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UNPACKING CONJOINT BEHAVIORAL CONSULTATION: PREDICTORS AND
CONDITIONS THAT SUPPORT PARENT-TEACHER RELATIONSHIPS

by

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A DISSERTATION

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UNPACKING CONJOINT BEHAVIORAL CONSULTATION: PREDICTORS AND CONDITIONS THAT SUPPORT PARENT-TEACHER RELATIONSHIPS

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University of Nebraska, 2016

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Empirical support confirms interventions with the goal of building partnerships between families and schools are effective methods for addressing childhood social-behavioral concerns and academic delays (for reviews see Jeynes, 2012). Conjoint Behavioral Consultation (CBC; Sheridan & Kratochwill, 2008) is a problem-solving based intervention that seeks to remediate childhood behavior problems by enhancing working relationships between parents and teachers. CBC consistently yields positive effects for children, families, and teachers (Sheridan, Eagle, Cowan, & Mickelson, 2000; Sheridan et al., 2012; Sheridan et al., in submission; Sheridan, Ryoo, Garbacz, Kunz, & Chumney, 2013) and these outcomes are achieved through supportive parent-teacher relationships (Sheridan et al., 2012; Sheridan et al., in submission). Although communication among parents, teachers, and consultants is considered an important process feature of CBC, its influence on perceptions of the parent-teacher relationship remains unexplored.

The purpose of this study was to determine whether CBC consultants' use of communication strategies during problem-solving interactions with parents and teachers predicted reports of their relationships, and whether consultees' (i.e., parents and teachers) displays of shared interactional qualities during these problem-solving interactions moderated the aforementioned prediction. One hundred and ninety-three

collaborative, problem-solving meetings were coded for CBC consultants' use of partnership-oriented communication strategies and the degree to which parents and teachers demonstrated shared interactions.

Multilevel analyses were conducted to explore whether consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers predicted the quality of the parent-teacher relationship, as well as the extent to which consultees' (i.e., parents and teachers) displays of shared interactions moderated this prediction. Descriptive analyses revealed that CBC consultants, on average, used a partnership orientation during their interactions with parents and teachers. Similarly, parents and teachers, on average, displayed a high degree of shared interactions when engaging in collaborative problem solving. Results of the multilevel analyses did not yield any significant findings. Future research with the intent of systematically manipulating communication within the consultation process is needed to fully understand how communication operates within CBC.

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CHAPTER 1: INTRODUCTION

Theoretical models and empirical findings suggest children's development is shaped by the multiple proximal and distal environments that support their functioning (Bronfenbrenner, 1977). Children's behavioral, social, and cognitive development is influenced by the direct and indirect interactions they have within and among their primary environments (e.g., home, school). That is, relationships between children and the adults in their lives (e.g., parents and teachers) have a significant impact on their behavior and social adjustment (for reviews see Roorda, Koomen, Split, & Oort, 2011; Wyatt Kaminski, Valle, Filene, & Boyle, 2008). Likewise, children's development is largely and indirectly influenced by the unique interactions among the key adults in their lives (Bronfenbrenner, 1977). A historic and convincing body of literature suggests interventions with the goal of building partnerships between families and schools are effective for addressing childhood social-behavioral concerns and academic delays (for reviews see Jeynes, 2012).

One family-school partnership program that consistently yields positive effects in randomized controlled trials (Sheridan et al., 2012; Sheridan et al., in submission; Sheridan, Ryoo, Garbacz, Kunz, & Chumney, 2013) and experimental small-n studies (Sheridan, Eagle, Cowan, & Mickelson, 2001) is Conjoint Behavioral Consultation (CBC; Sheridan, Kratochwill, & Bergan, 1996; Sheridan & Kratochwill, 2008). CBC is an indirect model of service-delivery that seeks to remediate childhood behavior problems and improve adaptive functioning by enhancing positive relationships between families and schools. Through partnership-oriented interactions (Garbacz et al., 2008), consultants guide parents and teachers (i.e., consultees) through an individualized

problem-solving cycle comprised of joint, data-based decision-making; consistent, coordinated implementation of evidence-based interventions; and shared responsibility for positive child outcomes (Sheridan & Kratochwill, 2008).

Recent discussions among intervention researchers have called for efforts to discern elements that relate and contribute to positive effects (Forman et al., 2013). Only recently have the mechanisms by which CBC produces desired parent, teacher, and child outcomes been explored. One component of CBC that has been extensively studied is the parent-teacher relationship. Empirical support confirms positive parent-teacher relationships as necessary for CBC to promote children's prosocial behavior (Sheridan et al., 2012) and improve learning-oriented skills (Sheridan et al., in submission). However, the use of partnership-building strategies by CBC consultants and the interpersonal dynamics among parents and teachers that help shape these productive relationships remain unexplored. Within CBC, research that disentangles the parent-teacher relationship is necessary.

The purpose of this study was to determine whether CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers predicted the quality of their relationships, and whether consultees' (i.e., parents and teachers) displays of shared interactional qualities during these problem-solving interactions strengthened the aforementioned prediction. Drawing from two existing randomized controlled trial databases, 193 collaborative, problem-solving meetings were coded for CBC consultants' use of partnership-oriented communication strategies and the degree to which parents and teachers demonstrated shared interactions. Multilevel analyses were conducted to explore the main effect of consultants' use of

partnership-oriented communication strategies during problem-solving interactions with parents and teachers on the quality of the parent-teacher relationship, as well as the interaction effect of parents' and teachers' displays of shared interactions during CBC meetings on this prediction.

The results of the study were varied. Descriptive analyses revealed that CBC consultants, on average, used partnership-oriented communication strategies—including encouraging parents and teachers to make joint decisions and being sensitive and responsive to the consultation team—during interactions with parents and teachers. Similarly, parents and teachers, on average, displayed a high degree of shared interactions—including balanced turn taking and confirming each other's perspectives—when engaging in collaborative problem solving. However, results of the multilevel analyses failed to reveal a significant predictive relationship between consultants' use of partnership-oriented communication strategies and teacher perceptions of the quality of the parent-teacher relationship, nor did parents' and teachers' shared interactions moderate this prediction. These results are limited to interactional qualities among parents, teachers, and consultants within formal, collaborative problem-solving meetings; however, several interactions and exchanges occur between parents, teachers, and consultants outside of these CBC meetings. Analyses of interactions within CBC meetings may not fully tap consultants' communication and parents and teachers shared interactions during the entirety of the CBC process. Future studies should account for the exchanges that occur between parents, teachers, and consultants both within the formal, collaborative problem-solving process and outside of these CBC meetings.

CHAPTER 2: LITERATURE REVIEW

The settings in which children grow and develop, and the interactions and experiences they encounter in these environments, have a formidable impact on their healthy functioning. The most influential settings, home and school, both uniquely and collectively determine children's developmental trajectories. Children's relationships with their peers (e.g., Furrer & Skinner, 2003), experiences in their classroom (e.g., Hamre & Pianta, 2005; Rimm-Kaufman, Curby, Grim, Nathanson, & Brock, 2009), and interactions with their parents (e.g., Jimerson, Egeland, & Teo, 1999) shape their social-emotional competence, behavioral skills, and academic achievement.

Disruptions in children's functioning, including social and behavioral challenges, often manifest distinctively based on the environment and individuals with which they are interacting, yet significantly impair children's functioning across the home and school settings. It is important that interventions address the perspectives and contributions of each environment and individual in a manner that creates complementary and consistent supports for children's healthy development. In fact, children who experience consistent, mutually reinforcing stimulation across home and school (e.g., both parents and teachers reading with a child) show greater gains in their academic and cognitive functioning than children who do not have those experiences (Crosnoe, 2012; Crosnoe, Leventhal, Wirth, Pierce, Pianta, & The NICHD Early Child Care Research Network, 2010).

The relevance of coordinated, home-school interactions has been widely recognized by educational institutions (e.g., The Family Involvement Network of Educators, Harvard Family Research Project; The Office of Head Start National Center on Parent, Family, and Community Engagement) and federal policies (No Child Left

Behind, 2001; The Individuals with Disabilities Education Act, 2004) enacted to expand the extent to which families and schools work together to support children's development. A meta-analysis of the parent involvement literature found that educational programs targeting parent-teacher collaboration had among the highest effect sizes of all parent involvement programs examined (Jeynes, 2012). The cornerstone of these coordinated, cross-setting interventions is positive, ongoing relationships between parents and teachers characterized by trust, mutual input, and shared responsibility for promoting children's healthy development. In fact, the quality of the relationship between parents and teachers has been shown to predict children's achievement in early elementary school (Hughes & Kwok, 2007) and contribute to building their adaptive, social, and learning-oriented skills (Sheridan et al., 2012; Sheridan et al., in submission).

One model that operates through collaborative relationships between parents and teachers is Conjoint Behavioral Consultation (CBC; Sheridan et al., 1996; Sheridan & Kratochwill, 2008; Sheridan et al., 2012; Sheridan et al., in submission). Through structured, problem-solving interactions invoked by a CBC consultant, parents and teachers (i.e., consultees) work together to address children's academic delays and social-behavioral challenges. Not only does decades of randomized controlled trial (Sheridan et al., 2012; Sheridan et al., in submission; Sheridan et al., 2013) and single case experimental research (Sheridan et al., 2001) support CBC as an effective intervention to build children's social competence, but recent evidence suggests it is the collaborative relationships between parents and teachers that is, in part, responsible for the positive effects of CBC (Sheridan et al., 2012; Sheridan et al., in submission).

Previous CBC research has established the importance of positive, working relationships between parents and teachers to promote healthy development in children (Garbacz et al., 2015; Sheridan et al., 2012; Sheridan et al., in submission). Yet, little is known about the features of CBC and the dynamics among parents and teachers that are important to fostering these relationships. Historically, there have been calls in the literature to uncover the interpersonal dynamics that are related to outcomes within consultation (Gutkin, 1999). As such, the purpose of this study was to explore the interpersonal conditions within CBC by determining whether the CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions predicted the quality of the parent-teacher relationship. Moreover, this study explored the dynamics among parents and teachers that may facilitate positive relationships by exploring the moderating influence of parents' and teachers' shared interactions on the prediction between CBC consultants' use of communication strategies and the parent-teacher relationship. Following is an overview of the goals and objectives of CBC and the relevant outcome research. Gaps in this literature are highlighted to emphasize the critical need for research on interpersonal dynamics and relationships within CBC. Drawing from research across topical areas and disciplines, the importance of interpersonal interactions for building working relationships is reviewed. The section concludes with the research questions and hypotheses for this study.

Conjoint Behavioral Consultation

CBC (Sheridan et al., 1996; Sheridan & Kratochwill, 2008) is as a partnership-centered (Garbacz et al., 2008) model of service delivery wherein parents and teachers as joint consultees address children's academic delays and social-behavioral challenges

through structured, collaborative problem solving interactions invoked by a trained CBC consultant. Undergirding the theory and practice of CBC is an ecological-systems perspective (Bronfenbrenner, 1977) that posits the interactions and relationships within and among the primary environments (i.e., home, and school) supporting children's development shapes their learning and functioning. Accordingly, the primary objectives of CBC are to promote academic, behavioral, and socioemotional success of children by creating meaningful changes in parents' and teachers' behavior through establishing and strengthening their unique, working relationship and ability to engage in ongoing collaboration, problem-solving, and evidence-based intervention implementation (see Table 2.1 for a detailed list of the goals and objectives of CBC).

Table 2.1

Goals and Objectives of CBC

Goals

1. Promote healthy development of children through cross-system intervention development
2. Build the capacity of families and educators for data-based decision making and evidence-based intervention implementation
3. Establish and strengthen home-school partnerships

Outcome Objectives

1. Obtain comprehensive, functional progress monitoring data over time and across settings
2. Establish intervention plans across home and school and program for generalization and maintenance of intervention effects
3. Improve skills, knowledge, and behavior of families and educators for immediate and ongoing problem-solving

Relational Objectives

1. Establish and strengthen relationship within and across home and schools
2. Improve communication, knowledge, and understanding across home and school to maximize opportunities to meet the needs of the family, child, and school
3. Promote perspective taking, shared ownership of educational goals, and joint responsibility for problem solution

Note. Table adapted from Sheridan, S. M., Clarke, B. L., & Ransom, K. A. (2014). The past, present, and future of conjoint behavioral consultation research. In W. Erchul, & S. Sheridan (Eds.), *Handbook of research in school consultation* (2nd ed., pp. 210–247). New York, NY: Routledge.

CBC consultants lead parents and teachers through an individualized and responsive problem-solving cycle characterized by conjoint needs identification and analysis, home and school intervention development and implementation, and plan evaluation (see Figure 2.1 for graphical depiction of CBC stages and meeting objectives). Positive outcomes of the process are achieved through establishing and strengthening supportive relationships between parents and teachers (Sheridan et al., 2012; Sheridan et

al., in submission) that allow for cooperative and trusting problem-solving conversations. CBC consultants intentionally emphasize partnership-oriented interactions (Garbacz et al., 2008) aimed at improving communication between parent-teacher dyads, promoting shared ownership and joint responsibility for problem solution, and recognizing the interconnections between home and school to aid in the effective identification of children's concerns, development of comprehensive intervention plans, and continuous monitoring of children's progress.

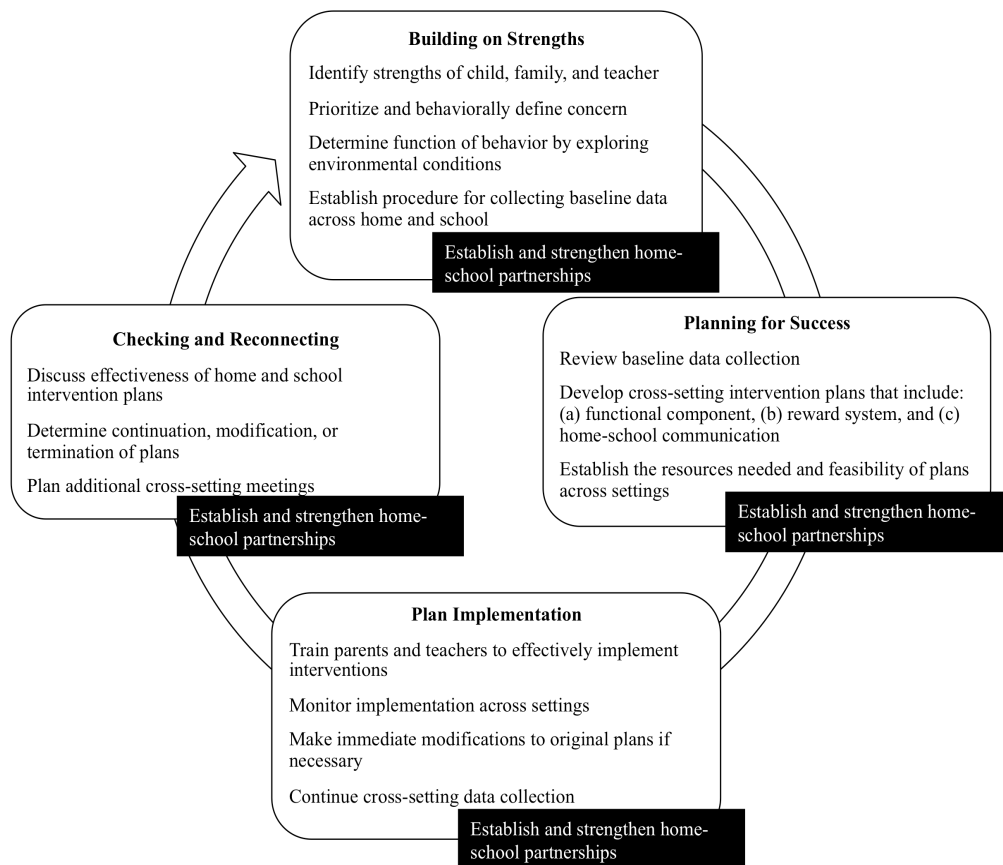


Figure 2.1. CBC stages and meeting objectives

Outcome research on conjoint behavioral consultation. Over 20 published studies, including systematic literature reviews, randomized controlled trials, and small-n designs have investigated the effects of CBC. Recognizing the cross-systemic goals and

objectives of CBC, research on the model has examined outcomes for children, parents, and teachers within the home and school environments and interconnections among these settings. The following sections describe the outcome and implementation studies on CBC concluding with a discussion of relevant research on the mediating and moderating effect of parent-teacher relationships on desired CBC outcomes.

