



Outcomes of an Effectiveness Replication Study of BEST in CLASS for Young Children at Risk for Emotional and Behavioral Disorders in Early Childhood Settings

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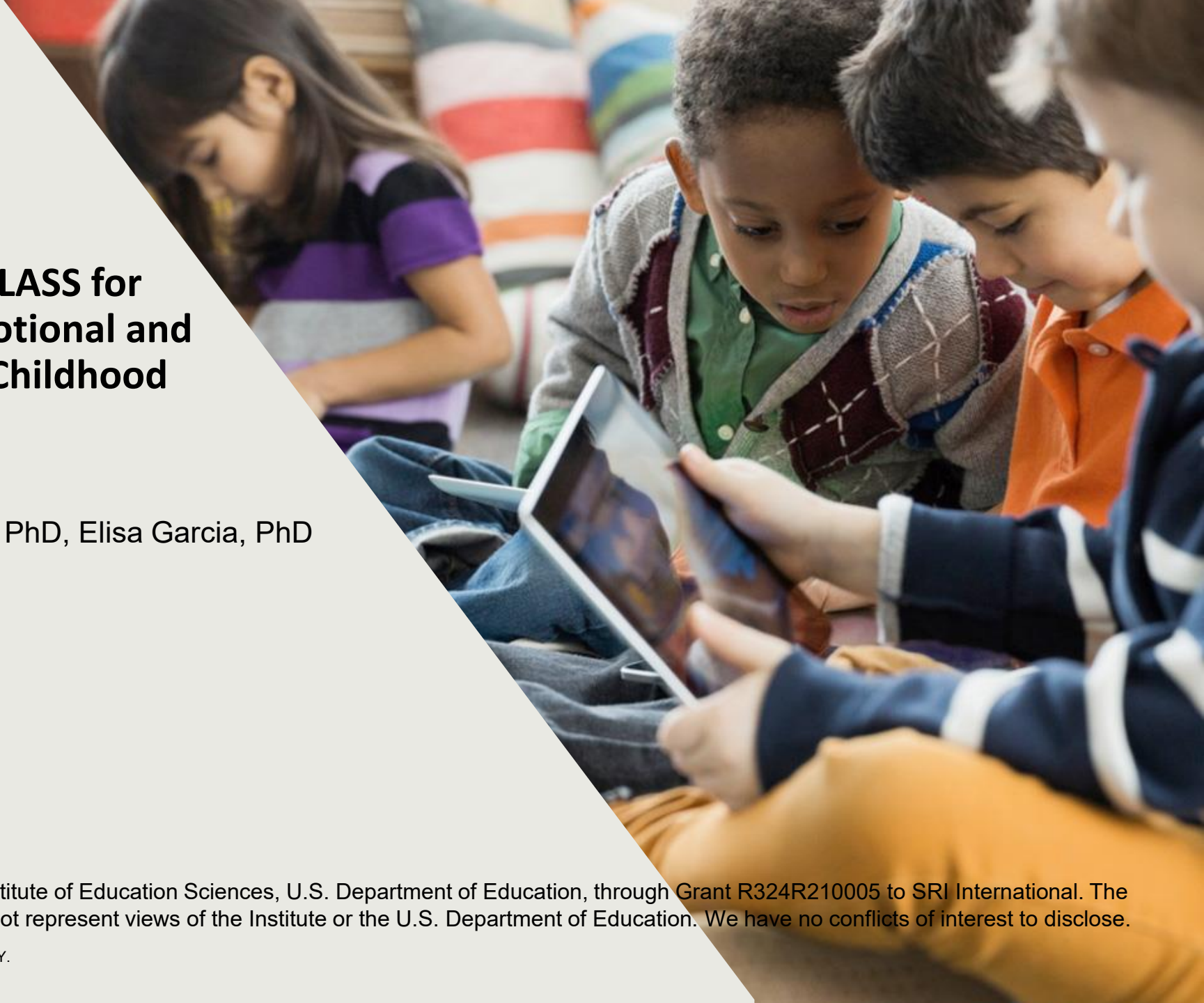
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Agenda



- Background and Purpose
- About BEST in CLASS-PK
- Research Design and Methods
 - Research Questions
- Findings
- Key Takeaways and Implications



