


# Conjoint Behavioral Consultation: Preliminary Findings of Child Outcomes and the Mediating Effect of Parent-Teacher Relationships



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# Introduction & Rationale

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- Without intervention, students with behavioral challenges are vulnerable to difficult life circumstances (Wagner et al., 1993)
  - Significant academic challenges (e.g., grade failure, lower GPAs, missed school, dropout)
  - Serious difficulties outside the school (e.g., pregnancies, criminal activity, substance abuse, homelessness)

# Introduction & Rationale

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- There is a strong need for intervention across home-school contexts
  - Family-school partnerships & parental involvement positively correlate with favorable outcomes for students, parents, and teachers (e.g., Grolnick & Slowiaczek, 1994; Haynes, Comer, & Hamilton-Lee, 1989; Masten & Coatsworth, 1998)
  - 20th Annual Report to Congress (US Department of Education, 1998) had recommended implementing programs that are
    - “flexible, positive, collaborative, culturally appropriate, and regularly evaluated...”* and (b) *“...have multiple components tailored to individual needs... build on strengths of youth and their families...and [are] continually evaluated”* (US Department of Education, 1998; II-59).

# Introduction & Rationale

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- Conjoint Behavioral Consultation is a promising home-school intervention model (CBC; Sheridan et al., 1996; Sheridan & Kratochwill, 2008)
  - Promotes implementation of evidence-based intervention strategies by parents and teachers conjointly
  - Provides a mechanism to develop collaborative family-school partnerships to support children

# Introduction & Rationale

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- **Additional research on CBC is needed**
  - CBC's efficacy has been examined primarily via single subject or quasi-experimental studies (e.g., Sheridan, Clarke, & Burt, 2008); need a large-scale randomized trial
  - Mechanisms by which CBC exerts its effects (e.g., parent-teacher relationships) have not been explored

# Focus of this Study

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## □ Primary objectives of this study:

- to present preliminary findings of a randomized trial evaluating the efficacy of CBC
- to determine the effects of CBC on parent-teacher relationships
- to examine the parent-teacher relationship as a mediator between the CBC intervention and child outcomes

# Primary Research Questions

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1. What is the effect of CBC on children's externalizing, adaptive, and social behaviors?
2. What is the effect of CBC on teachers' reports of the parent-teacher relationship?
3. Does the parent-teacher relationship mediate the effects of CBC on child outcomes?

# Participants

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- 203 K-3 students and their parents and teachers from 26 schools participated
- Students with disruptive classroom behaviors (e.g., non-compliance, aggression) were selected based on teacher nomination, ratings on a short behavioral inventory, and the *Systematic Screening for Behavior Disorders (SSBD)*; Walker & Seversen, 1990)

# Research Design

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- 3-cohort randomized design
- Within each cohort, small groups (one teacher and 2-3 parents) to which intervention was provided were randomly assigned to CBC or the control (treatment as usual) condition
  - 52 small groups (112 students) assigned to CBC
  - 42 small groups (91 students) assigned to the control condition

# Three-Stage CBC Implementation

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- Stage 1: Needs Identification and Needs Analysis (Building on Strengths)
  - Discuss objectives
  - Review strengths of student, family, and school
  - Prioritize 1-2 target behaviors per student
  - Identify and define needs, settings, and goals
  - Conduct functional behavior analysis
  - Discuss ways to gather information
  - Discuss and select strategies for change

# Three-Stage CBC Implementation

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- Stage 2: Plan Development (Planning for Success)
  - Discuss Objectives
  - Discuss information collected by parents and teachers about identified behaviors
  - Develop a plan to address student needs
  - Collect plan materials
  - Discuss support for the plan at home

# Three-Stage CBC Implementation

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- Stage 3: Plan Evaluation (Checking and Reconnecting)
  - Discuss progress made toward goals
  - Evaluate the plan(s)
  - Determine the need to continue or change the plan