Child outcomes. Four notable reviews have positioned the utility of CBC among related interventions and determined the relevance of the model across children's demographic profiles. Guli (2005) reviewed eighteen studies on parent consultation using a rigorous methodological coding system (i.e., the Procedural and Coding Manual of the Division 16 Task Force on Evidence-based Interventions in School Psychology; Kratochwill & Stoiber, 2002). Relative to other consultation models, CBC demonstrated the strongest evidence for producing significant improvements in children's school-related difficulties, including problems with social skills and homework completion.

To establish the effectiveness of CBC for children at-risk of negative outcomes, the aggregated impact of the model has been explored among studies of children with disabilities and children of diverse backgrounds. For example, Sheridan et al. (2001) reviewed four years of federally funded CBC studies to determine its use for 52 children with disabilities (e.g., behavior disorders, learning disabilities) or at-risk of special education placement. Results suggested the model was effective for all students in the sample, with an average effect size of 1.10 ($SD = 1.07$), however, the greatest school-related effects were apparent for older children (11 years of age and older) with low behavior severity ratings prior to CBC and younger children (ages 5-7) with higher severity ratings. Further, Sheridan, Eagle, and Doll (2006b) reviewed the effects of the

model for 125 children of various racial, linguistic, and economic backgrounds. CBC yielded high effect sizes regardless of children's background. Average effect sizes were 1.51, 1.21, and 1.35 for children experiencing two or more forms of diversity (e.g., some combination of racial, ethnic, and linguistic diversity), one form of diversity, and no forms of diversity, respectively. Sheridan, Clarke, Knoche, and Edwards (2006a) reviewed the research on CBC as a form of early intervention in an at-risk early childhood sample. Examining data from 48 children six years old and younger, Sheridan and colleagues (2006b) found CBC had generally positive effects on these children's behavior with a mean effect size of 1.08 (SD = 1.61).

Individual experimental studies have also examined the use of CBC to address a variety of childhood difficulties. Small-n and single case studies have shown CBC effectively addresses childhood academic concerns (e.g., Galloway & Sheridan, 1994; Weiner, Sheridan, & Jenson, 1998), social problems (e.g., Sheridan, Kratochwill, & Elliott, 1990), and disruptive behaviors (e.g., Ray, Watson, & Skinner, 1999). These small scale studies have been replicated with larger samples. For example, Power and colleagues (2012) conducted a randomized controlled trial evaluating the efficacy of the Family-School Success (FSS) program on the academic functioning of 199 children (grades 2-6) that met criteria for combined and inattentive types of attention-deficit/hyperactivity disorder (ADHD). The FSS program was comprised of CBC, daily report cards, and a behavioral homework intervention. Relative to students in the comparison group, children who received the FSS program showed significantly greater decreases in homework inattention and task avoidance (ES = 0.52). Similarly, Murray, Rabiner, Schulte, and Newitt (2008) conducted a CBC-mediated daily report card

intervention with 24 students (grades K-6) with academic impairments and ADHD.

Compared to the control group, students that received the intervention demonstrated greater academic productivity ($ES = 0.72$) and significant improvements in their academic skills ($ES = 0.67$).

In addition to academic outcomes, large-scale experimental studies of CBC have also demonstrated positive effects for elementary-aged children with behavioral and social concerns. Sheridan and colleagues (2012) conducted a randomized controlled trial with a sample of 207 children (grades K-3) identified with disruptive behavior problems. The children whose parents and teachers participated in CBC showed significant improvements on teacher reports of their adaptive skills ($d = 0.39$) and parent and teacher reports of their social skills ($d = 0.42$ and 0.47 , respectively). Using the same sample, Sheridan and colleagues (2013) examined the effects of CBC on children's behavior at home, specifically. Relative to children in the control group, parents' of children receiving CBC reported significant reductions in the frequency of their children's arguing ($d = -0.90$), defiance ($d = -1.34$), noncompliance ($d = -1.05$), and tantrums ($d = -1.54$) at home.

Similar results have been shown in unique geographic and practice settings. Results from a randomized controlled trial examining the efficacy of CBC for children (grades K-3) living in rural communities found children that received CBC had improvements on teacher-reports of school problems ($d = -0.45$, $p = 0.05$) and observational measures of their inappropriate (e.g., off-task; $d = -0.46$, $p = 0.02$) and appropriate (e.g., social interactions; $d = 0.28$, $p = 0.04$) classroom behavior that significantly outpaced students in the "business as usual" (control) group (Sheridan et al.,

in submission). Similarly, Owens, Murphy, Richerson, Girio, and Himawan (2008) tested a modified version of CBC with a sample of children with disruptive behaviors in a rural community in the Appalachian region. Of the 117 children (grades K-6) that participated, those who received the treatment, which was comprised of a daily report card intervention, biweekly consultation meetings, and behavioral parenting sessions, showed significant improvements in behavioral functioning (i.e., hyperactivity, impulsivity, and conduct disorder symptoms). Moreover, Sheridan and colleagues (2009) explored the use of CBC in pediatric settings. Twenty-nine children (grades K-9) were referred to CBC by their pediatricians due to behavioral or social-emotional difficulties. Positive results were reflected in the behavioral outcomes of the children that received CBC with an average effect size of 1.42 ($SD = 2.0$).

Parent and teacher outcomes, beliefs, and practices. As an indirect model, it is implied that CBC produces desired changes in children's behavior through structured, collaborative interactions between parents and teachers that allow for the coordinated and consistent cross-system implementation of evidence-based interventions. Accordingly, outcome research has examined the impact of CBC on parents' and teachers' perceptions and competencies. For example, Power and colleagues (2012) found parents receiving FSS, a comprehensive family-school partnership intervention that incorporates CBC, reported a greater reduction in their use of negative and ineffective discipline practices ($ES = 0.59$) at home than the parents in the comparison group. Moreover, relative to the parents in the comparison group, those receiving FSS perceived themselves as more effective at assisting in their child's education ($ES = 0.37$). A similar effect emerged in a randomized controlled trial examining the efficacy of CBC. In particular, parents who

received CBC reported greater improvements in the quality of the interactions with their child's teacher ($ES = 0.70$; Sheridan et al., 2013). Additionally, Sheridan et al. (2013) found that CBC parents, relative to parents in the control group, reported greater improvements in home-school communication ($ES = 0.52$).

Several studies have shown that CBC improves relationships between parents, teachers, and students. In an early childhood sample, Sheridan and colleagues (2006a) found that parent reports of their relationship with their children's teachers improved significantly following CBC. Similarly, across geographic settings, CBC parents and teachers in both rural (Sheridan et al., in submission) and non-rural (Sheridan et al., 2012) settings reported greater improvements in the quality of their relationships ($d = 0.46$ for teacher reports in rural settings; $d = 0.47$ for teacher reports in non-rural setting) after participating in the intervention than parents and teachers in the control groups. Moreover, Owens and colleagues (2008) found that the parents and teachers that received an intervention informed by CBC, comprised of biweekly consultation meetings and behavioral parenting sessions, reported significant improvements in their relationship with the child, as well as classroom and family functioning.

Related research has explored participants' beliefs and practices associated with specific CBC procedures. Several studies have examined parent and teacher reports of social validity, as well as the extent to which parents, teachers, and CBC consultants can successfully implement CBC interventions and procedures. For example, Sheridan et al. (2001) found across 52 CBC cases, parents and teachers rated the process to be highly effective. Cowan and Sheridan (2003) further examined CBC acceptability ratings and found parents, teachers, and children rated the behavioral interventions developed

through CBC as “very” to “highly” acceptable.

CBC implementation research has focused on the dual components of the model responsible for improving children’s behavior: fidelity to cross-system (home, school) behavioral intervention implementation and fidelity to collaborative problem-solving implementation (i.e., process fidelity; Sheridan, Rispoli, & Holmes, 2014). Rates of fidelity are consistent across CBC studies (Sheridan et al., 2012; Sheridan et al., in submission) with parents and teachers reporting high percentages of adherence to intervention plan steps (e.g., 81.64% of home intervention steps, 92.54% of classroom intervention steps in non-rural sample; 82% of classroom intervention steps in rural sample) and consultants’ demonstrating successful implementation of problem-solving objectives (98% of problem-solving objectives implemented by consultants in non-rural sample; 95% of problem-solving objectives implemented by consultants in rural sample). In fact, Sheridan, Swanger-Gagné, Welch, Kwon, and Garbacz (2009) explored the reliability of measures used to assess intervention implementation and process fidelity within a randomized trial of CBC and found that CBC was implemented with high levels of integrity regardless of the method or source of the fidelity data.

Moderators and mediators underlying change in CBC. Permeating the conceptual, empirical, and practical understanding of CBC are efforts to create complementary and consistent environments that provide comprehensive support for children’s healthy development. Indeed, CBC is a highly acceptable intervention that improves children’s functioning regardless of demographic characteristics, contextual features, and type of impairment. Moreover, CBC appears to simultaneously support parents’ and teachers’ use of evidence-based strategies and strengthen the quality of their

relationships. Although clarifying the effects of CBC on desired child, parent, and teacher outcomes provides an initial understanding of the utility of the model, little is known about the mechanisms through which these outcomes are achieved.

One component of CBC that has been extensively studied is the parent-teacher relationship. Substantial empirical support, both from within and outside the CBC literature, confirms positive parent-teacher relationships as operative to effectively promote children's social-emotional and adaptive competence. For example, a recent investigation with a sample of 206 kindergarten through third grade children with behavioral concerns found that the quality of the parent-teacher relationship mediated the influence of parents' beliefs that they are responsible for, and effective at, supporting their children's education on children's adaptive functioning and externalizing behaviors (Kim, Sheridan, Kwon, & Koziol, 2013). In fact, collaborative relationships between parents and teachers have been found to be, in part, responsible for positive effects across CBC studies (Sheridan et al., 2012; Sheridan et al., in submission). In other words, the desired effects seen in CBC on children's behavior are a function of the positive relationships established between parents and teachers.

Attempts to further unpack the influence of parent-teacher relationships on children's development have revealed the importance of shared, congruent perceptions of these relationships. For example, Minke, Sheridan, Kim, Ryoo, and Koziol (2014) examined the effect to which parents' and teachers' similar perceptions of the quality of their relationship influenced ratings of children's social skills and externalizing behaviors. Using a sample of 175 elementary school students, teachers' reported greater improvements in children's social skills and significant decreases in their disruptive

behaviors when they shared a positive view of their relationship. Garbacz and colleagues (2015) found that similar (i.e., congruent) views of interpersonal communication between parents and teachers moderated the effects of CBC on teacher reports of children's social skills. That is, the benefits of CBC depended on the congruence with which parent and teachers viewed their communication.

This recent line of research has uncovered that unique shared interpersonal connections and dynamics between parents and teachers strengthen the effectiveness of CBC. Yet, whether features and processes within CBC support positive relationships between parents and teachers remain largely unexplored. The research on the quality of the relationship between parents and teachers within CBC has examined the parent-teacher relationship as an independent variable, a mediating variable, or a moderating variable. Although this has confirmed that a working relationship both accounts for and strengthens children's outcomes, no studies have explored whether interactional practices and conditions within CBC predict and strengthen parent-teacher relationships. In fact, the majority of implementation research on CBC has focused on whether parents, teachers, and consultants successfully implemented structural components of the model (e.g., completed home-school notes). A recent review of CBC implementation research suggested that there has been much less attention toward consultants' and consultees' ability to successfully meet the unique, collaborative objectives of the model (Collier-Meek & Sanetti, 2014). Understanding the manner in which shared interactional qualities between parents and teachers co-operate with the use of specific practices in CBC (i.e., consultants' use of particular communication strategies) to support positive relationships between parents and teachers was the purpose of this study. After providing an overview

of relevant research on communication in consultation and shared interactions between parents and teachers—the two variables under investigation in this study—the research questions and hypotheses of this study are presented.

Communication in Consultation

The importance of effective communication in problem-solving consultation has been documented across consultative models (e.g., Ruble, Birdwhistell, Toland, & McGrew, 2011), targeted child concerns (e.g., Erchul et al., 2007), and types of consultees (e.g., Sheridan, Meegan, & Eagle, 2003). Coding of discrete speech acts during consultation meetings has allowed researchers to reliably demonstrate the relationship between consultants' and consultees' communication patterns and related outcomes, including perceptions of consultation effectiveness and consultees' participation in problem solving (Martens, Erchul, & Witt, 1992). In an early study of consultant and consultee communication in behavioral consultation, a model structurally similar to CBC (Bergan & Kratochwill, 1990), Erchul (1987) found consultants' ability to manage and structure the consultation meeting was significantly correlated with consultees' perceptions of consultants' effectiveness ($r = 0.65$). Similarly, consultants' ability to control the topics discussed within consultation has been shown to relate to consultees' willingness to engage in important problem-solving activities, including collecting baseline data and implementing treatment plans (Witt, Erchul, McKee, Pardue, & Wickstrom, 1991).

Others have explored the relationship between specific communication strategies, including types of questions and verbal statements (e.g., summarization, reflection) used in problem-solving interactions, and consultation outcomes. For example, Martens,

Deery, and Gherardi (1991) examined consultants' use of summarization statements in seven problem-solving meetings. The type of summarizing statement used by consultants (i.e., summarizing the consultees' affect or summarizing content) influenced the type of information shared by consultees during the process. That is, when consultants reflected content discussed by consultees during problem-solving interactions, consultees made more statements of agreement toward the consultant, whereas when consultants reflected consultees' perceived affect consultees made more statements about themselves and their emotions.

Recognizing that asking questions was a primary way to direct the consultation process, Erchul, Covington, Hughes, and Meyers (1995) found favorable perceptions of consultation were related to consultants' use of affiliative requests, such as using polite and inclusive language ($r = 0.52$) in an isolated sample of 14 behavioral consultation cases. Greater use of demand requests, characterized by instructions to consultees, was associated with less favorable ratings of the consultation process ($r = -0.67$). In other words, effective consultants used an affiliative intonation when making requests of consultees during meetings rather than explicitly telling consultees what to do. However, these results differed among consultation models. In fact, when consultants using other consultative models were included in these analyses, the results were no longer significant, suggesting that the importance of specific communication strategies may differ based on the consultation model used.

Hughes, Erchul, Yoon, Jackson, and Hennington (1997) explored whether consultees' evaluations of consultant effectiveness were related to the type of question asked during consultation meetings (i.e., open or closed questions), type of elicitors used

in those questions (cf. Bergan & Tombari, 1975), and consultees' response to the questions (i.e., acceptance or non-acceptance of questions). Using frequency data from 41 behavioral consultation interviews, evaluations of consultant effectiveness were significantly correlated with the number of consultant questions accepted by consultees ($r = 0.32$), as well as the use of questions that elicited consultees to share their perceptions (i.e., inference questions; $r = 0.35$). Findings from these studies suggest that effective consultants use communication strategically to facilitate the problem-solving process by summarizing and asking consultees to share their own thoughts and perceptions in a manner that is both responsive to the consultation model, as well as reflective of consultees' participation.