Behavioral Challenges in Early Childhood



- ~**25% children** enter school with behavioral challenges that affect their learning experiences and increase risk for long-term academic and social-emotional difficulties.^{1, 2}
 - Reducing learning opportunities and straining teacher-child relationships.^{3,4}
- While disruptive behaviors are common and typically decline with development,⁵ **children with persistent and severe problem behaviors** face risks for learning delays and further social-emotional difficulties.⁶
- **Problem behavior is alterable with effective early intervention.**
- High-quality and evidence-based early learning can foster positive relationships and reduce problem behaviors.^{7, 8, 9}

¹Conroy et al. (2008), ²Ringeinsein et al. (2017), ³Hendricks et al. (2016), ⁴Myers & Pianta (2008), ⁵Chacko et al. (2009), ⁶Brennen et al. (2015), ⁷Hetzner et al (2011), ⁸McClelland et al (2007), ⁹Yoshikawa et al (2012)

Importance of Teacher-Child Relationships



- Positive teacher-child interactions can serve as a “protective” factor for social-emotional and academic success.^{1, 2, 3}
- **Supporting teachers to respond productively to problem behaviors is critical** to prevent negative teacher-child relationships and other negative long-term child outcomes.^{4,5}

¹Bulotsky-Shearer et al. (2012), ²McCabe & Altamura (2011), ³O'Connor & McCartney (2007), ⁴Coplan et al. (2015), ⁵Yoder & Willford (2019)

Critical Role of Coaching



- Teachers need training in strategies to prevent or ameliorate chronic social-emotional and behavior problems.¹
- Tier 2 interventions with teacher training and practice-based coaching (PBC) in ECE settings support effective implementation of strategies to address and prevent challenging behaviors
- Teachers need ongoing support to implement evidence-based practices with fidelity.

¹Snell et al. (2012)



BEST in CLASS-PK Program

BEST in CLASS-PK Components



Tier 2 evidence-based intervention for young children with persistent and intensive challenging behaviors



Practice-Based Coaching



- Used by Head Start programs as a professional development strategy.
- Uses a **14-week** framework in partnership with a trained coach.
- Employs **collaborative** decision-making, modeling, observation, performance feedback, and problem solving.
 - Coach and teachers develop a partnership based on trust, respect, honesty, and nonevaluative communication.
- Offers **technical assistance and support** in weekly sessions to help teachers use BEST in CLASS practices with focal children.
 - Teachers identify focal children who are “high risk” for developing emotional and behavioral disorders.
 - Coach helps plan strategies for communicating with caregivers about using these strategies at home.

BEST in CLASS-PK Instructional Practices



Rules:

Teach short, simple classroom rules to support focal children's compliance and appropriate behavior.

Precorrections:

Remind or instruct focal children to engage in appropriate, alternative behaviors before challenging behaviors can occur.

Opportunities to repond:

Enhance instructional queries and pacing to increase focal children's active engagement and decrease their challenging behaviors.



Behavior-specific praise:

Build positive relationships with focal children and reinforce their appropriate behaviors with specific, verbal encouragement.

Corrective feedback:

Use learning opportunities to help focal children learn the correct responses and appropriate behaviors via timely, high-quality feedback.

Instructive Feedback:

Expand focal children's preacademic and behavioral learning via extended learning opportunities.

Linking and mastery:

Link and combine BEST in CLASS instructional practices to maximize effectiveness and promote continued mastery, maintenance, and generalization.

Evidence for BEST in CLASS-PK



In comparison to Business as Usual, there is evidence that
BEST in CLASS-PK leads to:

**Improved
classroom
atmosphere**

**Improved
teacher-child
interactions**

**Improvements in
child appropriate
behavior,
engagement, and
social skills**

**Reductions in child
challenging
behavior**

- **BEST in CLASS-PK** is an intervention that mitigates obstacles shown to negatively impact short- and long-term child outcomes

- These findings have maintained

Over **time**
&
Across **trials**



Systematic Replication Study



Current evidence base for BEST in CLASS-PK from **efficacy trials**

- Conducted under **ideal** conditions:
 - Coaches were **highly trained** and experienced research staff, closely **supervised**.
 - Coaches observed teaching practices and **corrected deviations**.
 - Program developers provided **regular monitoring**.

Systematic replication study

- Intervention implemented in **naturally occurring** conditions (e.g., typical early childhood classrooms) with **typical end users** (e.g., current program staff) and **evaluated independently**.
- Results will provide practically important impacts on **meaningful education outcomes**.



Research Questions



The purpose of this effectiveness replication study is to examine the impacts of the BEST in CLASS Tier 2 teacher training and coaching model.

