

Home-School Continuity and Child Behavior Outcomes in Conjoint Behavioral Consultation

S. Andrew Garbacz, MA, Susan M. Sheridan, PhD,

Kathryn E. Woods, MA, & Carrie A. Semke, MA

Introduction

Home-School Continuity

- Continuity across home and school environments is vital to promote children's learning and development and to enhance home-school partnerships (Pianta & Walsh, 1996).
- When families and schools are engaged in collaborative relationships in which each party shares and defers to the other's experiences and expertise (Turnbull, Turnbull, Erwin, & Soodak, 2006), children are more likely to experience improved academic performance, social development, and behavioral outcomes.
- Children who experienced discontinuity across their home and school environments have difficulty making transitions and are at greatest risk for poor school performance and mental health concerns (Phelan, Davidson, & Yu, 1998).
 - Conversely, children at risk can experience behavior improvements when they receive congruent messages, expectations, goals, values, priorities, and supports from families, schools, and communities.
- Continuity has previously been operationalized as *maintenance* of treatment effects over time or *coordination* among systems that support children's learning and development.
- Sheridan et al. (2004) defined and investigated congruence (degree of similarity) and agreement ("harmony of opinion") in parent-teacher consultation (i.e., Conjoint Behavioral Consultation). The current study extends previous research to consider continuity between home and school, including congruence and agreement from a multidimensional (structural and relational) perspective.
 - Structural continuity: consistency among home and school in the manner in which parents and teachers support children's learning and efforts promoted through CBC (including communication and behavioral intervention implementation).
 - Relational continuity: the degree to which parents and teachers feel connected to and in sync with one another, and the relationship they share on behalf of the child (including joining together to meet child needs).
- In addition, no other work has been conducted that has sought to determine the extent to which continuity predicts child behavior.

Conjoint Behavioral Consultation

(CBC; Sheridan & Kratochwill, 2008)

- Conjoint behavioral consultation (CBC) is a structured, indirect model of service delivery wherein a consultant works collaboratively with parents, teachers, and support staff to address the academic, behavioral, and social needs of a child (Sheridan & Kratochwill, 2008).
- CBC also promotes the development of constructive relationships through joint goal-setting, collaborative decision-making, and promoting participation and collaboration among systems.

- CBC has received substantial empirical support for addressing a variety of academic, social, and behavioral concerns (Lasecki, Olympia, Clark, Heathfield, & Jenson, 2008; Sheridan, Eagle, Cowan, & Mickelson, 2001; Wilkinson, 2005) across home and school settings for children in elementary (Sheridan et al., 2001) and early childhood programs (Sheridan et al., 2006).
- In addition, results of a large-scale randomized trial evaluating the efficacy of CBC indicated that compared to control group participants, students in the CBC group demonstrated improved behavior, teachers in the CBC group reported greater relationships with parents, and parents in the CBC group reported increases in their communication with their child's teacher and beliefs about their own involvement (Sheridan et al., 2009).
- To date, measurement of multidimensional continuity between home and school as manifested in CBC has not been explored.
- The relationship between continuity and child behavioral outcomes at home and school has yet to be examined.

Purposes of Study and Research Questions

- The *purposes* of this are to investigate the degree to which CBC establishes continuity across home and school, and to examine the relationship between continuity across home and school and child behavior.
 1. Is there evidence of structural and/or relational continuity across home and school within the context of CBC services?
 2. Do aspects of continuity (i.e., structural, relational continuity) within CBC predict child behavior at home and at school?

Design and Analysis

- As part of the larger study, a four-cohort, randomized experimental design was employed to determine the efficacy of CBC in relation to a control condition.
- To investigate continuity, only participants for the CBC condition were included in this study.
- To examine the first research question, Pearson correlations were computed between parent and teacher reports of the following: acceptability of the CBC process, parent-teacher relationship, implementation integrity ratings, and implementation integrity documentation.
- To examine the second research question, a series of regression analyses were conducted to determine whether structural and/or relational continuity within the CBC process predict child behavior at home and school.