Communication is considered a main process feature of CBC (Sheridan & Kratochwill, 2008; Garbacz et al., 2008; Garbacz et al., 2015). Indeed, the use of communication strategies to successfully facilitate the problem-solving sequence, including effective questioning, reflections, and summarizing, is central to the role of CBC consultants. Yet, the objectives of CBC extend beyond those in traditional behavioral consultation to include fostering and strengthening healthy, working relationships between parents and teachers (Sheridan & Kratochwill, 2008). CBC consultants are responsible for establishing an environment that allows for collaborative, relationship building interactions. As a result, consultants use a partnership-centered approach (Garbacz et al., 2008) wherein they communicate in a manner that promotes joint responsibility between parents and teachers, supports individual strengths and competencies, and fosters collaboration between families and schools (Sheridan, Warnes, Cowan, Schemm, & Clarke, 2004). The effectiveness with which CBC consultants

facilitate a partnership-centered approach varies based on their ability to employ relationship-building strategies that are tailored and responsive to the individual needs of parent-teacher dyads. In a study of consultants' use of a partnership orientation during CBC, Garbacz and colleagues (2008) examined associations between consultants' use of partnership-centered communication during problem-solving meetings and measures of acceptability, satisfaction, perceptions of effectiveness, and child performance across home and school. Elements of a partnership orientation were measured in 20 CBC cases using the Partnership Orientation Measure (POM). The POM (Garbacz et al., 2008) is an observational measure that assesses CBC consultants use of communication strategies that facilitate responsive and collaborative problem-solving interactions (e.g., encouraging, sensitive, and responsive statements, utilizes open-ended questions, reflection, and paraphrasing) and promote a partnership between parents and teachers (e.g., focuses on the strengths of the family, teacher, and child, encourages teaming and collaboration, shares resources and information). Findings revealed that CBC consultants were able to implement the problem-solving procedures with fidelity while adhering to a partnership orientation. In fact, consultants' use of partnership-oriented communication strategies significantly predicted teachers' acceptability ($R^2 = 0.28$) and satisfaction ($R^2 = 0.14$) with CBC. Despite its assumed importance, no studies have examined the association between CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers and the quality of the parent-teacher relationship.

Parent and Teacher Interactions

Exploring the predictive relationship between consultants' use of partnership-

oriented communication strategies and the parent-teacher relationship provides a preliminary understanding of the CBC practices that predict relationships between parents and teachers. However, it is likely that the strength of this relationship will depend on characteristics among and between parents and teachers. Consultation research has been increasingly concerned with consultee characteristics that influence the success of problem solving. Previous studies have identified beliefs (e.g., self-efficacy; Durlak & Dupre, 2008; Dusenbury, Brannigan, Hansen, Walsh, & Falco, 2003), competencies (e.g., skill proficiency; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005), motivation (Bosworth, Gingiss, Potthoff, & Roberts-Gray, 1999) and willingness to engage in treatment (Gresham, 1989; Perplechikova & Kazdin, 2005) as variables that can influence the effectiveness of intervention processes.

CBC researchers recently found that the strength of its effects depended upon the degree to which parents and teachers held a congruent, or similar, view of their communication (Garbacz et al., 2015). In fact, examining communication patterns between parents and teachers has been the subject of several CBC studies. For example, using the Family Relational Communication Control Coding Systems (Heatherington & Friedlander, 1987) to code speech acts within four CBC cases, Erchul and colleagues (1999) explored communication patterns among parents and teachers. Analyses revealed that no single participant in CBC disproportionately attempted to direct or influence the process; rather, influence was shared among participants with communication patterns characterized by collaborative and reciprocal speech acts. Similarly, Sheridan and colleagues (2002) examined associations between influence and involvement on CBC case outcomes using the Psychosocial Processes Coding Scheme (Leaper, 1991).

Descriptive analyses of speech acts in 16 CBC meetings revealed that communication among participants was highly collaborative and corresponding effect sizes from the examined cases were found to be meaningful and positive (average $ES = 1.2$). Grissom, Erchul, and Sheridan (2003) investigated aspects of interpersonal control in CBC in relation to measures of acceptability, consultant effectiveness, and attainment of consultation goals. Parent dominance during the process was associated with less positive behavioral outcomes for children, including lower acceptability ratings given by teachers and less favorable parental goal attainment ratings. The findings illustrate that shared interactional qualities between parents and teachers, including collaborative speech acts and equitable control during interactions, can facilitate the CBC process whereas disparate communication patterns, such as dominance by one participant, can constrain the process. However, this research has been limited to examining discrete speech acts between parents and teachers. Global interactional qualities between parents and teachers that demonstrate equity, consideration, and trust have long been assumed to shape and reflect positive parent-teacher relationships (Clarke, Sheridan, & Woods, 2009); however, to date, no CBC research has explored these types of joint interactions among parents and teachers.

Qualities of shared interactions, including perspective taking, co-negotiation of roles and responsibilities, and engagement, have shown to strengthen personal relationships (Koenig Kellas, 2010). Considerable evidence from related fields (e.g., communication studies) suggests that the manner in which individuals jointly accomplish conversational tasks (e.g., discussing difficult events) is linked to important relational outcomes. For example, specific interactional qualities including perspective-taking, turn-

taking, clear roles, and engagement are associated with satisfaction, supportiveness, and adaptability among family members (Trees & Koenig Kellas, 2009) and the mental health and perceived stress among marital couples (Koenig Kellas, Trees, Schrodtt, LeClair-Underber, & Willer, 2013). Trees and Koenig Kellas (2009) examined the joint interactional processes among 54 family members while they recalled recent difficult experiences. Using the Interactional Sense Making Rating Scale (ISMR, Koenig Kellas & Trees, 2005), the authors' examined the relationship between family members' engagement and coherence when discussing a difficult family experience, as well as the extent to which family members acknowledged others' perspectives and took turns during the telling of family stories and familial relationship outcomes, including perceived family supportiveness and satisfaction and families' cohesion and adaptability. The findings indicated families' abilities to co-construct a coherent story (i.e., coherence) and account for other family members' perspectives (i.e., perspective-taking) was predictive of ratings of familial cohesion ($R^2 = 0.22$ for perspective taking), adaptability ($R^2 = 0.19$ for coherence), and supportiveness ($R^2 = 0.35$ for coherence and perspective taking). Similarly, an examination of 68 couples' video-recorded joint storytelling interactions revealed married couples' shared interactions when recalling stressful experiences were significantly related to husbands' positive perceptions of their own mental health and lower levels of perceived stress (Koenig Kellas et al. 2013). When the couples' recall of a stressful event produced a coherent, integrated story and when the couple was dynamic and evenly balanced in their turn-taking, husbands' reported fewer mental health symptoms ($R^2 = 0.14$ for coherence; $R^2 = 0.09$ for turn-taking) and less perceived stress ($R^2 = 0.06$ for coherence). Particularly, the more husbands took their

wives' perspectives into account and engaged with their partner during the recall task, the fewer mental health problems (e.g., nervousness, irritableness, sleeplessness) they reported ($R^2 = 0.10$ for perspective-taking; $R^2 = 0.09$ for engagement).

Summary and Research Questions

There is overwhelming empirical support confirming the parent-teacher relationship as a variable that both accounts for and strengthens children's desired outcomes, particularly in CBC. Yet, little is known about the practices and dynamics in CBC that support and facilitate these relationships. Successful consultation is characterized by deliberate, strategic (Daly & Wiemann, 1994 as cited in Erchul & Martens, 2010) and responsive interpersonal communication. A consultant's role in guiding the process through effective questioning, summarizing, and attention toward consultees and the objectives of the consultation model employed appears necessary for effective problem-solving interactions. In fact, evidence suggests consultants' use of communication strategies that build on strengths, promote skills, and foster collaborative interactions (i.e., the use of a partnership orientation) are significant process features of CBC (Garbacz et al. 2008). Despite the assumed importance of the partnership-centered communications to support working relationships between parents and teachers, there has been no research exploring the link between CBC consultants' effective use of a partnership orientation during problem-solving interactions and the parent-teacher relationship.

Moreover, interactions between parents and teachers have been shown to either facilitate or constrain outcomes in CBC. Garbacz and colleagues (2015) found perceptions of communication between parents and teachers moderated the effects of

CBC. The benefits of CBC depended on the degree to which parents and teachers had shared views of their communication. However, no studies have replicated the moderating effect of shared interactions in CBC using objective measures (i.e., coding parents and teachers interactional qualities during CBC meetings) of communication between parents and teachers, which would allow for more comprehensive understanding of how shared interactions operate in CBC.

Understanding whether CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers predicts, and whether consultees' (i.e., parents and teachers) displays of shared interactional qualities strengthen relationships between parents and teachers was the purpose of this study. The following research questions were examined:

Research question 1. Do CBC consultants' use of partnership-oriented communication strategies (i.e., being sensitive, responsive, and encouraging, focusing on strengths, promoting teaming and collaboration, using effective questioning, summarizations, and paraphrasing, building skills, and sharing resources and information; Garbacz et al., 2008) during problem-solving interactions with parents and teachers predict teacher reports of the perceived quality of the parent-teacher relationship?

Hypothesis 1. It is expected that consultants' use of partnership-oriented communication strategies (i.e., being sensitive, responsive, and encouraging, focusing on strengths, promoting teaming and collaboration, using effective questioning, summarizations, and paraphrasing, building skills, and sharing resources and information; Garbacz et al., 2008) during problem-solving interactions with parents and teachers will significantly and positively predict teachers' reports of the quality of the parent-teacher relationship.

Research question 2. Do parents' and teachers' (i.e., consultees) shared interactional qualities (i.e., engagement, turn taking, perspective-taking, coherence; Koenig Kellas & Trees, 2005) moderate the predictive relationship between consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teacher and teacher reports of the parent-teacher relationship?

Hypothesis 2. It is hypothesized that the strength of the prediction between consultants' use of a partnership orientation during problem-solving interactions with parents and teachers and teacher reports of the quality of the parent-teacher relationship will depend on the degree to which consultees display shared interactions (i.e., engagement, turn taking, perspective-taking and coherence; Koenig Kellas & Trees, 2005). Specifically, when parents and teachers display high levels of shared interactional qualities, the predictive relationship between consultants' use of a partnership orientation during problem-solving interactions and reports of the parent-teacher relationship will be stronger.

CHAPTER 3: METHOD

The primary objective of this study was to examine whether CBC consultants' use of communication strategies during problem-solving interactions with parents and teachers predicted, and whether consultees' (i.e., parents and teachers) displays of shared interactional qualities strengthened teacher-reports of the parent-teacher relationship. Secondary data analyses drawing on data from two extant CBC randomized controlled trials were used to conduct multilevel moderation analyses exploring the following model:

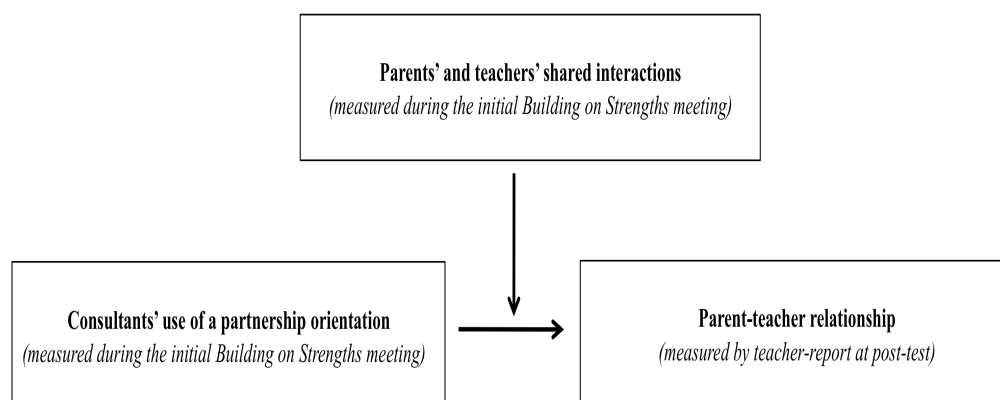


Figure 3.1. Graphical representation of model being tested in this study.

Participants and Setting

Participants in this study were drawn from two large-scale randomized controlled trials examining the efficacy of CBC across geographic settings. The first study (CBC in the Early Grades; IES Award # R324A100115) was conducted within a large Midwestern city between the years of 2005 and 2009. A replication study (CBC in Rural Communities; IES Award # R305C090022) was conducted in Midwestern rural

communities (2010-2015). Data from both trials were combined to provide a larger, more representative sample than would be observed with data from a single CBC study. The research design, sampling procedures, CBC activities, and measures were similar across both samples. Following is a description of: (a) recruitment procedures used across CBC studies; (b) selection criteria for this study with a justification of the sample size based on related research; and (c) demographic characteristics of the sample for the present study.

Participant recruitment procedures. Across both studies, families were selected to participate based on teacher-reported concerns of children's disruptive behaviors (Sheridan et al., 2012). Classrooms served as the unit of randomization. After teachers' informed consent was obtained and they were randomly assigned to the CBC (treatment group) or a "business-as-usual" (control) group, participating families within each classroom were recruited. Recruitment of parents and children followed a multistep procedure, wherein teachers rank-ordered the top students with disruptive behaviors (e.g., noncompliance, aggression) and completed a researcher-developed checklist assessing the frequency and severity of their behaviors, as well as the perceived need for additional intervention (1 = Low to 9 = Extreme). Up to three families in each classroom were recruited after the teacher indicated each child exhibited disruptive behaviors that interfered with learning and/or demonstrated the need for additional services. The parents of children meeting these inclusionary criteria were invited to participate in the study and informed consent was obtained.

Selection criteria. The present study examined data from participants in the treatment group across both CBC studies. No participants from the "business-as-usual" (control) group were included in this study. Two hundred parents (and their children) and

their participating teachers were randomly selected from both existing CBC samples in equal numbers. That is, 100 parent (and their children), teacher, and consultant triads were randomly selected from each CBC study providing they met the following criteria: (a) participants completed the CBC intervention and had available recordings of the first CBC problem-solving meeting, Building on Strengths (see coding procedures section for a justification of the use of this meeting); (b) parents and teachers reported on demographic characteristics prior to participating in CBC; and (c) teachers reported on the parent-teacher relationship after participation in CBC. Seven cases were dropped from the study because the quality of the audio recording of the Building on Strengths meeting was poor (i.e., coders were unable to hear the parent, teacher, and/or consultant) and data were unable to be derived from the recording.¹

The resulting sample was 193 parents (and their children; 100 dyads randomly selected from the CBC in Rural Communities study, 93 dyads randomly selected from CBC in Early Grades study), 114 teachers ($M = 1.69$ parent and child dyads per classroom), and 21 consultants ($M = 3.95$ schools per consultant) working across 56 schools ($M = 3.54$ teachers per school; see Table 2 for demographic characteristics of the sample). Previous research exploring the effects of interest in the study, namely consultants' use of communication strategies (as measured by the Partnership Orientation Measure; POM; Garbacz et al., 2008; see Study Variables and Measures section) and displays of shared interactional qualities (as measured the Interactional Sense-Making Rating Scale; ISMR; Koenig Kellas & Trees, 2005; see Study Variables and Measures section) have relied on sample sizes comparable to those in the present study. Garbacz and colleagues (2008) examined 20 CBC cases ($n = 20$ children and parents, $n = 16$

teachers, $n = 19$ consultants) and found that consultants' use of a partnership orientation (as measured by the POM) significantly predicted teachers' acceptability and satisfaction with the process. Trees and Koenig Kellas (2009) examined displays of shared interactional qualities (as measured by the ISMR) among 52 families and found these interactional qualities positively predict family functioning and supportiveness among. Within a multilevel moderation modeling framework, Garbacz and colleagues (2015) used a sample of 166 children in 74 different classrooms across 21 different schools working with 8 CBC consultants from the CBC in the Early Grades randomized controlled trial to explore whether congruence in parent and teacher communication moderated the effects of CBC and found a significant moderating effect of congruent communication on teacher reports of children's social skills. Demographic characteristics of the sample follow (see Table 3.1).