# Three-Stage CBC Implementation

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- 4-5 conjoint consultation sessions occurred over 8-12 weeks in small groups with parents of 2-3 students and the classroom teacher
- Consultants selected interventions for students' behavioral plans from a *Behavioral Strategies Toolkit* with standardized protocols for evidence-based behavioral strategies
- All students' behavioral plans contained a *motivation component* (e.g., token economy, reward menu) and a *home-school communication system*
- Additional contacts and training with parents and the teacher were scheduled as needed

# Pre-Post Measures/Data Collection

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- Student behavior outcomes
  - Behavioral Assessment System for Children, 2nd Edition – Teacher Report, Child (BASC-2; Reynolds & Kamphaus, 2004)
  - Social Skills Rating System (SSRS; Gresham & Elliott, 1990)
- Parent-teacher relationships
  - Parent-Teacher Relationship Scale –II (PTRS-II; Vickers & Minke, 1995)
- Severity of student behavioral problems (control variable)
  - Teacher rating during screening (mild = 1; severe = 9)

# Data Analyses

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- Effect of CBC on child outcomes & parent/teacher relationships
  - 3-level multilevel model (time points within individuals within teachers) examining the fixed effect of time by treatment interaction ( $\gamma$ )
- Mediating effect of the parent-teacher relationship
  - Path analysis with a bootstrap method (Shrout & Bolger, 2002)

# Results

## Fixed Effect Estimation

## Descriptive Statistics

Effect	Estimate	SE	DF	t		Pre	Post	
<u>BASC-II Externalizing Problems</u>								
Intercept (C)	61.35	2.28	283	26.86	**	CBC	M 67.14	63.13
Slope (C)	-1.41	1.01	164	-1.40			(SD) (11.23)	(10.83)
$\Delta$ Intercept (T - C)	2.15	2.44	236	0.88		Control	M 68.32	66.48
$\Delta$ Slope (T - C)	-2.60	1.32	162	-1.98	*		(SD) (10.64)	(10.16)
Severity	2.76	.52	171	5.33	**			

\*  $p < .05$ , \*\*  $p < .01$ ; T: Treatment (CBC), C: Control;  $\Delta$  Slope (T - C): differences in change over time between CBC and Control conditions of practical interest

# Results

## Fixed Effect Estimation

## Descriptive Statistics

Effect	Estimate	SE	DF	t		Pre	Post	
<u>BASC-II Adaptive Skills</u>								
Intercept (C)	45.35	1.67	290	27.22	**	CBC	M 40.82	43.25
Slope (C)	.30	.76	160	.39			(SD) (6.69)	(7.17)
Δ Intercept (T - C)	-3.23	1.83	236	-1.77		Control	M 41.95	42.64
Δ Slope (T - C)	1.99	1.00	158	1.99	*		(SD) (6.98)	(6.61)
Severity	-1.25	.36	167	-3.45	**			

\*  $p < .05$ , \*\*  $p < .01$ ; T: Treatment (CBC), C: Control; Δ Slope (T - C): differences in change over time between CBC and Control conditions of practical interest

# Results

Effect	Fixed Effect Estimation					Descriptive Statistics				
	Estimate	SE	DF	t		Pre	Post			
<u>SSRS Total Score</u>										
Intercept (C)	91.86	2.56	299	35.84	**	CBC	M	83.42	89.14	
Slope (C)	1.35	1.16	165	1.17			(SD)	(12.18)	(13.59)	
Δ Intercept (T - C)	-5.21	2.86	240	-1.82		Control	M	85.26	87.49	
Δ Slope (T - C)	3.66	1.53	164	2.40	*		(SD)	(9.16)	(8.97)	
Severity	-2.83	.54	171	5.27*	**					

\*  $p < .05$ , \*\*  $p < .01$ ; T: Treatment (CBC), C: Control; Δ Slope (T - C): differences in change over time between CBC and Control conditions of practical interest