1. What are the impacts of BEST in CLASS-PK on children's **problem behaviors** and **self-regulation**?
2. How does BEST in CLASS-PK influence the **quality of teachers' positive interactions** with children?
3. To what extent do school-based coaches **implement BEST in CLASS-PK practices using practice-based coaching (PBC)** with fidelity and quality?

Research Design



- **Cluster randomized control trial** study of BEST in CLASS-PK under routine conditions in authentic early childhood settings
 - Teachers were randomly assigned to BEST in CLASS or “business-as-usual”/ comparison group
 - Blocked by location and center size
 - Teachers within same centers randomized to condition
- Two data collection waves
 - **Baseline** child and teacher data prior to randomization
 - **Outcome** data after completion of practice-based coaching sessions
- Three cohorts: 2022-2023, 2023-2024, 2024-2025
- Implementation study with teacher survey items and coach interviews

Participating Sites



Site 1: Northeast/ Central Florida

- ECE agency serving children in 14 counties
- Suburban and **rural communities**
- ~3,000 children across more than 300 Head Start classrooms
- Children are **44% Black, 31% White**, 14% Latinx, 6% Multi-racial
- 8% speak Spanish at home
- 7% are children with disabilities

Site 2: Northern Virginia

- Public school district in **mid-size city**
- 95 early childhood programs
- Children are **89% Black**, 4% Multi-racial, 3% Latinx, 3% White
- 3% speak Spanish at home
- 8% are children with disabilities

Site 3: Northern California

- **Suburban** school district
- Over 1,000 children across approximately 190 center-based Head Start programs
- Children are **37% Asian, 33% Latinx, 20% White**, 8% Multi-racial, 2% Black
- **40% speak Spanish at home**
- 17% are children with disabilities

Participants



Total sample

- 181 children and 78 teachers

Treatment

- 86 children and 40 teachers

Comparison

- 95 children and 38 teachers

Site 1: Northeast/ Central Florida

- 124 children
- 51 teachers
- 6 coaches
- 26 centers

Site 2: Northern Virginia

- 33 children
- 17 teachers
- 6 coaches
- 6 centers

Site 3: Northern California

- 24 children
- 10 teachers
- 2 coaches
- 9 centers

Participant Demographics



- Children participating in the study were between 2.8-6 years old ($M = 3.2$) across the Head Start sites.
 - Teachers completed a systematic screener for behavior disorders ([SSBD](#)) for children to determine eligibility

Child characteristics by condition		
	Comparison	BEST in CLASS
	Percent	Percent
Child is female	37.4	31.1
Child race/ethnicity		
Black/African American	51.2	52.7
Hispanic/Latinx	23.6	19.1
Multi-ethnic/racial	1.57	4.6
White	15	14.5
Other	8.66	9.2
Child speaks non-English at home	26.9	25.2
Child has IEP/504	6.1	6.8

[Teacher Characteristics](#)

Measures



Direct Child Assessment

- Preschool Self-Regulation Assessment (PSRA) to measure **children's self-regulation**



Teacher Survey

- Caregiver-Teacher Report Form (C-TRF) to **measure children's problem behaviors**
- Coaching and implementation experience questions
- Student-Teacher Relationship Scale (STRS)
- Teachers' Sense of Self Efficacy Scale (TSES)



Teacher and Classroom Observation

- TCIDOS and BICACS to measure **adherence and quality of implementation**
- Classroom Assessment Scoring System (CLASS 2nd Edition)