Table 3.1

Demographic Characteristics of Sample			
Family Characteristics		N = 193	
Mean (SD) Parent Age		34.0(6.9)	
Mean (SD) Adults in Home		1.9(0.7)	
Maternal Education < College Degree		54.5%	
Student Characteristics		N = 193	
Mean (SD) Student Age		6.6(1.1)	
Mean Student Grade			
Kindergarten		23.8%	
1 st Grade		29.6%	
2 nd Grade		31.3%	
3 rd Grade		15.3%	
Student Gender (Male)		74%	
Student Eligible for Free or Reduced Meals		52.7%	
Student Ethnicity			
White/European American/non-Hispanic		75.0%	
Black/African-American		6.9%	
Hispanic or Latino		6.9%	
Asian		1.1%	
Other		10.1%	
Teacher/Classroom Characteristics		N = 114	
Teacher Gender (Female)		96%	
Mean (SD) Teacher Years of Experience		14.4(11.9)	
Mean (SD) Number of Students in Classroom		19.0(4.8)	
Teacher Highest Degree			
Some College		5.3%	
College Degree		25.4%	
Additional Formal Schooling		69.3%	
Consultant Characteristics^a		Early Grades (N = 8)	Rural (N = 13)
Consultant Gender (Female)		100%	93%
Consultant Ethnicity (White/non-Hispanic)		100%	100%
Mean (SD) Consultant Age		25.30(2.07)	31.5(6.12)
Mean (SD) Years of Graduate Education		2.63(1.69)	2.81(1.31)

Notes. ^a Consultant characteristics are provided for each study separately as raw data from the Early Grades study was not available.

Parents and children. The sample included 193 children and their parents that participated in CBC. The average age of parent participants (N=193) was 34 (SD=6.9) years old. More than half of parent participants reported a high school diploma as the highest degree earned (54.5%).

The children (N=193) who participated in the study were primarily male (74%). The average age of children was 6.6 (SD = 1.1) years. Children, as reported by parents, were predominately White/non-Hispanic (75%) and approximately half were eligible for free and reduced meals (52.7%).

Teachers. The sample included 114 teachers. Teacher participants were mostly female (95%). Teachers' had, on average, approximately 14 years of experience (SD = 11.9). The majority of teachers (69%) had completed some additional formal school, including obtaining an advanced graduate degree or completing graduate-level coursework.

Consultants. CBC consultants (N = 21) participated across both CBC studies². Consultants from the CBC in the Early Grades study (N = 8) all self-reported as female (100%) and White/non-Hispanic (100%), with an average age of 25.3 (SD = 2.07) years (Sheridan et al., 2012). All were trained in either school psychology or counseling psychology, having completed an average of 2.63 (SD = 1.69) years of graduate education. Consultants for the CBC in Rural Communities study (N = 13) were predominately female (93%) and all self-reported as White/non-Hispanic (100%), with an average age of 31.5 (SD = 6.12) years. All consultants held Master's degrees in educational administration, special education, school psychology, or counseling psychology, having completed an average of 2.81 (SD = 1.31) years of graduate

education.

Study Variables and Measures

Multiple measures were used to assess consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers, consultees' shared interactions, and the quality of the parent-teacher relationship. Several meaningful pre-treatment covariates were also considered.

CBC consultants' communication strategies. The predictor variable in this study is CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers (i.e., consultees). Partnership-oriented communication strategies are defined as CBC consultants' use of specific communications that demonstrate a collaborative environment during CBC meetings, including identifying consultees' strengths, promoting teaming among the consultation team, and being responsive to consultees' needs (Garbacz et al., 2008).

Consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers was assessed using the Partnership Orientation Measure (POM; Garbacz et al., 2008; see Appendix A). The POM is a 7-item observational measure completed by trained coders that assesses CBC consultants' use of partnership-oriented communication strategies during CBC meetings. The seven items reflect communication strategies that: (a) focus on children's and consultees' strengths, (b) promote teaming and collaboration among the consultation team, (c) encourage consultees to share their input and jointly make decisions, (d) are sensitive and responsive to consultees' needs, (e) effectively facilitate the consultation process (e.g., asking open-ended questions), (f) build consultees' skills, and (g) share

resources and information. Ratings of the POM range from 1 to 6, with a score of 1 indicating that a consultant did not use a specific partnership orientation strategy (i.e., it could not have been worse) and a score of 6 indicating that the consultant appropriately used the strategy (i.e., it could not have been better). The measure yields an overall partnership-orientation score with high scores on the POM indicating consultants' used a partnership orientation during CBC meetings.

Previous research has shown POM scores demonstrate high internal consistency across items ($\alpha = 0.90$; Garbacz et al., 2008) and CBC meetings ($\alpha = 0.91$ - 0.95; Garbacz et al., 2008), as well as high levels of interrater agreement (100% agreement; Garbacz et al., 2008). Consistent with previous research, internal consistency across items with the current sample was high ($\alpha = 0.90$). High levels of agreement ($M = 97\%$; Range = 85% - 100%) between the coders using the POM were observed.

Content validity for the POM was established through an expert-review process (Garbacz et al., 2008). Five experts in family-school partnerships reviewed and rated the measure's validity. Expert ratings indicated that the POM items were very relevant to, and representative of, a partnership orientation. A confirmatory factor analysis was conducted with the current sample to determine if a single factor could account for the covariances observed in the data. The analysis revealed a single factor model was an approximate fit for the data [$\chi^2(14, N = 193) = 41.35, p < .01$; RMSEA = 0.10 CFI = 0.96; SRMR = 0.03; Hu & Bentler, 1999]³. As a result, total POM scores were calculated for each initial Building on Strengths CBC meeting (see coding procedures section). Total POM scores represented the consultants' use of partnership-oriented

communication strategies during interactions between each parent, teacher, and consultant triad involved in the Building on Strengths meeting.

Parent-teacher relationship. Consistent with Sheridan et al. (2012), the outcome variable is defined as teachers' perceptions⁴ of the parent-teacher relationship, chosen to capture changes and variations in relationship quality. Teachers' reports of relationship quality were selected because previous CBC research has established teacher perceptions of the parent-teacher relationship as critical to the success of the intervention (i.e., teacher-reports of the parent-teacher relationship partially mediates the effect of CBC on student outcomes; Sheridan et al., 2012, Sheridan et al., in submission). Moreover, teachers have the potential to interact with many parents, and are keenly aware of changes and variations in parent-teacher relationships. As such, they are likely more capable of differentiating relationship quality than are parents of children in early grades who experience fewer and more limited interactions with teachers.

The parent-teacher relationship was assessed using the Parent-Teacher Relationship Scale—II (PTRS; Vickers & Minke, 1995; see Appendix B). The PTRS is a 24-item self-report measure assessing perceptions of the relationship between parents and teachers on a 5-point Likert-type scale (1=almost never, 5=almost always). The scale assesses the overall quality of the parent-teacher relationship with factor analytic work yielding two subscales: joining (19 items assessing the sense of interpersonal connection in the relationship) and communication-to-other (5 items assessing each respondents' sharing of information and emotions with the other party). The PTRS was completed approximately one week before (pre-test) and after 12 weeks of CBC (post-test). High scores on the PTRS indicate that respondents feel positively about their relationship with

the other person. For purposes of this study, total scores were calculated representing the overall relationship quality using the post-test teacher report of the PTRS (Vickers & Minke, 1995).

High levels of internal consistency for PTRS total scores have been demonstrated in CBC studies ($\alpha = 0.94$ for parents and teachers; Sheridan et al., 2012) and within the present sample ($\alpha = 0.95$). Previous psychometric work on the PTRS has examined the construct validity of the factor scores by comparing subscale scores (i.e., joining and communication-to-other) to global ratings of the parent-teacher relationship (i.e., rated as “very poor”, “poor”, “okay”, “good”, or “excellent”; Vickers & Minke, 2005). Less positive global ratings of the parent-teacher relationship were significantly related to lower joining and communication-to-other subscale scores.

Parents’ and teachers’ (consultees) interactions. The moderator variable is parents and teachers (i.e., consultees) shared interactions. Consultees’ shared interactions were defined as the joint and cooperative interpersonal interactions demonstrated by parents and teachers during CBC meetings. Qualities of shared dynamics include: (a) engaging interactions (i.e., both parents and teachers show interest in the process and communicate in a warm manner); (b) turn taking (i.e., interactions are fluid and dynamic and turns are evenly distributed); (c) perspective taking (i.e., parents and teachers attend to and confirm each others’ perspectives); and (d) coherent communication (i.e., parents and teachers share information that is integrated and cohesive; adapted from Koenig Kellas & Trees, 2005).

Parents’ and teachers’ shared interactions were assessed using an adapted version of the Interactional Sense-Making Rating Scale (ISMR; Koenig Kellas & Trees, 2005;

see Appendix C). The original ISMR scale was developed to measure joint interactions (i.e., verbal and nonverbal interactions) between family members. Adaptations were made to tailor the measure to CBC. First, some language was revised to reflect interactions among parents and teachers rather than family members. Second, nonverbal indicators of joint interactions were removed given those interactions cannot be observed using audio recordings. Third, one item was removed from the ISMR (i.e., “participation in the meeting follows a logical sequence”) because the existing structure of CBC inherently follows an organized and logical sequence. The resulting adapted version of the ISMR is a 7-item observational measure completed by trained, independent coders. Coders rated four global qualities of shared interactions (i.e., engagement, turn-taking, perspective-taking, and coherence) using a 5-point rating system. A score of 1 indicates low levels of shared interactions and a score of 5 indicates high levels of shared interactions. High scores on the ISMR suggest a high degree of shared interactions between parents and teachers.

Previous research using the original, non-adapted ISMR scores indicates adequate levels of internal consistency for each of the four assessed shared interactional qualities ($\alpha = 0.72$ to 0.92 ; Koenig Kellas & Trees, 2005). In the present sample, internal consistency across items was high ($\alpha = 0.91$). High levels of agreement ($M = 92\%$; Range = $85\% - 100\%$) between the coders using the ISMR were observed.

Scores of all four shared interactional qualities (i.e., engagement, turn-taking, perspective-taking, and coherence) have shown to correlate positively with scores on measures of familial adaptability, cohesion, and overall function (as measured using the Family Adaptability and Cohesion Evaluation Scale; Koenig Kellas & Trees, 2005). A

factor analysis was conducted with the current sample to determine if a single factor could account for the covariances observed in the data [$\chi^2(14, N = 193) = 116.09, p < .01$; RMSEA = 0.19; CFI = 0.91; SRMR = 0.05; Hu & Bentler, 1999]³. Total ISMR scores were calculated for each initial Building on Strengths CBC meeting (see coding procedures section) representing the extent to which each parent and teacher dyad involved in the meeting demonstrated shared interactions.

Covariates. Several meaningful covariates were considered. Children's pretreatment behavior severity, parents' and teachers' pretreatment relationship quality (PTRS), family poverty status, maternal education level, teachers' years of experience, the year in which the child participated in the study, the research assistant that coded data using the POM and ISMR served, and the geographic setting in which each school was located served as covariates in this study. Pretreatment behavior severity, pretreatment relationship quality, family poverty status, maternal education level, and teachers' years of experience were all measured through parent- and teacher-report approximately one week prior to the start of CBC (i.e., pre-test) through the use of web-based or paper-and-pencil surveys completed by the parent or teacher. Pretreatment child behavior severity, as rated by each child's teacher on a scale from 1 (low) to 9 (extreme), and teachers' pre-test PTRS scores (as measured by teacher reports on the PTRS), are considered important because severe and consistent behavior and parent-teacher relationship problems may alter intervention effectiveness (Keenan & Wakschlag, 2000) and contribute to parents' and teachers' engagement with each other during the process. Similarly, research consistently shows that poverty and low maternal education predicts poor quality parent-teacher relationships (Hughes & Kwok, 2007). For this study, poverty status and maternal

education level are measured by parents' report of children's free/reduced meal status (0 = not eligible, 1 = eligible) and mothers' report of highest educational degree earned (1 = less than a high school diploma, 2 = high school diploma, 3 = some college, 4 = college degree, 5 = some graduate coursework, 6 = advanced graduate degree). Teachers' years of experience, measured by their report of the number of years they have been teaching, is significant because teachers with more experience may have an easier time developing relationships with parents.

In addition to parent and teacher covariates, several project-related covariates were considered. The year of each child's participation was included as a covariate to account for variations over time across the CBC studies (i.e., between the years of 2005 and 2015 in which the studies occurred). The research assistant that coded data using the POM and ISMR was included to control for discrepancies between research assistants coding data for the project. Geographic location, based on the location of the each participating child's school (0 = nonrural, 1 = rural, as measure by the National Center for Education Statistics urban-centric locale designation system; NCES, n.d.), was considered to account for differences in the parent-teacher relationship that may be observed across settings.

Procedures

The present study relied on extant data collected from two randomized controlled trials examining CBC. Data on parent-teacher relationship quality (as measured by PTRS; Vickers & Minke, 2005) and several covariates were extracted from existing CBC databases. New data was generated by coding available audio recordings of CBC meetings to assess consultants' communication strategies during problem-solving

interactions with parents and teachers (as measured by the POM; Garbacz et al., 2008) and consultees' (i.e., parents and teachers) shared interactions (as measured by the ISMR; Koenig Kellas & Trees, 2005). Following is a description of the CBC procedure used in both CBC studies and the current study procedures.

CBC procedures. CBC casework was conducted following procedures outlined in Sheridan and Kratochwill (2008). Consultants were trained in CBC using a criterion-based model involving didactic seminars, role-plays, and performance feedback from veteran consultants and CBC researchers. All consultants demonstrated mastery of CBC objectives before beginning casework and received ongoing supervision during their casework from licensed psychologists and veteran CBC consultants.

Within each classroom, a consultant met with a teacher and one to three parents for collaborative, problem-solving consultation sessions over approximately eight weeks. Meetings occurred in the child's school and were approximately 45 and 60 minutes in length. Specifically, CBC was implemented through three formal stages operationalized by semi-structured joint meetings. In the first stage (Building on Strengths meeting), parents and teachers identified and defined specific concerns related to the child's behavior and developed complementary procedures to collect baseline data across settings. Due to the sensitive nature of this meeting (e.g., discussions of children's disruptive behavior), these meetings were conducted for each child with individual parents, the child's teacher, and a consultant. During the second stage (Planning for Success meeting), the consultation team reviewed the collected information, established behavioral goals, and developed plans to be implemented across home and school. Each plan included three research-based components: (a) components to address the

hypothesized function of the behavior (e.g., escape/avoidance, skill deficit), (b) motivational strategies (e.g., attention, rewards), and (c) a home-school communication system (e.g., home-school notes; McCain & Kelley, 1994). Specification of each component was completed in a manner that was responsive to each home and classroom environment and each child's preferences (e.g., rewards). Progress toward goals and plan effects were monitored and evaluated in the third stage (Checking and Reconnecting meeting).

Data collection procedures. Data used in this study were derived from two sources: (a) extant information extracted from the two existing CBC study databases; and (b) new information collected through coding existing audio recordings of CBC casework. Selected de-identified raw data (i.e., PTRS data and demographic information) and audio recordings were accessed through the secure servers that house the data from both CBC randomized controlled trials.

Coding procedures. One hundred and ninety-three recordings of the Building on Strengths meeting were coded for consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers (as measured by the POM) and the extent to which parents and teachers displayed shared interactions (as measured by the ISMR) during these problem-solving meetings. The POM was coded for the consultation triad (i.e., parent, teacher, consultant, focusing on specific consultant communication strategies) involved in each Building on Strengths meeting, whereas the ISMR was coded for each parent and teacher dyad involved in the meeting.

