skill-building were suggested

Kurian, LaForett & Murray (June, 2018). *Teachers' Satisfaction and Experience with a School-Based Intervention for Young Children's Social and Emotional Development.* Poster to be presented at the National Research Conference on Early Childhood, Arlington, VA.

# Parent Satisfaction
## (n=43/58 or 75%)



Parent Perception of Child Improvement and Progress

Perceived Improvement: 90%
Satisfied with Progress: 98%

Parents reported gains in a range of children's skills such as emotion regulation, social skills, problem-solving and paying attention; the most common area of improvement identified was emotion regulation

# Parent Satisfaction

- 76% of variance in satisfaction predicted by:
  - Perceptions of their child's improvement (primarily)
  - Relationship with group leaders
  - Parenting strategies gained

- Satisfaction predicted higher parent meeting attendance ($r$ = .46) but lower home skill reinforcement ($r$ = -.61)

- Parental skill support at home was overall low (17%) and unrelated to meeting attendance or phone contacts with group leaders

- Open ended responses suggest:
  - Interest in greater support and communication with parents
  - Interest in a longer program/more support for child

Kurian, Murray & LaForett (May, 2018). *Parent Satisfaction with a School Mental Health Program: Predictors and Impacts on Parental Involvement.* Poster to be presented at the Society for Prevention Research, Washington DC.

# Implementation Lessons

Fidelity can be maintained in schools with significant implementation supports

Conjoint delivery with counselors may increase school capacity for SEL interventions and create broader impact

School contextual factors likely influence program delivery and perhaps efficacy

# Implementation Research Questions
## (exploratory)

- To what extent does variability in fidelity and dosage influence student outcomes?

- To what extent does intervention group assignment contribute to outcome variability?

- Are school characteristics (including climate) related to quality of program delivery and student progress/outcomes?

- How will school counselors continue to use the program and enhance SEL programming at their schools?