Methods

Participants and Setting

- 20 schools in a moderately-sized Midwestern city and surrounding communities
- 113 parents, 43 teachers, and 113 students who were identified as having concerns related to disruptive behaviors (e.g., non-compliance, aggression)

Table 1

<i>Demographic Characteristics of Participants</i>		
N = 113		
Student Gender	Male; Female	78%; 22%
Student Ethnicity	White, non-Hispanic	69%
	African-American	11%
	Other	20%
Student Age	Mean (SD)	6.45 (1.08)
Behavior Severity (1-9)	Mean (SD)	6.82 (1.36)
Parent Age	Mean (SD)	34.77 (8.04)
Parent Ethnicity	White, non-Hispanic	87%
	African-American	4%
	Other	9%
Teacher Experience	Mean (SD)	9.38 (10.06)
Teacher Ethnicity	White, non-Hispanic	100%
Disability Status	Students with ≥ 1 Disabilities	48%
	Students Receiving Special Education Services	40%

*Measures and Variables*Predictor Variable – Structural Continuity:

- Absolute difference in parent and teacher ratings on the following scales:
 - Implementation integrity ratings – percentage of implementation integrity steps reported as completed as part of respective behavioral plans
 - Implementation integrity documentation – percentage of days parents and teachers reported implementing respective behavioral plans
 - Parent-Teacher Relationship Scale II (PTRS-II; Vickers & Minke, 1995) – Communication Factor
 - Behavior Intervention Rating Scale – Revised (Von Brock & Elliott, 1987) – Acceptability of CBC

Predictor Variable -- Relational Continuity:

- Absolute difference in parent and teacher ratings on the following scales:
 - Parent-Teacher Relationship Scale II (PTRS-II; Vickers & Minke, 1995) – Total Score
 - Parent-Teacher Relationship Scale II (PTRS-II; Vickers & Minke, 1995) – Joining Factor

Outcome/Criterion Variables – Externalizing Behavior, Adaptive Skills, Social Skills

- Behavior Assessment Scale for Children, Second Edition (BASC-2; Reynolds & Kamphaus, 2004) – Teacher and Parent Report
- Social Skills Rating Scale (SSRS; Gresham & Elliott, 1990) – Teacher and Parent Report

CBC Implementation

- Within each CBC classroom, a consultant met with the teacher and 2-3 parents for approximately 4-5 conjoint consultation sessions over ~8 weeks via 3 stages:
 - *Needs Identification and Needs Analysis (Building on Strengths)* – reviewed student, family, and school strengths; prioritized 1-2 target behaviors per student; identified and defined needs, settings, and goals; conducted functional behavior assessment; discussed information gathering; and selected strategies for change.
 - *Plan Development (Planning for Success)* – discussed information collected by parents and teachers about identified behavior(s); developed a plan to address student needs; collected plan materials; discussed ways to support the plan at home and school; and gathered information.
 - *Plan Evaluation (Checking and Reconnecting)* – discussed progress made toward goals; evaluated the plan(s); and determined needs for plan continuation and/or changes.

Results

Research Question 1: Is there evidence of structural and/or relational continuity across home and school within the context of CBC services?

- Evidence of continuity across home and school was found in the context of CBC services (see Table 2).

Table 2

<i>Pearson Correlations for Continuity Variables between Parents and Teachers¹</i>		
Variable	Correlation	p-value
Structural Variables		
Documentation of Implementation Integrity	0.34	.000
Intervention Implementation Integrity Rate	0.23	.141
Parent-Teacher Relationship - Communication	0.09	.269
CBC Acceptability	-0.10	.420
Relational Variables		
Parent-Teacher Relationship	0.37	.000
Parent-Teacher Relationship – Joining	0.44	.000

¹Continuity was defined as the absolute difference between parent and teacher scores on measures that correspond to the variables

Research Question 2: Do aspects of continuity (i.e., structural, relational continuity) within CBC predict child behavior at home and at school?

- Four significant linear relationships were found between continuity and child outcomes. All significant relationships involved relational continuity variables and adaptive and social skills (see Tables 3 and 4):
 - Continuity in the parent-teacher relationship predicted child social skills at school. For every 1-point difference in parent and teacher PTRS ratings (i.e., decrease in continuity), a 0.28 decrease in child social skills can be expected.
 - Continuity in parent-teacher relationship predicted child adaptive skills at school. For every 1-point difference in parent and teacher PTRS ratings (i.e., decrease in continuity), a 0.20 decrease in child adaptive skills can be expected.
 - Continuity of joining in the parent-teacher relationship predicted child social skills at school. For every 1-point difference in parent and teacher report of joining (i.e., decrease in continuity), a 0.29 decrease in child social skills can be expected.
 - Continuity of joining in the parent-teacher relationship predicted child adaptive skills at school. For every 1-point difference in parent and teacher report of joining (i.e., decrease in continuity), a 0.24 decrease in child adaptive skills can be expected.
- No significant relationships were found for any of the structural variables and child outcomes.
- No significant relationships were found for any continuity variables and externalizing behaviors.