The Building on Strengths meeting is conducive to assessing specific parent-

teacher interactional qualities because it is conducted with one consultant, one parent, and one teacher unlike the remaining CBC meetings (i.e., Planning for Success, Checking and Reconnecting), which are conducted in small groups (i.e., one consultant, one teacher, and parents of one to three children). Coding the initial meeting in the consultation process is consistent with previous research (Erchul et al., 1999; Sheridan et al., 2002) that has relied on coding one meeting as representative of the process. Moreover, data from analyses of fidelity of consultants' use of collaborative problem-solving procedures suggest CBC consultants adhered to structural (e.g., selected a target concern to address at home and school) and relational (e.g., maintained involvement through the meeting) meeting objectives at similar rates across the Building on Strengths, Planning for Success, and Checking and Reconnecting meetings (M=96%, M=96%, M=93%, respectively; Sheridan et al., in submission).

Two research assistants were trained to code audio recordings using the POM and ISMR. Both research assistants were undergraduate students majoring in psychology at the University of Nebraska-Lincoln. Each research assistant completed a 28-hour didactic training program. During training, definitions of each item on the POM and ISMR were discussed (see Appendix D for the codebook provided to research assistants). Behavioral indicators and decision rules for differentiating ratings on each item were provided. Key features of the training were group and independent practice coding. The research team coded several audio recordings that represented “high” scores on the POM and ISRM, as well as audio recordings that represented “low” scores on the POM and ISMR. Each research assistant practiced coding using an additional eight audio recording (i.e., four audio recordings for the POM and four audio recordings for the ISMR) prior to beginning

data collection. In both the training and data collection coding, raters were provided with a note-taking sheet to document behavioral markers relevant to the item being rated.

Prior to coding audio files independently, each research assistant met mastery criteria (85% agreement) with two existing meetings coded by an expert coder.

Consistent with Garbacz and colleagues (2008), ratings were considered in agreement if they were within one rating of one another on the Likert scale. For example, if one coder rated a partnership-oriented communication strategy (on the POM) or interactional quality (on the ISMR) with a 3 and another coder rated the same strategy or interactional quality with a 4, the raters were considered in agreement. If one coder rated a partnership-oriented communication strategy or interactional quality with 3 and another coder rated the same strategy or quality with a 5, ratings were considered to be in agreement.

During the coding process, team meetings were held to ensure research assistants were coding accurately and progress was being made toward coding completion. During the meetings, the research team discussed any challenges encountered when coding the audio recordings. When discrepancies arose, group conversations took place about the coding process and involved listening to the audio recordings where discrepancies were present and reaching and documenting consensus among the coding team.

Interrater agreement was monitored throughout the coding process. Thirty-one percent of all cases (i.e., 60 meetings randomly selected with equal numbers across all coders) were double coded for interrater agreement. The principal investigator of this study served as the expert coder and provided master coding for these 60 meetings⁵.

Research assistants were required to meet criteria (85% agreement) with the expert coded

ratings. No cases that were double coded fell below acceptable levels of agreement.

Data Analysis

The predictive relationship between CBC consultants' use of communication strategies during problem-solving interactions with parents and teachers and the quality of the parent-teacher relationship, as well as the moderating effect of consultees' (i.e., parents and teachers) shared interactions on the aforementioned prediction, were assessed using multilevel modeling. Multilevel modeling addresses a common issue in the collection of data within schools where students who share a teacher or consultant could have data that are more similar to each other than to other participants. Multilevel modeling addresses these dependencies in this data and reduces the chance for Type I Error and biased parameter estimates. This approach takes into account the hierarchical nesting created from the complex sampling procedure used to collect data in both CBC studies (Sheridan et al., 2012).

Whether consultants' use of partnership-oriented communication strategies during problem-solving interactions between parents and teachers (as measured by the POM) predicted parent-teacher relationship quality (as measured by teacher reports of the PTRS; Research Question 1) as well as the moderating influence of consultees' shared interactions (as measured by the ISMR; Research Question 2) was assessed in two multilevel models. The models were initially implemented in a four-level multilevel model where children and parents (Level 1) were nested within classrooms/teachers (Level 2), classrooms/teachers were nested within schools (Level 3), and schools were nested within consultants (Level 4).

The multilevel models were implemented using PROC MIXED procedure in SAS

Version 9.3 (SAS Institute, 2011). The predictor and moderator variables were centered within cluster (Enders & Tofighi, 2007). The teacher covariates (i.e., years of experience, pretreatment parent-teacher relationship quality) were centered at the grand mean, and child/parent covariates (i.e., pretreatment behavior severity, family poverty status, maternal education level) were centered within cluster. The Satterthwaite's approximation for degrees of freedom (Satterthwaite, 1946) was used to determine the denominator degrees of freedom for all tests of fixed effects. Final parameter estimates were obtained through restricted maximum likelihood estimation.

The consultants' use of partnership oriented communication strategies (referred to as consultants' within-triad communications strategies) during problem-solving interactions with parents and teachers served as the predictor variable and consultees' shared interactional qualities served as the moderator variable. The main effect of consultants' use of partnership-oriented communication strategies on the quality of the parent-teacher relationship was tested using the regression coefficient for consultants' within-triad communication strategies (Level 1). Subsequently, moderation was statistically tested using the interaction term of consultants' within-triad communication strategies (Level 1) by consultees' shared interactions (Level 1) to determine whether shared interaction qualities result in a stronger predictive relationship between consultants' within-triad communication strategies and teacher reports of the parent-teacher relationship. Children's pretreatment behavior severity, parents' and teachers' pretreatment relationship quality (PTRS), family poverty status, maternal education level, teachers' years of experience, the year the child participated in the study, the research assistant that coded data, and the geographic setting in which each school was located

were included in the model as covariates.

Model building. Model building started with an empty model with no predictors to determine the unconditional variance structure. There was a negative variance estimate when consultant (Level 4) was added to the empty model, resulting in the removal of the random effect for consultants from all analyses. The fixed effect of consultant was dropped, as well, because it did not have a statistically significant effect on any outcome. The random effects that were included in the model to account for between-school (Level 3) and between-teacher/classroom (Level 2) variability were significant (see Table 3.2), with the intraclass correlation (ICC; $\rho = 0.45$) suggesting 45% of the variability in teacher reports of the parent-teacher relationship was at Level 2 or higher (i.e., between-school or between-classroom/teacher differences). After the predictors (i.e., consultants' within triad communication strategies, parents' and teachers' shared interactions) and the interaction term were included in the model, the Level 2 estimate of the random intercept variance was negative ($Z = -0.64$), suggesting that once the Level 2 predictors were included the residual classroom/teacher variance estimate was negative. Level 2 (i.e., classroom/teacher) was retained because randomization in the CBC studies occurred at the classroom/teacher level. As a result, the random effect of Level 3 (i.e., school) was removed from the model. Similarly, the school fixed effect was dropped because it did not have significant effect on any outcome. These modifications resulted in a final two-level multilevel model of children and parents (Level 1) nested within classrooms/teachers (Level 2).

Table 3.2

Covariance Parameter Estimates for Baseline Empty Model

Level	Est.	SE	Z Value	p
Consultant ^a	--	--	--	--
School	71.47	33.79	2.12	0.03
Teacher	40.07	35.20	1.14	0.26
Residual	136.75	26.00	5.26	<.01

Notes. ^a Consultant has a negative variance estimate.

Following model building, the full proposed models with covariates were estimated. Several covariates were removed from each of the models (i.e., geographic setting, year of participation, coder, consultant, teachers' years of experience, maternal education level, and children's pretreatment behavior severity) due to their non-significant effect. Teachers' pretreatment relationship quality and family poverty status remained in the model as covariates.

Model equations. A description of the two-level multilevel statistical model follows. For simplicity, covariates are included as general child/parent, and teacher/classroom level covariates. The multilevel moderation equations are:

Level 1 Equation:

$$\begin{aligned} PTR_{ij} = & b_{0j} + b_{1j}(COMM_{ij} - COMM_{.j}) + b_{2j}(SHINT_{ij} - SHINT_{.j}) + \\ & b_{3j}(COMM_{ij} - COMM_{.j})(SHINT_{ij} - SHINT_{.j}) + b_{4j}(COVS_{ij} - \\ & COVS_{.j}) \\ & + e_{ij} \end{aligned}$$

Where $.j$ represents the variable was centered within clusters

Level 2 Equations:

$$\begin{aligned} b_{0j} = & \gamma_{00} + \gamma_{01}(COMM_{.j} - COMM_{..}) + \gamma_{02}(SHINT_{.j} - SHINT_{..}) + \\ & \gamma_{03}(COMM_{.j} - COMM_{..})(SHINT_{.j} - SHINT_{..}) + \gamma_{04}(COVS_{.j} - COVS_{..}) \end{aligned}$$

$$+ \gamma_{05}(\text{COVT}_{0j} - \text{COVT}_{..}) + v_{0j}$$

$$b_{1j} = \gamma_{10}$$

$$b_{2j} = \gamma_{20}$$

$$b_{3j} = \gamma_{30}$$

$$b_{4j} = \gamma_{40}$$

Where .. represents the variable was centered at the grand mean

The children and parents i (Level 1) and teachers/classrooms j (Level 2) model components can be written into equations for each level of the model, where the first equation contains information at Level 1 (children and parents) and the second set of equations contain the information for Level 2 (teachers/classrooms). In this model, PTR_{il} is the post-test teacher report of the parent-teacher relationship for parent i within teacher/classroom j . The main effect of consultants' within-triad communication strategies is represented by $\gamma_{01}(\text{COMM}_j - \text{COMM}_{..})$, $\gamma_{02}(\text{SHINT}_j - \text{SHINT}_{..})$ represents the main effect of parents' and teachers' shared interactions, $\gamma_{03}(\text{COMM}_j - \text{COMM}_{..})(\text{SHINT}_j - \text{SHINT}_{..})$, represents the interaction effect between consultants' within-triad communication strategies and consultees' shared interactions, and $\gamma_{04}(\text{COVS}_j - \text{COVS}_{..})$ and $\gamma_{05}(\text{COVT}_{0j} - \text{COVT}_{..})$ represent child/parent level (e.g., child's pretreatment behavior severity, maternal education level) and teacher level covariates (e.g., years of experience), respectively. In addition to an overall intercept (represented by γ_{00}), the equations include, v_{0j} , which represents the random classroom effect and, e_{ij} , which represents the random errors of prediction in the Level 1 equation. For this study, the main interests are the significance test of $\gamma_{01}(\text{COMM}_j - \text{COMM}_{..})$ and $\gamma_{03}(\text{COMM}_j - \text{COMM}_{..})(\text{SHINT}_j - \text{SHINT}_{..})$, the regression coefficient and interaction

term that capture the difference in teacher reports of the parent-teacher relationship due to consultants' within-triad communication strategies and the moderating effect of consultees' shared interactions, controlling for the covariates of interest.

CHAPTER 4: RESULTS

The results of the study analyses follow. Descriptive statistics (see Tables 4.1 and 4.2) are discussed to illustrate the communicative context within CBC collaborative problem-solving meetings. The section concludes with the results of the multilevel moderation analyses (see Table 4.3).

Descriptive Analyses

Descriptive statistics for study variables are provided in Table 4.1. Table 4.2 contains descriptive statistics for the items used to measure consultants' partnership-oriented communication strategies (i.e., predictor variable as measure by the POM) and parents' and teachers' shared interactions (i.e., moderator variable as measured by the ISMR).

Table 4.1

Descriptive statistics for study variables			
Variable	M	SD	Range
Parent-Teacher Relationship ^a	4.22	0.64	1.88 – 5.00
Consultants' Partnership Oriented Communication ^b	4.06	0.63	2.43 – 5.29
Parents' and Teachers' Shared Interactions ^c	3.77	0.68	2.14 – 5.00

Notes. ^a The parent-teacher relationship was measured using the teacher –reports on the Parent-Teacher Relationship Scale—II (PTRS; Vickers & Minke, 1995). Ratings range from 1 (almost never) to 5 (almost always). ^b Consultants' Partnership Oriented Communication was measured using the Partnership Orientation Measure (POM; Garbacz et al., 2008). Ratings range from 1 (could not have been worse) to 6 (could not have been better). ^c Shared interactions was measured using an adapted version of the Interactional Sense-Making Ratings (ISMR; Koenig Kellas & Trees, 2005). Ratings range from 1 (low levels of shared interactions) to 5 (high levels of shared interactions).

Communicative context of CBC. Descriptive analyses of the POM and ISMR (see Tables 4.1 and 4.2) provide a depiction of the communicative context within CBC. On average, consultants' used a partnership orientation during interactions with parents and teachers (as measured by the POM; $M = 4.06$, $SD = 0.64$; ratings range from 1 = could not have been worse to 6 = could not have been better) corresponding to a rating

that the consultants' uses of the strategies were "More Effective than Ineffective."

Average ratings on items ranged from a low of 2.90 ("Mostly Ineffective") on an item assessing consultants' ability to locate and communicate additional resources, options, and opportunities available to the family and teacher to a high of 4.50 ("Mostly Effective") on an item assessing consultants' awareness of the needs, attitudes, and feelings of the family and teacher.

Similarly, parents and teachers demonstrated high levels of shared interactions ($M = 3.77$; $SD = 0.68$; ratings range from 1 = Low Levels of Shared Interactions to 5 = High Levels of Shared Interactions) corresponding to a rating that parents and teachers "Frequently" demonstrated shared interactions. Average ratings on items ranged from a low of 3.41 ("Sometimes") on an item assessing the degree to which parents and teachers interact in a fluid, dynamic, and free manner to a high of 4.62 ("High") on an item that evaluates the degree to which parents and teachers have an even distribution of turns to talk throughout the meeting.

Table 4.2

Mean and standard deviation for items on the Partnership Orientation Measure and Interactional Sense Making-Rating Scale

	M	SD
Partnership Orientation Measure^a		
Focusing on Strengths	3.80	1.03
Teaming and Collaboration	4.30	0.75
Encouraging	4.44	0.65
Sensitive and Responsive	4.50	0.76
Facilitation of Problem-Solving	4.19	0.76
Skill Development	4.30	0.78
Resourceful and Shares Information	2.90	0.83
Interactional Sense Making-Rating Scale^b		
Involvement	3.74	0.79
Warmth	3.76	0.79
Dynamic	3.41	1.07
Distribution of Turns	4.62	0.62
Attentiveness to Others' Perspectives	3.44	0.88
Confirmation of Perspectives	3.96	0.59
Collaboration	3.43	0.99
Note. ^a Ratings on the Partnership Orientation Measure (POM; Garbacz et al., 2008) range from 1 (could not have been worse) to 6 (could not have been better) ^b Ratings on the adapted version of the Interactional Sense-Making Rating Scale (ISMR; Koenig Kellas & Trees, 2005) range from 1 (low levels of shared interactions) to 5 (high levels of shared interactions).		

Multilevel Moderation Analyses

The effects of the study variables are summarized in Table 4.3. Two multilevel models were implemented to assess the main effect of consultants' use of partnership-oriented communication strategies on the quality of the parent-teacher relationship and the interaction effect of consultees' (i.e., parents and teachers) shared interactions. The results of each analysis are provided below.

Consultants' use of partnership oriented communication strategies. A non-significant main effect emerged for consultants' within-triad communication strategies (as measured by POM) on teacher reports of the quality of the parent-teacher relationship

[as measured by PTRS; $\gamma = -0.18$, $t(63) = -0.49$, $p = 0.63$], controlling for the covariates of interest. The parameter, γ , corresponds with the estimate reported in Table 4.3 and represents the regression coefficient of consultants' within-triad communication strategies.

Moderating effect of consultees' shared interactions. A non-significant interaction effect emerged for consultees' shared interactions [as measured by ISMR; $\gamma = 0.03$, $t(63) = 0.19$, $p = 0.85$], controlling for the covariates of interest. The parameter, γ , represents the interaction effect between consultants' within-triad communication strategies (as measured by the POM) and consultees' shared interactions (as measured by the ISMR) on teacher reports of the quality of the parent-teacher relationship (as measured by the PTRS) and corresponds with the parameter estimate reported in Table 4.3.

