

One Step Ahead: The Effectiveness of CBC in Head Start

Brandy L. Clarke, M.A., Susan M. Sheridan, Ph.D., Diane C. Marti, Ed.S., Jennifer D. Burt, M.Ed., Ashley M. Rohlk, B.S., & Ariadne V. Schemm, M.A.
University of Nebraska-Lincoln

INTRODUCTION

Culture of Head Start:

- Head Start has a long tradition of delivering comprehensive and high quality services designed to foster healthy development of children from families with low-income. By federal definition, Head Start programs are child-focused and have the overall goal of increasing the school readiness of young children who are at-risk. Services are intended to be responsive and appropriate to each child's and family's developmental, ethnic, cultural, and linguistic heritage and experience.
- Head Start is one of several federal programs that recognizes the significance of families in providing an important developmental context for young children and requires family involvement.
- A review of evidence-based family-school interventions for preschool children identified some parent programs with promising outcomes (i.e., PARTNERS, PCIT), but reported that family-school interventions with preschool children have not been specifically examined (Bates, in preparation). There is a need for effective models that go beyond family involvement to active family-school participation on behalf of young children.

Conjoint Behavioral Consultation:

- Conjoint behavioral consultation (CBC; Sheridan, Kratochwill, & Bergan, 1996) provides a model that extends beyond parental involvement in education to promoting meaningful family-school partnerships.
- CBC is a structured, indirect model of service delivery wherein parents, teachers, and other service providers are brought together to collaboratively address social, behavioral, or academic concerns of a student.
- CBC is an organized, data-based approach that uses a structured four-stage process (i.e., problem identification, problem analysis, plan development, and plan evaluation).
- Although preliminary research has demonstrated that CBC was effective in enhancing school readiness characteristics for young children within early childhood settings (Sheridan, Dowd, Clarke, Eagle, & Gortmaker, in submission), an investigation of the effects of CBC within the Head Start culture is needed.

PURPOSE OF STUDY

- The purpose of this study was to assess the effectiveness of CBC within a Head Start setting/sample. Specific research questions were:
 - What are the effects of CBC in addressing social, behavioral, and academic concerns of families within a Head Start setting?
 - How do parents and teachers rate the social validity of CBC in terms of:
 - Their perceptions of the effectiveness of CBC;
 - Their ratings of its acceptability; and
 - Their satisfaction with the consultant?

METHODS

Participant Characteristics:

5 consultants
9 teachers
15 parents
14 clients
Mean age = 3.79; SD = .80
Gender: 64% male; 36% female
Diversity Characteristics:

Ethnicity: 57% Caucasian; 21% Chinese/Vietnamese; 14% African American; 7% Hispanic
Language spoken in the home: 29% primary language other than English
SES: all met criteria for Head Start; 8% earned less than \$15, 000 per year
Number of adults in the Home: 17% one adult
Target Behaviors:
School: 86% behavioral; 7% social; 7% academic
Home: 80% behavioral; 10% social; 10% academic

Independent Variables:

- CBC four-stage problem-solving process (i.e., problem identification, problem analysis, plan implementation, and plan evaluation) with partnership building procedures (i.e., collaboration, mutual respect, and shared decision making).
- Intervention strategies implemented in the context of CBC addressed social, behavioral, or academic concerns.

Outcome Measures:

- **Direct Observations**: Observations of specific target behaviors were conducted by parents and teachers across home and school settings throughout baseline, treatment, and follow-up stages.
- **Social Validity Measures**: Consultees' subjective perceptions of case outcomes were collected to assess clinical meaningfulness of change.
 - Perceived Effectiveness of CBC – Assessed with the Behavioral Intervention Rating Scale (BIRS) – Effectiveness factor (Elliott & Von Brock Treuting, 1991). Scale consisted of 7 items on a 6 point Likert scale. (1 = low perceived efficacy; 6 = high perceived efficacy).
 - Perception of Goal Attainment – Assessed using Goal Attainment Scaling (GAS; Kiresuk, Smith, & Cardillo, 1994). Scale consisted of a 5 point Likert scale (-2 = situation got significantly worse; +2 = goal completely met).
 - Acceptability of CBC – Assessed with the Behavioral Intervention Rating Scale (BIRS) – Acceptability factor (Elliott & Von Brock Treuting, 1991). Scale consisted of 15 items on a 6 point Likert scale (1 = not at all acceptable; 6 = highly acceptable).