Table 3

Linear Regression Analyses of Continuity of Parent-Teacher Relationship and Joining on Child Social Skills

Social Skills		Parent Teacher Relationship	Joining
	B(SE)	-6.492 (1.950)	-5.863 (1.737)
	β	-0.281	-0.285
	R ²	0.079	0.081

Table 4

Linear Regression Analyses of Continuity of Parent-Teacher Relationship and Joining on Child Adaptive Skills

Adaptive Skills		Parent Teacher Relationship	Joining
	B(SE)	-2.868 (1.266)	-3.115 (0.906)
	β	-0.196	-0.240
	R ²	0.038	0.058

Discussion

- Continuity across systems and its positive effect on child development have been studied in many forms, but have not been conceptualized in a multidimensional manner.
- The conceptualization of continuity in this study represents a step forward in understanding the synchrony parents and teachers experience in CBC, and how it affects child behavior.

- The multidimensional nature of continuity was investigated by assessing the correlation of parent and teacher ratings on specific structural and relational features of CBC.
- Continuity has not been subject to examination beyond bi-variate correlations; this study examined continuity in terms of its existence within a randomized clinical trial investigating CBC and its ability to predict child behavior as measured by standardized tools.

Main Findings

- Continuity among parents and teachers appears to be evident in CBC
 - There is evidence of both structural and relational continuity within the CBC process as observed in significantly correlated parent and teacher ratings of implementation integrity documentation and of the parent-teacher relationship.
- Relational continuity among parents and teachers predicts certain child outcomes:
 - Continuity in the parent-teacher relationship predicts positive ratings of child adaptive skills and social skills at school.
 - Continuity in parent-teacher joining predicts positive ratings of child adaptive skills and social skills at school.
 - Relational continuity in the parent-teacher relationship did not predict positive social skills and adaptive skills at home. It is possible that social skills and adaptive skills were more problematic at school than at home, yielding more room for improvement.
 - Relational continuity did not predict lower rates of disruptive behavior at home or school. It is possible that relational continuity is a construct particularly relevant for building child strengths rather than extinguishing behavioral excesses.
- Structural continuity among parents and teachers did not predict child outcomes.
 - It is possible that the synchrony in structure -- what parents and teachers do -- is less important than the relational qualities of their work together in predicting the effect on child behaviors.
 - Specifically, continuity in *what* parents and teachers do to support learning and efforts promoted through CBC may not be as important as *how* they share a relationship.
- Prior work investigating the effect of continuity on child behavior did not rely on standardized measures nor predictive analytic procedures.
 - The use of the PTRS-II, SSRS and the BASC in the regression analyses provides continued support for the role synchrony in the parent-teacher relationship plays in outcomes for children.

Limitations

- Measures of child behavior are based on parent and teacher self-report only; no independent observations of child behavior were used in the analysis.
- Although there is evidence to support conceptualizing continuity as a multidimensional construct, specific psychometric procedures determining the reliability and validity of the measures for assessing continuity were not conducted. Factor analytic work that confirms the constructs of structural and relational continuity is necessary.

- Differences between parent and teacher ratings on various measures were used to define continuity. The validity of this approach needs to be explored.
- Measures of the parent-teacher relationship and acceptability of the CBC process and intervention implementation are based on self-report only. Observations of continuity among parents and teachers using objective coding procedures would provide more objectivity to the findings.

Future Directions

- Structural equation modeling techniques should be used to assess the dimensions of continuity and their relative impact on the factor model.
- After determining a valid and reliable factor structure of continuity, a path analysis should be used to better understand the relationship of continuity and child behavior.
- Variables that moderate the effect of continuity should be explored to determine conditions under which continuity between parents and teachers may be more or less necessary.
- More accurate and reliable methods for measuring intervention implementation documentation and fidelity are needed to understand their role in predicting child behavior.
- Independent ratings of child behavior at home and school are necessary to assess the predictive contribution of continuity on objective child outcomes.
- Relational continuity should be assessed with measures beyond the PTRS-II, including more objective assessments of parent and teacher contributions to the relationship.

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