# Future School Delivery of IY Small Group

- External supports may be needed for full fidelity
  - Consider conjoint delivery with contracted mental health consultants
- Modifications for practice
  - Deliver shorter modules matched to domains of student impairment
    - E.g., school success, emotion regulation, friendship
  - School counselor could meet with 2-3 students at a time
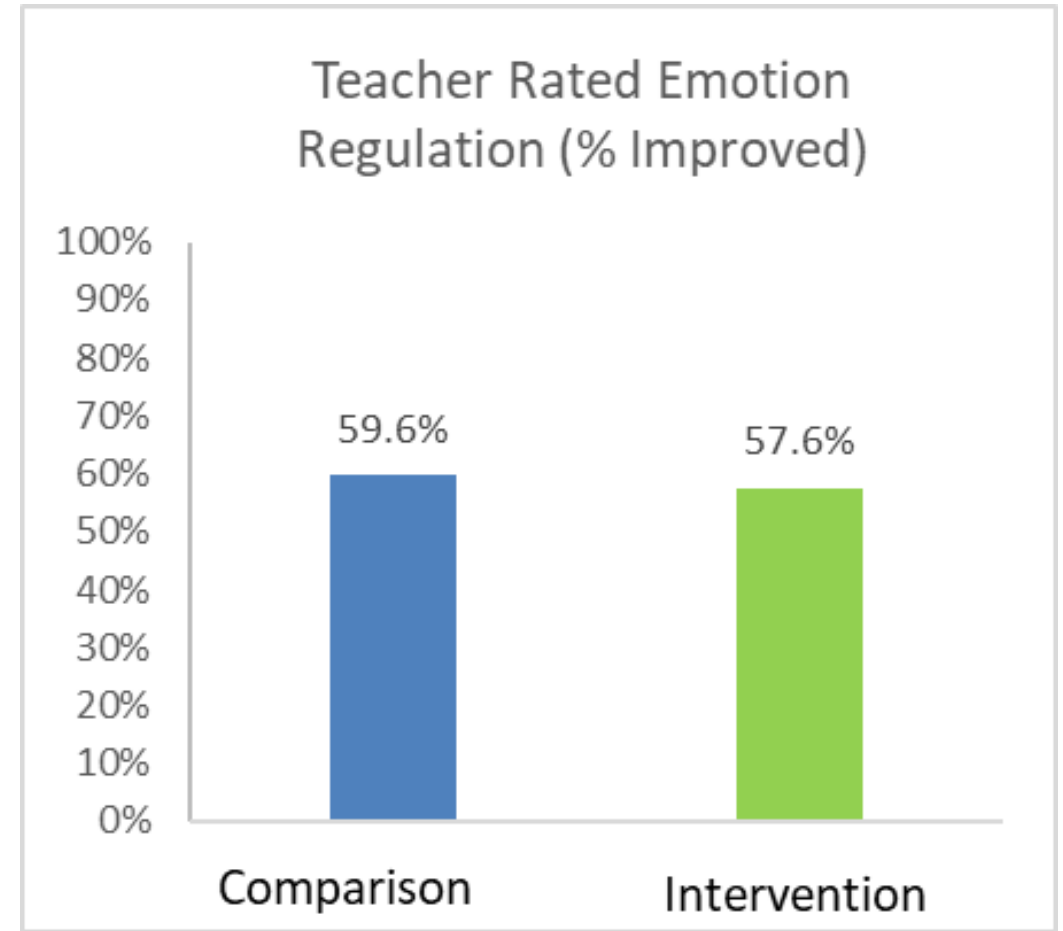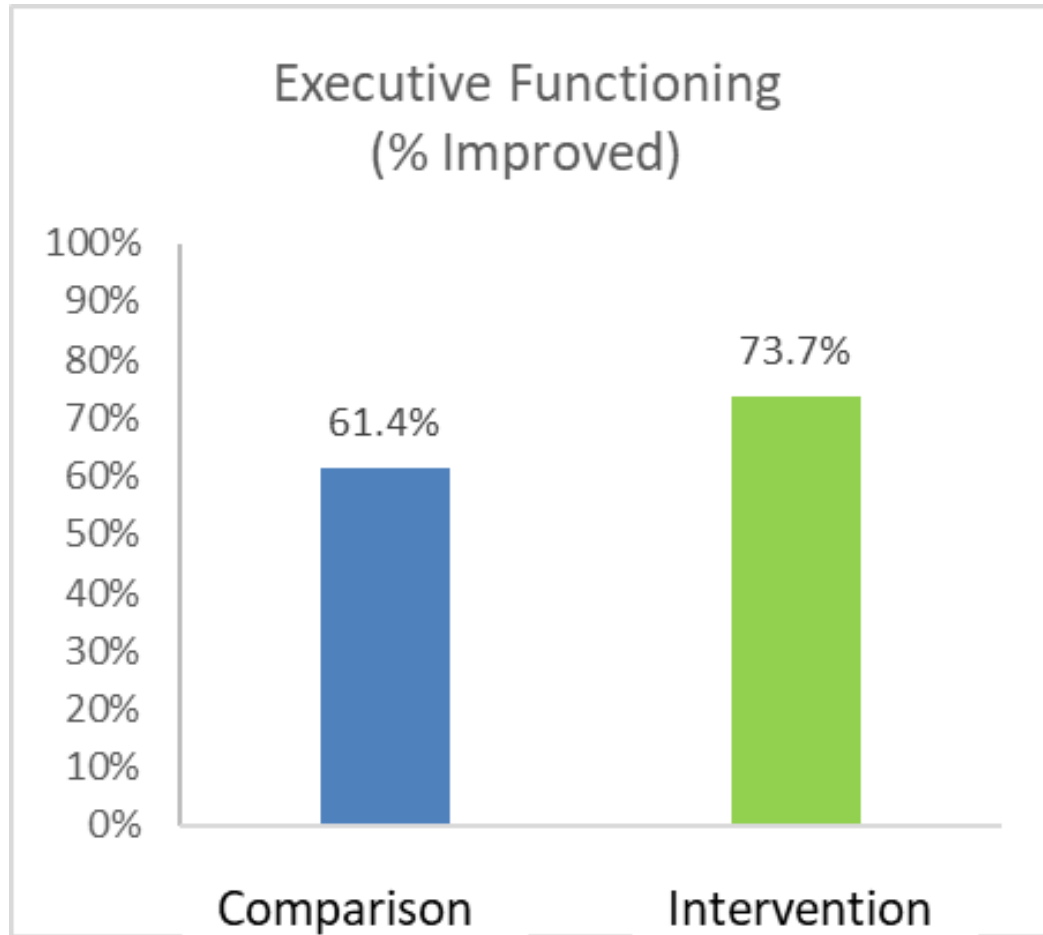  - Utilize curricula as classroom guidance lessons

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# Implications for School-Based Delivery of Other Clinical Programs