Table 4.3

Model Summaries

Parameters

Regression Coefficients (Fixed Effects)**Consultants' Partnership Oriented Communication**

Intercept	39.38 (5.78)**
Level 2: Consultants' Partnership Oriented Communication	0.66 (0.42)
Level 1: Consultants' Partnership Oriented Communication	-0.18(0.37)
Poverty Status	-5.21 (2.48)*
Pretreatment Relationship Quality	0.63 (0.06)**

Partnership Oriented Communication x Shared Interactions

Intercept	40.41 (5.96)**
Level 2: Consultants' Partnership Oriented Communication	0.64 (0.42)
Level 1: Consultants' Partnership Oriented Communication	-0.17 (0.38)
Level 2: Shared Interactions	0.31 (0.25)
Level 1: Shared Interactions	-0.04 (0.29)
Level 1: Partnership Oriented Communication x Shared Interactions	0.03 (0.13)
Poverty Status	-5.17(2.50)*
Pretreatment Relationship Quality	0.63 (0.06)**

Variance Components (Random Effects)**Consultants' Partnership Oriented Communication**

Residual	87.65(18.11)**
Intercept	43.43(20.42)*

Partnership Oriented Communication x Shared Interactions

Residual	87.68 (18.12)**
Intercept	45.35 (20.58)*

Model Fit**Consultants' Partnership Oriented Communication**

Log Likelihood	1182.3
AIC	1186.4
BIC	1191.7

Partnership Oriented Communication x Shared Interactions

Log Likelihood	1186.9
AIC	1190.9
BIC	1196.2

Notes. ^a* p < .05 ** p < .01

CHAPTER 5: DISCUSSION

Empirical evidence has reliably confirmed CBC's positive effects on the functioning of children, families, and teachers (Sheridan et al., 2012, Sheridan et al., in submission, Sheridan et al., 2013). Due to calls in the literature to discern elements that relate and contribute to positive intervention effects (Forman et al., 2013), recent research has begun to uncover components of the model that account for its success. Quality, positive relationships between parents and teachers during the process have consistently emerged as a critical mechanism for promoting desired outcomes for children (Sheridan et al., 2012; Sheridan et al., in submission). That is, the effects in CBC on children's behavior are a function of the supportive relationships established between parents and teachers.

Communication as an important aspect of parent-teacher relationships is considered a key feature of CBC (Garbacz et al., 2008; Sheridan & Kratochwill, 2008). It is through the supportive relationships between parents and teachers that allow for cooperative and trusting conversations that positive outcomes of the process are achieved (Sheridan et al., 2012; Sheridan et al., in submission). CBC consultants intentionally emphasize partnership-oriented interactions (Garbacz et al., 2008) aimed at improving communication between parent-teachers dyads. Indeed, research on CBC consultants' communication during collaborative problem-solving meetings has shown the use of a partnership-orientation is predictive of CBC outcomes (i.e., teachers' acceptability and satisfaction with the process; Garbacz et al., 2008). Moreover, the manner in which parents and teachers communicate throughout the CBC process has been found to moderate effects on child outcomes (Garbacz et al., 2015). However, no research has

explored links between specific communication strategies used by CBC consultants as well as interactional dynamics among parents and teachers and the parent-teacher relationship. As a result, the present study attempted to further explore the parent-teacher relationship by discerning the influence of consultant, parent, and teacher communication. In particular, this study examined whether CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers predicted, and whether consultees' (i.e., parents and teachers) displays of shared interactional qualities strengthened, teacher-reports of the parent-teacher relationship.

Main Findings

This study was the first to attempt to distinguish components of CBC that influence perceptions of the parent-teacher relationship by examining interactional qualities among consultants, parents, and teachers during CBC meetings. Descriptive analyses provide an illustrative understanding of the communicative context within CBC exchanges. For CBC consultants, these analyses revealed that, on average, they used partnership-oriented communication strategies (e.g., demonstrating an awareness of the needs, attitudes, and feelings of the family and teacher, responding to the family and the teacher in a way that promotes and inspires family and teacher decision-making; Garbacz et al., 2008) during problem-solving interactions in CBC meetings. These findings are consistent with previous research suggesting CBC consultants are successful at implementing the structured problem-solving components of the model with a partnership orientation (Garbacz et al., 2008). Moreover, these descriptive analyses broaden the depiction of consultant communication during collaborative problem-solving interactions

with parents and teachers and extend previous research examining discrete verbal patterns among consultants (Sheridan et al., 2002). These results add depth to the research that has shown CBC consultants' communication styles are primarily collaborative and affiliative (Sheridan et al., 2002) by further depicting these communications as being encouraging, sensitive and responsive to consultees' (i.e., parents and teachers) needs and promoting an environment of teaming.

Equity, consideration, and trust have long been assumed to shape and reflect positive parent-teacher relationships (Clarke, Sheridan, & Woods, 2009). As a result, this study explored shared interactions between parents and teachers during CBC meetings. Indeed, parents and teachers, on average, demonstrated high levels of shared interactions during problem-solving (e.g., parents and teachers contribute equally in the meeting, others' perspectives are always or almost always acknowledge and confirmed; Koenig Kellas & Trees, 2005) suggesting that CBC meetings are characterized by joint and cooperative interpersonal exchanges. These findings build on previous descriptive analyses of verbal communication acts among parents and teachers during the CBC process (Erchul et al., 1999; Sheridan et al., 2002). In particular, the results further define bidirectional, reciprocal and collaborative interactions (Erchul et al., 1999; Sheridan et al., 2002) between parents and teachers during CBC meetings by confirming that parents and teachers display warmth with each other, contribute equally throughout meetings, and attend to each other's perspectives.

The results of the multilevel moderation analysis did not support the study hypotheses. Consultants' use of partnership-oriented communication strategies during CBC meetings did not significantly predict teacher reports of the quality of their

relationship with parents. This is inconsistent with previous research suggesting a partnership-orientation is an important process feature of CBC (i.e., predictive of teachers' acceptability and satisfaction with the process; Garbacz et al., 2008). However, this study explored consultants' use of partnership-oriented communication strategies within the context of formal CBC meetings. Several interactions and exchanges occur between parents, teachers, and consultants outside of these meetings. Analyses of interactions within CBC meetings may not entirely capture consultants' communication during the process. It may be important to consider the quality of consultants' communication across all formal and informal interactions with parents and teachers in order to accurately assess the influence of consultants' use of a partnership orientation and the parent-teacher relationship.

Parents and teachers shared interactions did not moderate the aforementioned predictive relationship. This finding is contrary to previous research that suggests the effects of CBC on student outcomes depend on the congruence with which parents and teachers view their communication (Garbacz et al., 2015). Although the present study addressed a need identified in literature to use direct and objective measures of parent-teacher communication in CBC (Garbacz et al., 2015), the measure used to assess shared interactions (i.e., ISMR; Koenig Kellas & Trees, 2005) has never been applied to a sample of parents and teachers. Previous research using the ISMR has focused on interactions among families (Trees & Koenig Kellas, 2009) and married couples (Koenig Kellas et al., 2013). It may be that the ISMR as currently structured does not fully represent aspects of shared interactions between parents and teachers that are important within the context of CBC.

Contributions of this Study

The results of the present study did not support the hypotheses that: (a) CBC consultants' use of a partnership-oriented communication strategies during CBC meetings would significantly predict teacher reports of the parent-teacher relationship; and (b) parents' and teachers' displays of shared interactions during these meetings would moderate this predictive relationship. Despite the non-significant results, this study makes a meaningful contribution to the literature.

This study extends the research examining communication in school-based consultation. It adds to the manner in which communication is explored as it is the first study to examine shared interactions between parents and teachers by considering global qualities of these exchanges. Previous school-based consultation research and CBC research has examined relational processes using microanalytic approaches to assess individual utterances and speech acts among consultants, parents, and teachers (Erchul et al., 1999; Sheridan et al., 2002). However, global interactional qualities, such as engagement, perspective-taking, and cooperation, are considered important features of parent-teacher communication. Whereas microlevel analyses provide detailed information on communication patterns within consultation, exploring interactional qualities in a global manner adds breadth to the assessment of communication in consultation.

This study is also the first to attempt to explore predictors and conditions that contribute to positive relationships between parents and teachers in CBC. Much of the research on CBC has specified the intervention as the independent variable and relevant parent and teacher practices and child performance as dependent variables. Although

these studies provide an understanding of the intervention's efficacy, they do not clarify components of the model that contribute to the desired effects. The purpose of this study was to further understand the relevance of critical outcomes in CBC by exploring how shared interactional qualities between parents and teachers co-operate with the use of specific practices in CBC (i.e., consultants' use of particular communication strategies) to support positive relationships between parents and teachers. Closely examining additional components of the intervention that contribute to identified outcomes complements and augments existing research by providing a more nuanced understanding of how CBC operates.

Limitations and Future Research

Several limitations that lend themselves to future areas of study are important to consider when interpreting the present findings. First, the definition and measurement of shared interactions was based on research conducted in related fields (i.e., communication studies; Koenig Kellas & Trees, 2005). Although no measures exist within the school consultation research to globally assess interactional qualities between consultees (e.g., engagement, perspective-taking), applying the definition and measurement of shared interactions to parents and teachers is novel. Indeed, results from the confirmatory factor analysis for the measure of shared interactions used in this study (i.e., Interactional Sense-Making Ratings; Koenig Kellas & Trees, 2005) revealed that one of the fit indices was in acceptable range. Similarly, the results of the confirmatory factor analysis for the measure of consultant communication (i.e., Partnership Orientation Measure, Garbacz et al., 2008) suggested a single-factor structure was only an approximate fit for the data. Additional research is needed to establish the construct

validity and reliability of the measurement of shared interactions and partnership-oriented communication. Further, alternative ways of conceptualizing and assessing interactions between parents, teachers, and consultants may exist, including the measurement of non-verbal communication among the consultation team. Future research should consider this to ascertain the most appropriate manner for operationalizing and measuring these interactions in the literature.

Second, CBC is comprised of two, parallel components implemented concurrently: (a) collaborative problem-solving facilitated by a consultant to guide parents' and teachers' to identify, develop, and evaluate a behavioral intervention plan; and (b) the implementation of this intervention plan across the home and school setting (Sheridan et al., 2013). These dual components can be further defined by "relational" elements that aim to build supportive relationships between parents and teachers that allow for collaboration (e.g., communicating effectively, maintaining involvement throughout the process) and "structural" elements that represent actions that contribute to the implementation and evaluation of the developed intervention plan (e.g., collecting data, implementing components of the behavioral intervention plan). This study focused on relational elements in CBC that have demonstrated effects (Garbacz et al., 2008; Garbacz et al., 2015). However, the relational and structural components of the model likely operate in concert to produce desired outcomes and it may be important to consider them together. This research could ideally build on the existing discussions of presumed "active ingredients" within CBC (Sheridan et al., 2013) to begin empirically deriving the operative features of the intervention. Once these elements have been determined, investigations can begin to evaluate whether these elements, individually and in

combination, are required, optimal or sufficient to the success of CBC (Sheridan et al., 2013).

Third, this study explored communication among consultants, parents, and teachers within formal CBC meetings. Although previous research on communication in consultation has relied on coding problem-solving meetings (e.g., Erchul et al., 1999), CBC is comprised of both formal and informal collaborative problem-solving interactions. Examining only one set of interactions (i.e., interactions that occur within CBC meetings) may not provide a complete understanding of communication among consultants, parents, and teachers within CBC. Future research focused on identifying effective ways of exploring the quality of interactions between consultants, parents, and teachers across all CBC interactions is necessary.

A similar area of research would explore the accuracy of coding interactional qualities between consultants, parents, and teachers during the Building on Strengths meeting. This meeting is the first in the sequence of CBC meetings (Sheridan & Kratochwill, 2008). Previous research on CBC (Sheridan et al., 2002) and behavioral consultation (Erchul & Schulte, 1990) has relied on coding this initial meeting as characteristic of the entire process. However, both establishing and strengthening relationships between parents and teachers is a core feature of CBC (Sheridan & Krotchwill, 2008) and these relationships often grow and develop over time. The extent to which communication between consultants, parents, and teacher at this initial meeting is an accurate representation of their communication throughout the process is questioned and needs to be empirically verified.

Fifth, consistent with previous research (Sheridan et al., 2012, Sheridan et al., in

submission) the outcome variable in this study was teacher perceptions of the parent-teacher relationship. Teacher reports were selected to capture changes and variations in the quality of the parent-teacher relationship given teachers have the potential to interact with many parents, and are keenly aware of any deviations in the relationship. However, communication among the consultation team may affect parents' perceptions differently than teachers' perceptions. Indeed, it is not uncommon in CBC research (Sheridan et al., 2012) or family-centered intervention research (Bierman et al., 2008) to detect effects based on one reporter (i.e., to detect effects on parent reports of a child outcome and not detect effects for teacher reports of the same outcome). Future research is needed to ascertain the influence of communication during CBC interactions on parent perceptions of their relationship with their child's teacher. Moreover, it may be important to examine the role of communication on different, yet relevant outcomes, including parent, teacher, and student behavior. It may also be beneficial to consider the moderating role of parent, teacher, and consultant perceptions, such as perceived levels of engagement in the consultation process, as well as perceptions of helpfulness among the consultation team.

Sixth, this study relied on extant data from two existing randomized controlled trials. These studies set out to examine the efficacy of CBC on child outcomes. The variables of interest in the study, namely consultants' use of partnership-oriented communication strategies and parents' and teachers' displays of shared interactions, were not manipulated. Indeed, the range for some of these variables was limited. Future research intent on identifying the effects of consultants' use of partnership-oriented communication strategies and parents' and teachers' shared interactions as it occurs across a full continuum is necessary.

Similarly, the data from this study included students, parents, and teachers living in both rural and non-rural communities. Recent research suggests the quality of parent-teacher relationships differ based on community type (i.e., rural and non-rural; Witte, 2015). In addition, rural schools, by nature of being nested within geographically isolated communities, often have fewer students per classroom than non-rural classrooms. As a result, fewer students were recruited in each rural classroom than non-rural classroom, creating imbalanced sample sizes at the teacher/classroom level of the multilevel models. These imbalanced sample sizes can influence power and bias parameter estimates (Kupzyk, 2011). However, retaining separate samples (i.e., data from students in rural classrooms and data from students in non-rural classrooms) would have resulted in insufficient power. Future research could account for the unique effects of geographic setting and address the imbalanced sample sizes by including community type (i.e., rural, urban, town) as a moderator to determine whether the influence of communication on relationships operates differently across these settings.

Finally, the sample used in this study included parents and teachers of children with disruptive behavior concerns and findings are limited to this sample. Although this sample is representative of children that participate in CBC, the importance of a consultants' use of partnership-oriented communication strategies and shared interactions between parents and teachers on the parent-teacher relationship may vary for different target concerns. Future research investigating the effects of a consultants' use of partnership-oriented communication strategies and parents' and teachers' shared interactions for various samples (e.g., academic deficits) is necessary.

Conclusion

The purpose of this study was to examine whether CBC consultants' use of partnership-oriented communication strategies during problem-solving interactions with parents and teachers predicted, and whether consultees' (i.e., parents and teachers) displays of shared interactional qualities strengthened, teacher-reports of the parent-teacher relationship. Descriptive analyses revealed that CBC consultants, on average, used a partnership orientation during their interactions with parents and teachers. Similarly, parents and teachers, on average, displayed a high degree of shared interactions when engaging in collaborative problem solving. Results of multilevel analyses did not support the study hypotheses. Several limitations influence the interpretation of findings. Future research is needed to establish the reliability and validity of measures used in the study and to discern the unique contribution of consultants, parents, and teachers communication by systematically manipulating these variables.

ENDNOTES

¹ The recordings used in the study represent all available recordings for the *Building on Strengths* meeting across both CBC studies. Two-hundred and thirty-four audiorecordings were available for cases meeting inclusionary criteria for the study. Two hundred cases were randomly assigned to inclusion in the study. The remaining 34 cases were used for training purposes.