Analytic Approach

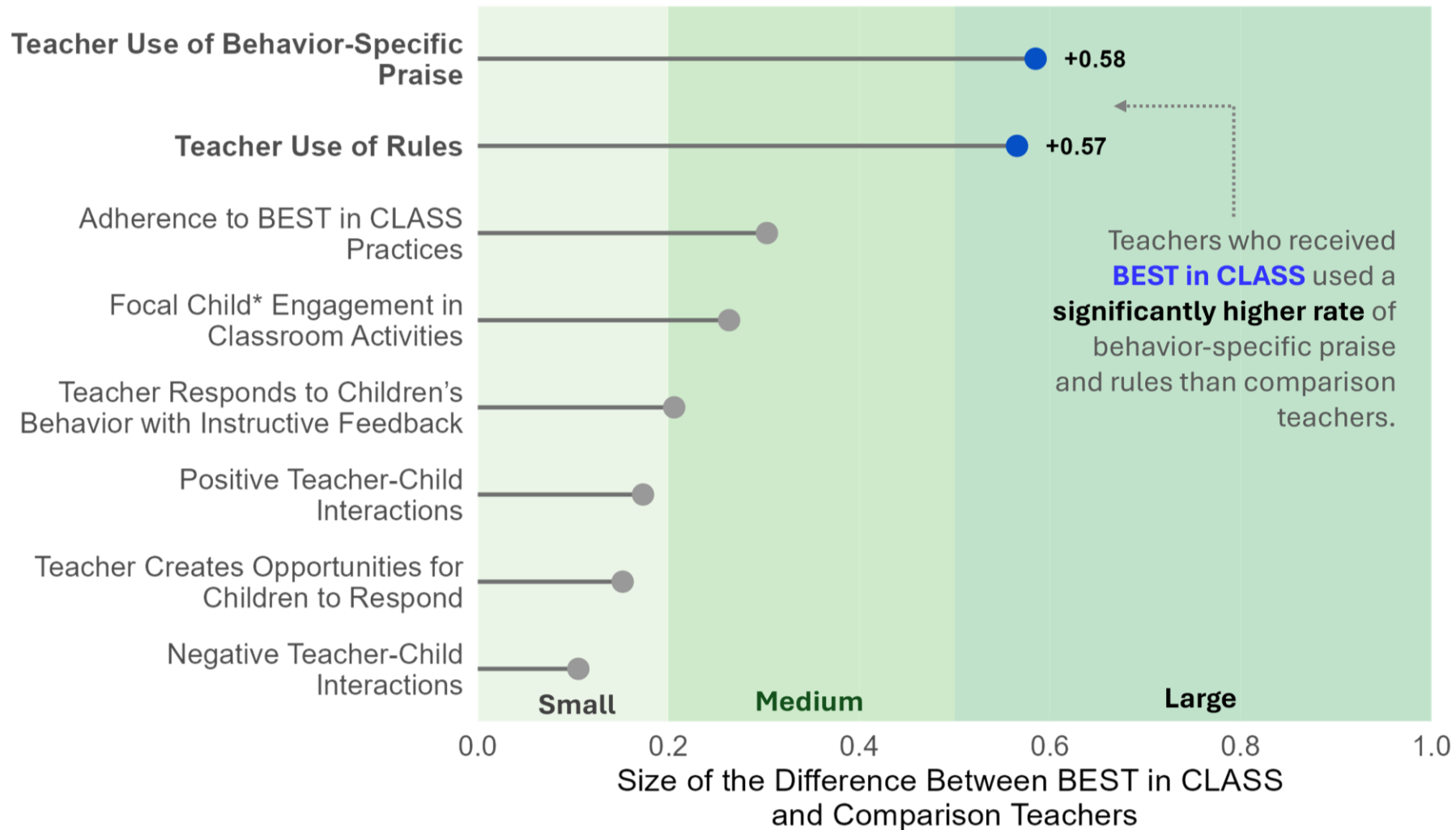


- Two-level Hierarchical Linear Regression (HLM)
 - Child-Level outcomes: Children nested within teachers
 - Teacher-Level outcomes: Teachers nested within region/district