- Consider fit of the program with school philosophy and policies
  - Discipline approaches could be a mismatch
- Include skill-based supports for parents and teachers
  - Targeted programs may work less well without this support and/or strong universal positive discipline and social-emotional learning programming
- Strategically select students for group interventions
  - Some students may need greater support than can be provided in a group therapy setting with a 1:2 or 1:3 ratio
  - Consider group composition, e.g., possibility of negative peer dynamics and benefits of including less-impaired peers
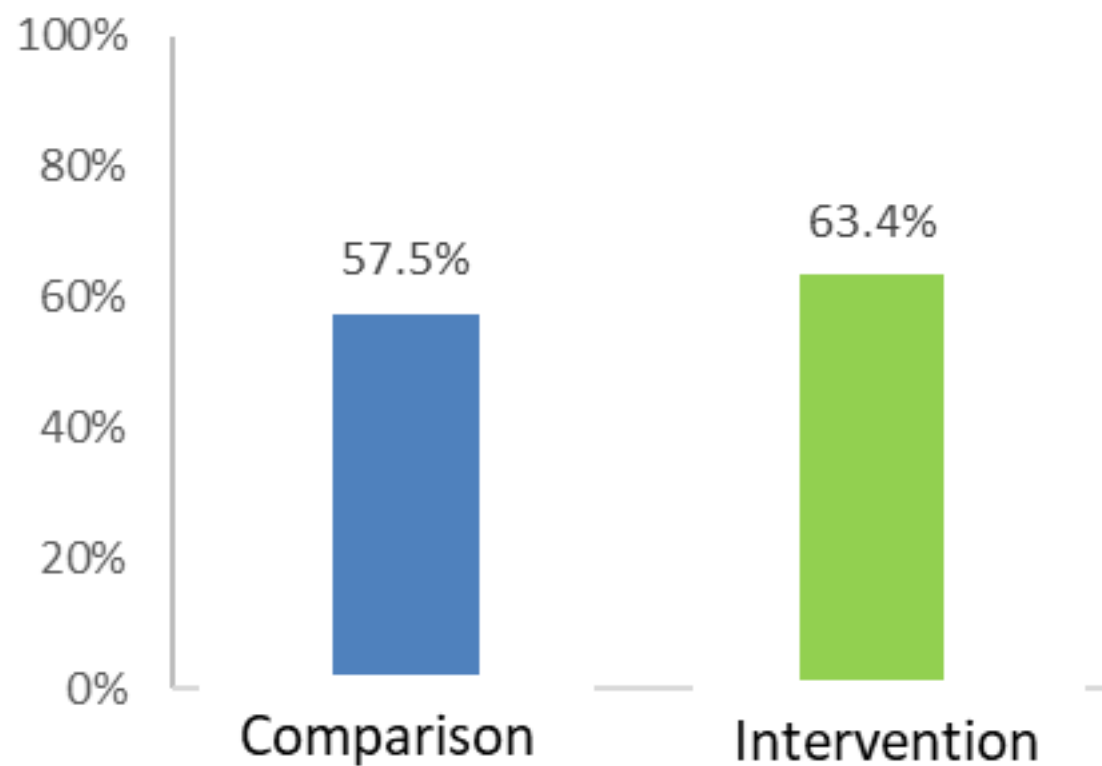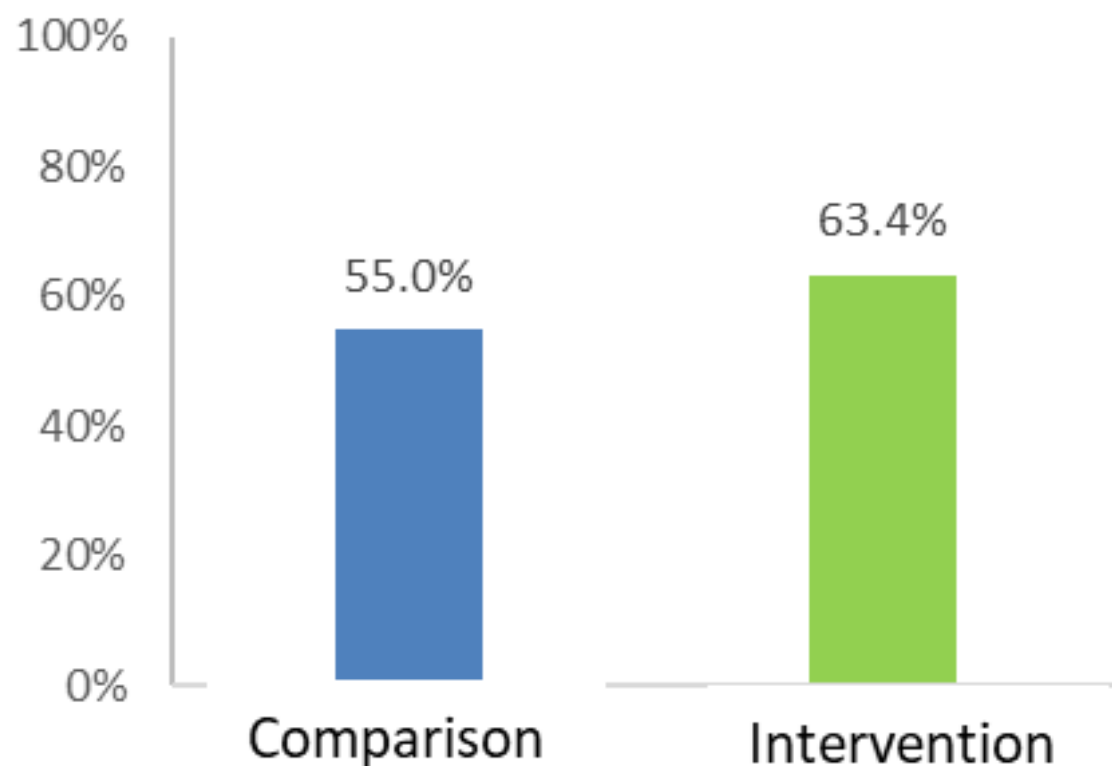
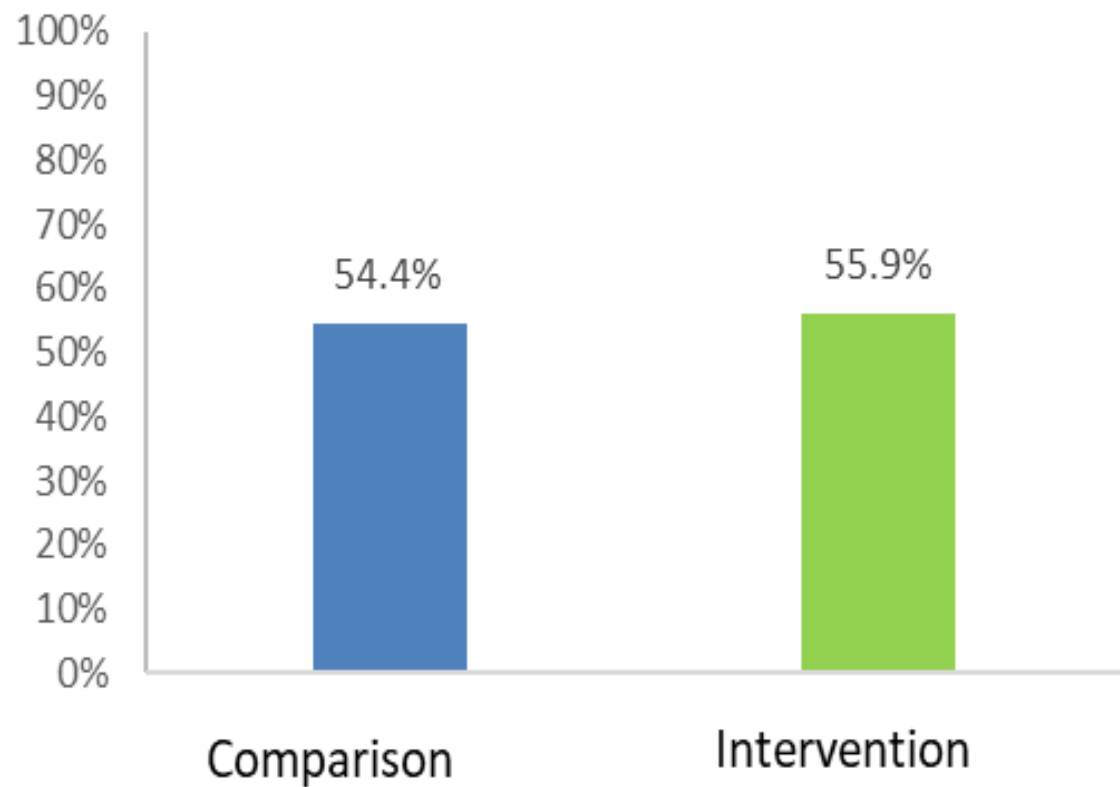# Questions?

# An early look at outcomes (Coh1-2)



Executive Functioning (% Improved)
- Comparison: 61.4%
- Intervention: 73.7%

Teacher Rated Emotion Regulation (% Improved)
- Comparison: 59.6%
- Intervention: 57.6%

## Observed Off Task Behavior (% Improved)

| Comparison | Intervention |
|------------|-------------|
| 54.4% | 55.9% |

## Teacher Rated Academic Performance (% Improved)

| Comparison | Intervention |
|------------|-------------|
| 50.9% | 55.9% |

# Our Questions

- How can we identify and evaluate for treatment predictors at the student and group level as well as a broader socio-contextual lens given our relatively small sample size?
  - Child sex, severity, symptom profiles
  - Teacher management skills
  - School variability