² Demographic information for consultants is reported separately for both CBC studies because raw data on consultant characteristics were unavailable for the CBC in the Early Grades study. The consultant characteristics presented are based on previously reported demographic information for consultants on the CBC in the Early Grades study (i.e., Sheridan et al., 2012).

³ Comparative fit index (CFI; Bentler, 1990) values $\geq .95$ indicates a good fit and between $\geq .90$ and $\leq .949$ are considered acceptable (Hu & Bentler, 1999). Root mean square error of approximation (RMSEA; Steiger, 1990) values $\leq .05$ are considered good and values $\geq .06$ and $\leq .08$ are considered acceptable (Hu & Bentler, 1999). Standardized Root Mean Square Residual (SRMR) values $\leq .08$ are generally considered good fit. Hu and Bentler (1999) recommends converging evidence between two fit indices in order to conclude good model fit.

⁴ Using teacher perceptions of the parent-teacher relationship also limited the number of necessary statistical tests, therefore decreasing the chance of Type I error.

⁵ Consistent with previous research that relied on coding CBC meetings (Holmes et al., 2013) when discrepancies across scores existed when conducting reliability coding, a discussion among the coding team occurred and consensus was reached. Each meeting

coded for reliability purposes was assigned a primary coder and secondary coder. Data from the primary coder was used in the analyses.

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APPENDIX A: PARTNERSHIP ORIENTATION MEASURE

Scale

1 Totally Ineffective	2 Mostly Ineffective	3 More ineffective than effective	4 More effective than ineffective	5 Mostly Effective	6 Totally Effective
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Item	Definition
Focuses on Strengths	Consultant emphasizes and identifies positive qualities and characteristics of the family, teacher, and child
Teaming and Collaboration	Consultant works jointly with the family and the teacher by identifying strengths, needs, and goals. The consultant incorporates family and teacher input into data collection and plan development. Additionally, the consultant promotes shared and ownership for the student.
Encourages	The consultant responds to the family and the teacher in way that promotes and inspires family and teacher decision-making in the consultation process.
Sensitive and Responsive	The consultant asks questions or makes statements that demonstrate an awareness of the needs, attitudes, and feelings of the family and teacher. The consultant is empathetic and responds positively to the family and teacher.
Effective Facilitation	The consultant utilizes effective communication strategies to guide the consultation process and to promote clear understanding for the consultant, family, and teacher.
Skill Development	The consultant promotes new and existing family and teacher abilities. This can include explaining and/or modeling steps of the problem-solving process as well as describing, training, modeling, and reinforcing specific techniques and interventions.
Resourceful and Shares Information	The consultant locates and communicates additional resources, options, and opportunities available to the family and teacher. The consultant provides information pertinent to the case.

APPENDIX B: INTERACTIONAL SENSE-MAKING RATINGS

Engagement: Degree of involvement and degree of warmth

Involvement Scale

1	2	3	4	5
Uninvolved Indications that parties are bored or not listening	Less animated and interested in the process	Moderate involvement Unbalanced involvement among parties	All parties involved with infrequent occurrences of disinterest	Involved Each person shows interests providing input in the process

Warmth Scale

1	2	3	4	5
Cold Distant and cold interactions. May express negativity.	More distant than warm. One or two instances of laughter, attentiveness, or affection	Neutral Interaction is balanced between warmth, attentiveness and distance	Interaction is mostly warm with some instances of distance	Warmth Interaction is characterized by warm interactions, including laughter and encouragement

Turn-Taking: Degree to which turn-taking is dynamic and evenly distributed

Dynamic Scale

1	2	3	4	5
Structured Highly structured. One person has a turn, followed by the next. Rarely deviate from this process	Participants rarely jump in to add to another's comment	Occasionally interrupt and build dynamically on each other's comments, but tend to also listen politely and wait their turn	Participants may interrupt and build off one another freely, but they ask permission more frequently	Fluid Interact in a fluid, dynamic, and free manner. The interaction is marked by interruptions, overlaps, and energy

Distribution of Turns Scale

1	2	3	4	5
Uneven Distribution One person dominates conversation	Turns are more unevenly than they are evenly distributed	Everyone gets a turn, but there is a sense that one member takes more turns than others	Fairly evenly distributed. One member may dominate, but the others contribute almost equal amounts	Even Distribution Even distribution of who gets to talk

Perspective-Taking: Extent to which participants attend to and confirm one another's perspective

Attentiveness to Others' Perspective Scale

1	2	3	4	5
Ignored Ignore others' perspective	Rarely take each others' perspectives into account	Sometimes acknowledge and sometimes ignore others' perspectives	Sometimes acknowledge and include others' perspective in subsequent comments	Integrated Demonstrate an understanding that others may have different perspective, listens to others' views, and incorporates them

Confirmation of Perspectives Scale

1	2	3	4	5
Disconfirming Consistently disconfirm each other's experiences. Frequent disagreements	Disagree more than agree	Sometimes confirm and sometimes disconfirm	Sometimes confirm, but do not disconfirm	Confirming Others' perspectives are almost always acknowledged and confirmed

Coherence: Degree to which the information provides is organized and integrated

Integration Scale

1	2	3	4	5
Parallel Parallel information is told	Separate information is shared	Balance between adding to others' comments and providing separate input	Build off of each others' comments, integrating information	Collaborative A high degree of jointness in the interaction

APPENDIX C: PARENT-TEACHER RELATIONSHIP SCALE

Scale

1	2	3	4	5
Almost Never	Once in a While	Sometimes	Frequently	Almost Always

Items

1. We trust each other.
2. It is difficult for us to work together.
3. We cooperate with each other.
4. Communication is difficult between us.
5. I respect this parent.
6. This parent respects me.
7. We are sensitive to each other's feelings.
8. We have different views of right and wrong.
9. When there is a problem with the student, this parent is all talk and no action.
10. This parent keeps his or her promises to me.
11. When there is a behavior problem, I have to solve it without getting help from this parent.
12. When things aren't going well, it takes too long to work them out.
13. We understand each other.
14. We see this student differently.
15. We agree about who should do what regarding this student.

16. I expect more from this parent than I get.
17. We have similar expectations of this student.
18. This parent tells me when he or she is pleased.
19. I don't like the way this parent talks to me.
20. I tell this parent when I am pleased.
21. I tell this parent when I am concerned.
22. I tell this parent when I am worried.
23. I ask this parent's opinion about this student's progress.
24. I ask this parent for suggestions.

APPENDIX D: CODEBOOK FOR CODING PARTNERSHIP ORIENTATION MEASURE AND INTERACTIONAL SENSE MAKE RATINGS

Partnership Orientation Measure

Rating Definitions

Rating	Description	Definition	Examples
1	Totally ineffective, it could not have been worse	The consultant was unsuccessful when using the communication strategy. This can include not using a strategy when deemed appropriate in the meeting	Consultant focuses on child, family, and teacher weaknesses and does not identify any positive qualities or characteristics
2	Mostly ineffective, it could have been a little worse	The consultant attempts to use the communication strategy, and it was used appropriately on a couple occasions	Consultant attempts to emphasize strengths of the child, family, and teacher, is successful and they identify one or two strengths, but still emphasizes weaknesses over strengths
3	More ineffective than effective	The consultant attempts to use the communication strategy and it is used appropriately on a few occasions	Consultant is successful in several attempts to identify strengths of the child, family, and teacher and but still emphasizes weaknesses over strengths
4	More effective than ineffective	The consultant attempts to use the communication strategy and it is sometimes used appropriately	Consultant is successful in several attempts to identify strengths of the child, family, and teacher and spends an equal amount of time focusing on strengths and weaknesses
5	Mostly effective, could have been a little better	The consultant attempts to use the communication strategy and did so in a manner that was mostly appropriate	Consultant is successful in several attempts to identify strengths of the child, family, and teacher and spends most of the

time focusing on strengths rather than weaknesses, but there were a few missed opportunities to focus on strengths

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| 6 | Totally effective, it could not have been better | The consultant was consistently successful when using the communication strategy and always used the strategy in a manner that was appropriate for the meeting | Consultant was successful in several attempts to identify strengths of the child, family, and teacher and focuses on and emphasizes strengths rather than weaknesses |
|---|--|--|--|

Partnership Orientation Measure

Item Definitions and Examples

1. *Focuses on Strengths*

Definition: The consultant emphasizes and identifies positive qualities and characteristics of the family, teacher, and child.

Guidelines

1. Consultant views the family, teacher, and child in a positive light.

Examples of Effective Use of Strategy	
Consultant: [Talking about framing target behavior positively] I think we should frame it this way because then we can think of times when she was able to control her emotions and really play up and pull from those times she is successful.	Consultant: [After parent described the different strategies they have been using to help improve their child's compliance] Wow, you have really done a lot to help [child's name] be successful! We have a lot of strategies that we can incorporate and build off during this process.
Examples of Ineffective Use of Strategy	
Parent: I really try to reason with her after she has a tantrum—tell her what she did wrong, so she knows what to do better next time. Consultant: The research doesn't really support that as an effective strategy. <i>[Consultant is critical of the parent]</i>	Teacher: Sometimes the classroom is busy—you know—the kids are doing different things and at different places with their work. Consultant: We are going to need to be really structured during that time if [child's name] is going to be successful. <i>[Consultant is critical of the teacher]</i>

2. Consultant emphasizes family, teacher, and child strengths rather than weaknesses.

Examples of Effective Use of Strategy	
Consultant: I'll start by reminding us of some of the strengths you provided me [parent's name] about [child's name]. [Child's name] is good at math, likes to draw, and that she enjoys listening to music and doing some stuff on the Wii. Consultant: Do you want to share with us some of her strengths at school [directed at teacher]? Teacher: [Child's name] is such a friendly little girl, she's always smiling, she gets along well in the classroom. I would say she does well in math. She does	Consultant: Does she have a hard time during math since math homework can be difficult for her? Teacher: No, not really Consultant: ..Because she likes math Parent: The only time she gets frustrated is if I tell her a way to do the homework that is different than [teacher's name] told her to do. So, then we get mad. That's why we have to set the timer. It would just be a bad situation because she gets really frustrated. Consultant: Sure, I think that's a really

<p>like to draw, you're right. I always see her as being a girly girl.</p> <p>Consultant: So, she's into girly things [group laughs].</p>	<p>good strategy</p> <p>Parent: Then she can do it the same way [teacher's name] told her to do. About the only time have to help her is with story problems. Sometimes I have to check her work because she goes fast.</p> <p>Consultant: Sure, sure. It sounds like she certainly has a strength in math!</p>
Examples of Ineffective Use of Strategy	
<p>Parent: [Talking about child's strengths] Well, he's really independent. But that is mostly a bad thing. It seems to be that way—he has good qualities, but there are always things that get in the way.</p> <p>Consultant: Well, let's now talk about those concerns you have.</p> <p><i>[Consultant could've spent more time talking about child's strengths instead of focusing on child's weaknesses]</i></p>	<p>Teacher: [Talking about function of the behavior] I don't he does it for attention. I do a really good job of ignoring him, so he doesn't really get attention when he shuts down.</p> <p>Consultant: Well you said you talk to him after he misbehaves. That can be reinforcing his meltdowns.</p> <p><i>[Consultant could've also emphasized parents attempts to ignore the behavior rather than just correcting the parent]</i></p>

3. Consultant responds to strengths of the family, teacher, and child.

Examples of Effective Use of Strategy	
<p>Consultant: [Parent just described ignoring a child's tantrum]. I think that is a good strategy. That is something we use for parent's who are getting into verbal altercations with their children and it sounds like you are really trying to avoid arguing that with [child's name] when he is tantruming.</p>	<p>Consultant: [Responding to parent] I think you hit it right on the head! She's getting a lot of nurturing and attention when she has tantrums and you've been trying to ignore [the behavior].</p>
<p>Consultant: [Talking about child's strengths] It sounds like she is a really good helper. That's great information because we can incorporate that into our plan we develop to help her be more successful.</p>	<p>Parent: [Talking about child's target behavior] And I think he doesn't follow my directions because he just doesn't want to do it.</p> <p>Consultant: Oh, you are so good and a really observant of his behavior! You could do my job!</p>
Examples of Ineffective Use of Strategy	
<p>Parent: I'm really trying hard to create some consistency for my kids—to use the same discipline strategies with all of them. You know? So it seems fair.</p> <p>Teacher: That's great.</p> <p>Consultant: Okay.</p>	<p>Teacher: I think I'm really good at helping him identify how he is feeling. I'd to continue that. Can we add something about expressing his feelings to the target defining?</p> <p>Consultant: For now, let's just focus on</p>

<i>[Consultant could've acknowledge parents attempt to create consistency for children]</i>	following directions. <i>[Consultant could've incorporated parent's existing skills and input into the process]</i>
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2. Teaming and Collaboration

Definition: The consultant works jointly with the family and the teacher by identifying strengths, needs, and goals. The consultant incorporates family and teacher input into target behavior definitions, data collection, etc. Additionally, the consultant promotes a shared responsibility and ownership for the student.

Guidelines

1. Consultant fosters identifying priorities in a joint, collaborative fashion.

Examples of Effective Use of Strategy	
<p>Teacher 1: [Meeting with two different teachers] I'm really concerned about him shutting down. If things do not go his way he will shut down which sometimes is just sitting there and sometimes he throws a fit</p> <p>Consultant: [Directed at teacher 2] Do you see the same thing in your classroom?</p> <p>Teacher 2: Yes, we have the same procedures, but some days he will just not do it</p>	<p>Parent: At home, there really isn't a specific time when she has a tantrum. It could start right after school or start at bedtime.</p> <p>Consultant: Well we may need to focus on that afternoon to bedtime. Which I think is fine because our intervention is contingent on seeing the behavior and we don't know when we will see it.</p> <p>Parent: Right</p>
Examples of Ineffective Use of Strategy	
<p>Consultant: [Selects a target behavior] So we will focus on following directions both at home and school.</p> <p>Parent and Teacher: Okay.</p> <p><i>[Consultant does not solicit input from parent and teacher about selecting target behavior]</i></p>	<p>Consultant: [Talking directly to parent] What behavior do you want to work on at school?</p> <p>Parent: Um, I think I'd like him to be able to express his feelings.</p> <p>Consultant: Okay. [Talking directly to teacher] What do you want to work on at school?</p> <p>Teacher: I think staying on-task.</p> <p><i>[Consultant works with parents and teachers in isolation without acknowledging the importance of the group]</i></p>

2. Consultant establishes collaborative networks.

Examples of Effective Use of Strategy	
<p>Consultant: We will all be sharing information today. [Parent name] You can share your experiences with [child's name] at home and [teacher's name] you can share your experiences at school. We will all come together to use that</p>	<p>Consultant: [Talking to teacher about child's strengths] Did you know how helpful [child's name] is at home?</p> <p>Teacher: No, I didn't, but I see that in the classroom. She always wants to help me out.</p>

information to make good decisions for [child's name] so that she can be successful.	Consultant: That's great! It sounds like she has a lot of great and similar strengths across home and school that we can build on during this process.
Examples of Ineffective Use of Strategy	
<p>Teacher: There are some others at the school that frequently work with [child's name]. I think it would be helpful if they were part of these discussions.</p> <p>Consultant: I think we are just going to keep it us [referring to the parent and one teacher]. We don't want too many heads at the table.</p> <p><i>[Consultant could've explored the opportunity to create a network of people to help the child]</i></p>	

3. Consultant emphasizes a team concept.

Examples of Effective Use of Strategy
<p>Consultant: [Referring to different strategies the parent and teacher have tried individually to address a child's behavior] I think we need to find a good combination of all the things you guys have been trying and I think we might just have to put some of those things together and do it in both settings [home and school] because I think you have tried some things that have worked for part of it. So if we can just combine some of the things you are doing, we can see some more success.</p>
Examples of Ineffective Use of Strategy
<p>Consultant: So, we will build on your experiences at home and school with [child's name] to develop individual interventions to put in place at home and school.</p> <p><i>[Consultant could've highlighted the importance of working across home and school and creating consistency for the child]</i></p>

4. Consultant asks the family and teacher to work with them.

Examples of Effective Use of Strategy	
Consultant: What would you guys say are your biggest priorities? Concerns that you have at this point? Teacher: My biggest concern is [child's name] cries, even at the littlest things... Parent: At home she does the same thing. She's very emotional.	Consultant: [Referring to the function of the behavior] Do you think it is because she doesn't get something that she wants? I'm just trying to explore all the options here. Teacher: No, not really because it could be something so small, not big at all.
Examples of Ineffective Use of Strategy	
Consultant: So the function of [child's name] behavior, or why she is doing it, is to get attention from you [talking to parent] and you [teacher's name] and she also gets some attention from her peers and siblings. Parent: I guess that makes sense. Teacher: Yea... <i>[Consultant could've asked for input from the family and teacher about the function of the behavior]</i>	

3. Encourages

Definition: The consultant responds to the family and the teacher in a way that promotes and inspires family and teacher decision-making in the consultation process.

