

Efficacy of Conjoint Behavioral Consultation in Developmental-Behavioral Pediatric Services



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Introduction

Interdisciplinary Collaboration in Pediatric Service Delivery

- Children treated by their primary health care providers often present with symptoms that affect their physical, academic, developmental, psychological, and social functioning.
- Collaboration across multiple systems supports children's adjustment.
- There is a need to create systematic mechanisms by which pediatric service providers (e.g., pediatric psychologists, pediatricians), school personnel, and families can exchange meaningful information, create effective and responsive interventions, and sustain school based outcomes for children.
- Consultation services within and across systems have been described as useful and effective and promoted in the work of multisystemic (i.e., home, school, pediatric health care setting) collaboration.

Conjoint Behavioral Consultation (CBC)

- CBC links parents, teachers, and other service providers (e.g., physicians) in the service provision for children.
- All participants serve as partners in joint decision making.
- Priorities are collaboratively identified, defined, analyzed, and addressed.
- Ongoing communication between the pediatrician, family, and school systems is paramount.

Purpose and Research Questions

- Purpose:* To evaluate the effects of the CBC model in addressing presenting concerns for children across home, school, and health care systems.
- What are the general effects of CBC in addressing identified concerns in a medically-referred sample?*
- How do parents and teachers perceive CBC in terms of its perceived effectiveness and acceptability?*
- How satisfied are parents and teachers with CBC consultants and services when provided across home-school-medical settings?*

Methods

Participants and Setting

- 16 children in kindergarten through 9th grade
 - 80% with ADHD, 33% with comorbid ODD
 - 94% receiving medication for their disorders.
- Parents of child participants (94% were mothers)
- Teachers of child participants (86% were female)
- 3 consultants were graduate students in school psychology trained to mastery in implementation of CBC.
- 2 pediatricians board certified in Developmental/Behavioral Pediatrics.
- CBC interviews were conducted in schools and interventions were implemented in the schools and homes of child participants.

Outcome Measures

Primary Data

- Direct observations of target behaviors throughout baseline, treatment, and follow-up phases.

Social Validity Data

- Perceptions of goal attainment as measured by *Goal Attainment Scaling (GAS)*; Kiresuk, Smith, & Cardillo, 1994).
- Evaluation of treatment efficacy and acceptability as measured by the revised *Behavior Intervention Rating Scale (BIRS)*; Von Brock & Elliott, 1987).
- Satisfaction with consultation services as measured by the *Consultant Evaluation Form (CEF)*; Erchul, 1987).

Procedures

Conjoint Behavioral Consultation

- Pediatricians referred patients based on perceptions of need for home-school consultation.
- A four-stage problem-solving model including problem identification, problem analysis, treatment implementation, and treatment evaluation was used.
- Parents and teachers served as co-consultees and attended all consultation meetings with the consultant.
- Target behaviors were identified in both home and school settings (36% behavioral, 40% academic, 25% social-emotional).

Conjoint Behavioral Consultation Procedures (Continued)

- Consultants were in regular communication with pediatricians throughout the consultation process regarding behavioral interventions and medication adjustments.

Integrity of the Consultation Process

- All CBC interviews were audiotaped and a trained observer coded 33% for adherence to CBC objectives as measured on the CBC Objectives Checklists (Sheridan et al., 2001).
- 80% of CBC objectives were attained by consultants across all interviews.

Data Analysis

- Effect sizes for individual cases were computed.
- Subjective evaluations and social validity were assessed.

Results

Objective and Subjective Outcomes of CBC Cases

Outcome Measure	Home Mean	Home SD	School Mean	School SD
Effect Size				
BIRS-R (Effectiveness)	2.67	2.2	.73	.87
BIRS-R (Acceptability)	3.75	1.40	3.18	.33
GAS	5.37	.65	4.83	1.0
CEF	4.20	.70	3.70	1.0
	6.38	.56	5.80	.96

- Behavior Intervention Rating Scale (BIRS)* Effectiveness and Acceptability factors were measured on a scale of 1-6 (with 6 being highly effective/acceptable).

- Goal Attainment Scaling (GAS)* was measured on a scale of 1-5 (with 5 representing the belief that the consultation goal was completely met).

- Consultant Evaluation Form (CEF)* uses a scale of 1-7 (with higher scores reflecting greater satisfaction with the CBC process and consultant).

Discussion

General Findings

- Relatively high effect sizes suggest that interventions developed in CBC were effective in addressing cross-setting behavioral concerns.
- More favorable home-based social validity indices were found. It is possible that consultants delivered family centered services and these were valued by parents.
- Variability in home and school outcomes suggests that the effectiveness and acceptability of CBC may be differentially impacted across contexts. Research should examine conditions under which CBC is more or less effective.
- Although not formally assessed, pediatricians reported the CBC process highly favorably, stating that the process allowed them the opportunity to offer their patients needed support and aid them in their decision-making regarding medication adjustments.
- This study was the first to date to demonstrate the effectiveness of CBC services with a medically-referred sample.

Limitations

- Intervention outcome data were collected by parents and teachers rather than independent observers.
- There is a lack of diagnostic diversity within the sample population (i.e., children with ADHD and receiving medication). The severity of children's behaviors may have resulted in parents and teachers rating the CBC process favorably simply because it provided assistance.

Implications for Practice

- Interdisciplinary collaboration among important persons in children's lives (i.e., parents, teachers, pediatric consultants, and physicians) allowed for the contribution of unique information across environments in treatment planning, implementation, and evaluation. Because children exist in several contexts, cross-setting models of service delivery such as CBC are essential.
- School and other pediatric-oriented psychologists are in a unique position to coordinate interdisciplinary consultation because they understand the unique demands of educational, medical, and family systems and are used to working within these individual settings.