- Satisfaction with Consultant and CBC Services – Assessed with the Consultant Evaluation Form (CEF; Erchul, 1987). Form consisted of 12 items using a 7 point Likert scale (1 = completely dissatisfied; 7 = completely satisfied).

Analyses:

- Effectiveness of CBC on case outcomes was evaluated through effect size analysis (Busk & Serlin, 1992).
 - Effect sizes in home and school settings for each case were computed to discern the degree of behavior change as a function of CBC-based interventions.
 - Effect sizes for each case were computed using a “no assumptions” approach. Differences in phase means for each case were divided by the SD of the baseline producing a quantitative index of treatment effects.
 - Effect sizes are interpreted in terms of standard deviation units, relative to baseline levels of performance.
- Perceptions of CBC effectiveness, goal attainment, acceptability, and satisfaction were collected post-consultation and evaluated descriptively.

RESULTS

Outcome Measures	Outcomes Across Participants		
	Mean	Median	SD
Effect Size			
School	3.01	1.57	4.47
Home	1.62	2.09	2.16
BIRS-Effectiveness ¹			
School	5.35	5.57	.78
Home	4.91	4.71	.65
GAS ²			
School	4.58	5.00	.51
Home	4.45	4.00	.52
BIRS-Acceptability ¹			
School	5.81	5.93	.27
Home	5.35	5.52	.52
CEF ³			
School	6.83	7.00	.32
Home	6.49	6.67	.58

¹ BIRS-Effectiveness = Behavioral Intervention Rating Scale-Effectiveness Factor (Range = 1-6, with high scores denoting high agreement)

² GAS = Goal Attainment Scaling (Range = 1-5, with high scores denoting positive perceptions of goal attainment)

³ BIRS-Acceptability = Behavioral Intervention Rating Scale- Acceptability Factor (Range = 1-6, with high scores denoting high agreement)

⁴ CEF = Consultant Evaluation Form (Range = 1-7, with high scores denoting high levels of satisfaction)

DISCUSSION

- Overall effect sizes suggest that interventions implemented through CBC were highly effective across the home and Head Start settings in addressing social, behavioral, and academic concerns. However, there was a large degree of variability in individual case outcomes, suggesting that CBC was more effective for some Head Start children than others.
- Both parents and teachers reported high degrees of perceived effectiveness, acceptance, and satisfaction (based on BIRS and CEF scores). In all areas, teachers rated CBC slightly higher than parents, suggesting greater teacher acceptance and satisfaction with the CBC model.
- Results of this study are fairly consistent with previous findings. Effect sizes were similar to children aged five through seven, and higher than those reported for children who were eight years of age and older (Sheridan, Eagle, Cowan, & Mickelson, 2001).
- Implications of this study suggest that CBC is a highly effective model in addressing the academic, social, and behavioral concerns for Head Start children.
- CBC provides school psychologists with the means to facilitate empowerment for parents beyond involvement to viewing themselves as integral and valid in their child's learning and engaging in meaningful partnerships with educators to promote academic success for at-risk children.

LIMITATIONS

- Small sample size limits generalizability beyond these findings. Further replication of this study is necessary.
- Direct outcome data were derived from parent and teacher report without inter-rater reliability measures.
- There was a high degree of variability in the individual case outcomes. This was addressed in part through reporting of median effect sizes for outcome analysis.
- Follow-up data demonstrating maintenance of treatment effects were lacking.

FUTURE RESEARCH DIRECTIONS

- Longitudinal research of targeted interventions on child outcomes and parent-teacher relationships is needed.
- Research using mixed-methodology to capture the personal and relational effects and experiences of parents and teachers involved in the CBC process is necessary.