# Results

## Fixed Effect Estimation

## Descriptive Statistics

Effect	Estimate	SE	DF	t			Pre	Post	
<u>Parent-Teacher Relationship Scale II (Teacher) - Total</u>									
Intercept (C)	3.83	.13	167	29.70	**	CBC	M	3.66	3.78
Slope (C)	-.05	.05	174	-.11			(SD)	(.70)	(.75)
Δ Intercept (T - C)	-.30	.17	183	-1.75		Control	M	3.78	3.72
Δ Slope (T - C)	.16	.06	174	2.53	**		(SD)	(.80)	(.81)

\*  $p < .05$ , \*\*  $p < .01$ ; T: Treatment (CBC), C: Control; Δ Slope (T - C): differences in change over time between CBC and Control conditions of practical interest

# Results

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1. What is the effect of CBC on children's externalizing, adaptive, and social behaviors?
  - ▣ CBC students had a greater decrease in externalizing problems and increase in adaptive skills (BASC-II)
  - ▣ CBC students had a greater increase in social skills (SSRS)

# Results

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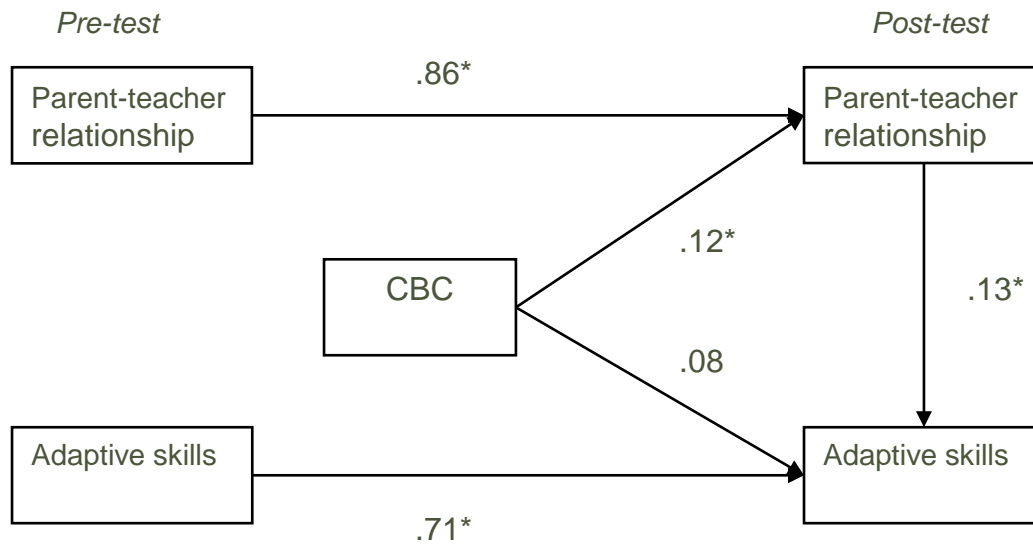
2. What is the effect of CBC on teachers' reports of the parent-teacher relationship?
  - There was a greater increase in the reported quality of parent-teacher relationships for teachers participating in CBC

# Results

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3. Does the parent-teacher relationship mediate the effects of CBC on child outcomes?
  - A mediating effect of the parent-teacher relationship accounted for the effect of CBC on the *Adaptive Skills outcome (BASC-2)*

# Results



$\chi^2(2)=1.65, p=.44$

CFI=1.00

RMSEA=.00

\*P < .05

# Conclusions

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- ❑ This is the first randomized trial to test the efficacy of CBC and processes that may mediate its effects.
- ❑ CBC had a positive impact on students and parent-teacher relationships.
  - Students participating in CBC had a greater decrease in externalizing problems and increase in adaptive skills and social skills.
  - Teachers participating in CBC reported greater improvements in their relationships with parents of children involved in CBC.
- ❑ A mediating effect of the parent-teacher relationship accounted for the positive CBC effect on children's increased adaptive skills, suggesting that this relationship is important to consider in bolstering student outcomes.
- ❑ An ongoing investigation will help determine the efficacy of CBC on additional outcomes and additional possible mediators of CBC effects.