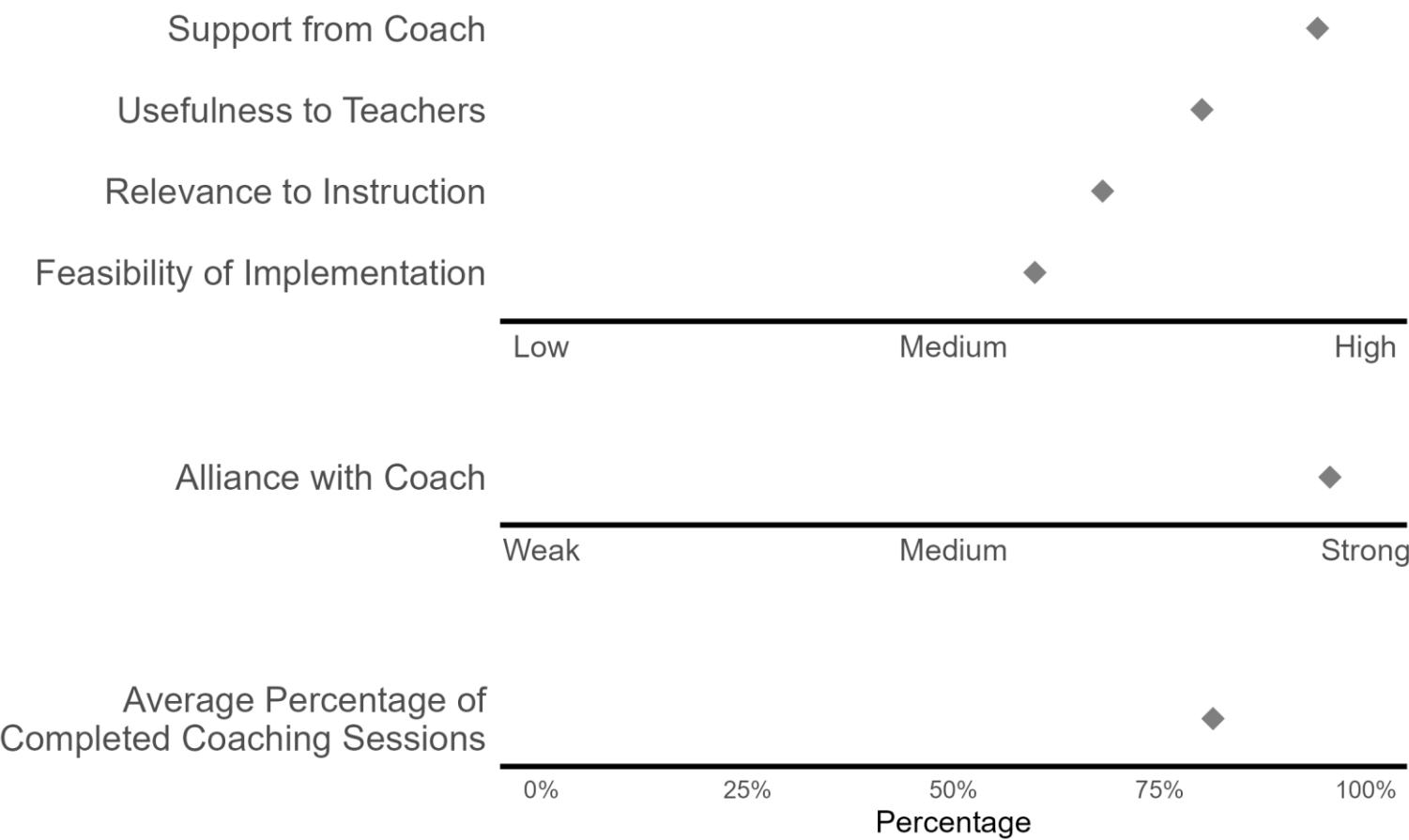
Findings

Notable Effect Sizes



*Focal children are identified by teachers as children who display some challenging behaviors in the classroom.

Contextualizing Findings with Teacher Implementation Measures



Note: The values on the first two visuals are the simple average across 35 individual items, grouped into 5 sub-scales.
Overall n= 37. Site n= 23.

Contextualizing Findings with Coach Implementation Interviews



- Coaches found BEST in CLASS-PK to be practical and impactful due to the focus on concrete strategies. Coaches observed changes in student behavior, teacher practice, and teacher self-efficacy.
- Coaches discussed overall classroom effects beyond focal students.
- Strong coach-teacher alliance and ongoing coaching supports were seen as essential for successful implementation and fidelity.
- Consideration for the school context and infrastructure is important to support implementation.
 - An implementation challenge included competing coach demands and high caseloads.
 - An implementation facilitator included alignment of BEST in CLASS-PK with other professional development



Key Takeaways and Implications

Key Takeaways



- Beginning to see patterns in teachers' increase in use of BEST in CLASS-PK practices in the classroom.
- Evidence for impact not as strong as prior BEST in CLASS-PK evaluations suggesting challenges in implementation in authentic classroom settings.
 - Supported by prior literature^{1,2,3,4}
 - Scaling and sustaining implementation remains difficult due to workforce and systemic barriers.^{5,6}

¹Payne (2008), ²Scott (2002), ³Supovitz & Weinbaum (2008), ⁴Weiz & Jenson (2001), ⁵Fagan et al. (2019), ⁶Wackerle-Hollman et al. (2021)

Implications for Practice



- When designing coaching programs consider integrating program elements that are practical, relationship-driven, and adaptable, with attention to real-world classroom dynamics like co-teaching and limited time.
- Provide consistent and ongoing supports to teachers and coaches to support fidelity and continuous learning.
- Ensure programs are aligned with existing professional development systems to promote sustainability.



Purpose: To help stakeholders learn about **evidence-based** approaches to support all students' **positive behavior**, **mental health**, and **well-being**.

Includes tips and findings from our research, evaluation, and TA work.

- Perspectives from our partners on the ground, too!

Send comments and inquiries about partnering or working with us to:
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