Guidelines

1. Consultant encourages family and teacher to speak up for the child.

Examples of Effective Use of Strategy	
Consultant: Thank you for both for coming together to sit down and talk about [child's name].	Consultant: [During discussion of child's strengths] Is there anything else you want to make sure we know about [child's name]? Anything else you can think of?
Examples of Ineffective Use of Strategy	
<i>[Anytime a consultant does not ask parents and teachers to share their opinions and input about the child]</i>	

2. Consultant encourages family and teacher to make their own decisions.

Examples of Effective Use of Strategy	
<p>Consultant: [Talking about setting an initial goal] I know we all want her to express her emotional appropriately 100% of the time, I don't know if that is maybe the best jump right now. So what do you think would be a realistic goal right now?</p> <p>Parent: I'll go with at least 75% of the time right now. I think she can do it. 100% of the time is probably going a little far.</p> <p>Consultant: How about at school?</p> <p>Teacher: Um, she's at 25% now, so I'll go with 75%</p> <p>Consultant: I think that is a good goal to start with and then we will collect the information and can adjust it up or down.</p>	<p>Consultant: [Defining target behavior] So you've identified a lot of concerns for [child's name]. Since we are focusing on one behavior for now, what do you think would be important for us to work on?</p>
Examples of Ineffective Use of Strategy	
<p>Consultant: It sounds like what we will work on at home and school is controlling her emotions without crying or whining.</p> <p><i>[Anytime the consultant makes a decision on behalf of the group without checking for agreement or asking for input]</i></p>	

3. Consultant encourages family and teacher to use their capabilities and knowledge to get resources.

Examples of Effective Use of Strategy	
<p>Teacher: I was able to identify the cues to her tantrums—the way she looked at me and say, “[child’s name] we’re not going to cry.” That was working for a little bit.</p> <p>Consultant: Well maybe we just need to pair that with something else, like some more skill building and pair it with something where she see the benefits of not crying.</p>	<p>Consultant: [Describes some attention-based intervention plans] Go home and think more about this, things along this line. I think what we talked about [previously had discussed using a checklist with praise as a possible intervention] is a good plan, but come next time with some other ideas. I’ll have some ideas, too.</p>
Examples of Ineffective Use of Strategy	
<p>Parent: [Referring to child’s needs] Part of it is that I think he doesn’t get enough sleep. He has so much trouble sleeping—he tosses and turns and wakes up several times a night and he still wets the bed. He’s 7, I wasn’t doing that at 7. I don’t know if there is someone I can talk to about that?</p> <p>Consultant: I don’t know about resources for that in the area, but I’ll look into it. <i>[Consultant could’ve talked to the parent about existing resources/relationships to use to help find someone to help with sleep problems]</i></p>	

4. Sensitive and Responsive

Definition: The consultant asks questions or makes statements that demonstrate an awareness of the needs, attitudes, and feelings of the family and teacher. The consultant is empathetic and responds positively to the family and teacher.

Guidelines

1. Consultant focuses on family, teacher, and child needs without being critical.

Examples of Effective Use of Strategy	
Parent: [Talking about child's needs] Sometimes I think she is doing it [having tantrums] for attention. I try to ignore it because I've heard if you do that it goes away, but when you have three other kids... Consultant: It's hard	Parent: [Talking about siblings fighting] I can't keep them separated all of the time. Consultant: Well, you have to live. I think we need to teach her that she can't control their behavior, but she can control her response. Teacher: That's good. That makes sense
Consultant: Sounds like you have a lot of valid concerns. Now it is going to be hard to pick one to focus on.	Consultant: I think you both have a really good understanding of [child's names] and strengths and things that we can work. I think we can develop some really good strategies to help her control her emotions.
Examples of Ineffective Use of Strategy	
Parent: And with time-out, I'm trying, but he has figured out that if he goes behind the couch, I can't get to him. Consultant: What is he doing to get in time-out? <i>[Consultant could've acknowledged that implementing time-out can be difficult]</i>	

2. Consultant acknowledges different perspectives.

Examples of Effective Use of Strategy	
Parent: [Talking about child's needs] I think the biggest concern we have at home is following directions without having to nag him to get it done Teacher: At school I don't have to give him a bunch of reminders, but he just has trouble paying attention. Do we have to work on the same behavior in the classroom? Consultant: No, we can target different behaviors at home and school. We just want the behaviors we pick to meaningful for [child's name] and your classroom and at home	Consultant: [Talking about the function of the behavior] It sounds like at school, he isn't following directions because he wants to delay doing his math work Parent: He doesn't get out of work at home...he always has to do his homework. Consultant: Good to know. It could be that there is a different purpose to his behavior at home. Let's explore this a little more. What sort of things are happening after times he doesn't follow directions?

Examples of Ineffective Use of Strategy	
<p>Consultant: [Talking about the function of the behavior] So, he gets a lot of attention when he tantrums. It seems like that happens both at home, with you mom, and at school with you [teacher's name]</p> <p>Teacher: I really try to ignore him...I'm not sure he gets attention from me. Maybe the other kids.</p> <p>Consultant: Well you talk to him after he tantrums and tell him what he did wrong. That's still attention, even if it is not positive.</p> <p><i>[Consultant could've acknowledged that there were different perspectives and explored the function further (even if the consultant's perception was accurate)]</i></p>	

3. Consultant is friendly and supportive of the family and teacher.

Examples of Effective Use of Strategy	
<p>Consultant: [Talking about data collection] If you are comfortable tracking her behavior from 4 to 8...The other thing is, I don't want to overwhelm you if you don't have time to track her behavior for that long.</p> <p>Parent: I think I could. If it happens, I can just make a tally mark. I think it happening at least once a day.</p>	<p>Consultant: [Referring to developing a plan] Again, these have to be strategies that work and fit in your routine. It's important that you are able to use what we talk about and decide on.</p>
Examples of Ineffective Use of Strategy	
<p>Parent: [Talking about data collection] I'm not sure I can check in on his behavior every 5 minutes. I'm doing several things during that time—cooking dinner, checking homework—that kind of stuff.</p> <p>Consultant: Well this works for most people. Give it a try and we will talk about changes if it doesn't work.</p> <p><i>[Consultant could've talked more about ways to make data collection fit within the parent's schedule]</i></p>	

4. Consultant makes changes when family and teacher ask for things.

Examples of Effective Use of Strategy	
<p>Consultant: [Discussing the target behavior definition] We can define this as off-task behavior or we can focus on what we want [child's name] to be doing. What do you guys think?</p> <p>Teacher: I think it makes more sense to define it as on-task. That way we can really emphasize what we want him to do.</p>	
Examples of Ineffective Use of Strategy	
<p>Consultant: [Talking about needs] Sounds like she really likes to be in control and that can disrupt things in the classroom and at home</p> <p>Parent: I actually think that's a strength. She's really independent.</p> <p>Consultant: But it seems to be more of a problem...</p> <p><i>[Consultant could've acknowledge the parent's perception of a child's strength and</i></p>	

acknowledge the overlap between some strengths and difficulties]

5. Consultant checks to make sure family and teacher are happy.

Examples of Effective Use of Strategy	
Consultant: [Talking about defining a target behavior] And what we can do is include following directions without whining and mimicking into our definition like you had suggested earlier. Does that capture what you are thinking?	Consultant: [Talking about data collection] Okay, so we will track the number of directions given at home and school and circle those directions followed. Does that sound good to you?
Examples of Ineffective Use of Strategy	
<i>[Anytime a consultant does not check for agreement regarding decisions made during consultation]</i>	

6. Consultant has a good understanding of family and teacher values and displays an interest in learning even more about the family and teacher.

Examples of Effective Use of Strategy	
Consultant: Any thing else you want to add [when talking about child's strengths]? I mean it sounds like you see a lot of similarities between home and school with things that she likes and does well. That's good. And we can always add to this list as we continue through the process if you think of anything else.	Consultant: [Talking to parent about baseline data collection] If we can get at least three days of data collection that will be great. Don't stress too much about it, because I know your work schedule is tricky.
Examples of Ineffective Use of Strategy	
Teacher: I could go on and on about the strengths [child's name] has! Consultant: Okay, well let's talk about what is getting in the way of [child's name] being successful. <i>[Consultant could've displayed an interest in learning more/understanding the child]</i>	

7. Consultant is honest and sincere; tries to understand concerns; seems warm and caring with family and teacher.

Examples of Effective Use of Strategy	
Teacher: [Talking about when to start data collection] I have a lot going on this week—I mean a lot—with parent-teacher conferences and grades due. I don't think I can start collecting data until next week	Parent: I try to give [child's name] one-on-one attention, but it's hard to get all the kids to cooperate and stay busy when I'm spending time with her. Consultant: Yea, that's hard when you

Consultant: I understand, it is a very busy time for you. Would starting next Monday work?	have a lot of kids.
Examples of Ineffective Use of Strategy	
<p>Teacher: I've got so much to do—with the information needed for this project and all the other stuff I have to do—state tests are coming up...my goodness...it's overwhelming to think about.</p> <p>Consultant: Okay</p> <p><i>[Consultant could've acknowledged CBC is a lot of work or try to understand what the teacher is going through]</i></p>	

5. *Effective Facilitation of Problem-Solving*

Definition: The consultant utilizes effective communication strategies to guide the consultation process and to promote clear understanding for the consultant, family and teacher and. Examples of effective problem-solving facilitation strategies include: asking open-ended questions, eliciting examples, using minimal encouragers, paraphrasing (restating someone's statements to check for accuracy), clarifying (asking someone to explain his or her statement more clearly), reflecting (repeating the message behind a statement).

Guidelines

1. Consultant uses clear communication when telling family and teacher their concerns and suggestions.

Examples of Effective Use of Strategy	
<p>Consultant: So let's talk about [child's name] strengths. What is he good at? What does he like to do?</p> <p>Parent: He's really helpful</p> <p>Teacher: I see that in the classroom too</p> <p>Consultant: What sorts of things does he like to help out with</p> <p>Parent: He loves to fold laundry...</p> <p>Teacher: Yea the other day he started picking up books that other students had left out—I didn't even ask him to do that</p> <p>Consultant: That's awesome, so it sounds like he enjoys cleaning...what a useful skill that will come in handy later on!</p>	<p>Consultant: [Talking about the function of the behavior] So we've talked about what happens before—[child's name] is given a direction—and what happens after---often times it's such a struggle and so frustrating for everyone that he gets out of doing the work. Keeping this in mind, what do we thinking is motivating his difficulty following directions?</p> <p>Parent: I think he just wants to do what he wants to do on his time</p> <p>Consultant: Can you explain what you mean a little more?</p> <p>Parent: Like last night, he threw a fit—whining, arguing—when I asked him to get out his homework. He tried negotiating with me saying that he would do later. If he isn't in the mood to do his homework, there is no way he's going to do it</p> <p>Consultant: It sounds like he really wants to get out, or escape, from doing his homework.</p>
Examples of Ineffective Use of Strategy	
<p>Consultant: [Talking about antecedent events] So what's happening before she meltdowns? Is there anything triggering that behavior?</p> <p>Parent: I don't know...I really don't think there is a precipitating event. It can happen anytime.</p> <p>Consultant: Okay. Does anything trigger that behavior at school?</p> <p><i>[Consultant could've elicited examples for the parent to identify antecedents to the behavior]</i></p>	

2. Consultant checks to make sure family and teacher understood.

Examples of Effective Use of Strategy	
<p>Consultant: [Talking about function of behavior] We decided that he's off-task because he wants to delay doing his math work and his homework—he just doesn't like to do the work...</p> <p>Teacher: Ya, that sounds like [child's name]</p> <p>Consultant: And when we develop our plan in our next meeting we will want to flip that behavior. Maybe let him escape some math, but only when he does the work. We could think about modifying his assignments or giving him some breaks. Does that make sense?</p> <p>Parent: I think—like giving him what he wants when he does the work</p> <p>Consultant: Yep</p>	<p>Consultant: [Talking about data collection] During reading time at school and bedtime at home we are going to tally the number of directions given to [child's name] and then circle the ones that she followed so we can determine what percentage of directions she is following during that time. Does that sound like something you'll be able to do?</p> <p>Parent: I think so...</p> <p>Teacher: Yea</p> <p>Consultant: ...sometimes it is helpful to think what how it will look—like what you will use to make the tallies?</p> <p>Parent: I could just make marks this on this sheet. Ya—I think this will work out.</p> <p>Teacher: I was thinking the same thing</p> <p>Consultant: That's a good idea. So you'll both make tallies on these purple sheets. Other questions about data collection?</p> <p>Parent and Teacher: No</p>
Examples of Ineffective Use of Strategy	
<p>Teacher: Okay, so I'm going to include that one behavior we decided to work on [child's name] behavior sheet—being compliant. Am I remember right? Is that what we decided on?</p> <p>Consultant: Following directions</p> <p><i>[Consultant did not check that the everyone knew what target behavior was decided on]</i></p>	

6. Skill Development

Definition: The consultant promotes new and existing family and teacher abilities. This can include explaining and/or modeling steps in the problem-solving process (e.g. defining a priority need, collecting information) as well as describing, training, modeling, and reinforcing specific techniques and interventions.

Guidelines

1. Consultant promotes family, teacher, and child skill and competencies.

Examples of Effective Use of Strategy	
<p>Parent: [Referring to child having a tantrum] And that's why we started using the timer because I couldn't sit there and keep doing this</p> <p>Consultant: And you said that seems to help a bit, so that's good. It's a strategy we can use later on.</p> <p>Parent: It does</p>	<p>Consultant: And I think you are already doing some good things with her with the checklist. It really gives her something concrete and we will definitely want to incorporate that into our plan. Checklists are like magic for some kids that get easily frustrated.</p>
Examples of Ineffective Use of Strategy	
<p>Parent: We are now using this form of time-out where [child's name] has to complete a chore when he doesn't follow directions</p> <p>Consultant: Oh, okay. Sounds like he likes to help out.</p> <p><i>[Consultant could've acknowledged and praised parent for trying to address the behavior]</i></p>	<p>Teacher: [Child's name] seems to do a lot better when I provide structure. I make sure the lessons are really clear and have him sit right next to me. That's helpful.</p> <p>Consultant: Okay</p> <p><i>[Consultant could've acknowledged and praised the teacher for trying to address the behavior]</i></p>

2. Consultant helps family and teacher learn skills to get resources to meet their needs.

Examples of Effective Use of Strategy	
<p>Consultant: These are our goal sheets [provides parent and teacher goal sheets]. We will use these in every meeting as our road map throughout the process</p>	<p>Consultant: We will play the stranger test. Do you think if we told someone who was observing [child's name] behavior that we want to [child's name] to verbalizes her feelings to adults and peers without crying that would be able to identify when she is doing that?</p> <p>Parent and Teacher: Yes, um-hmm</p>
<p>Teacher: [Talking to parent] I'll send home a sheet each day that explains how he is doing with the target behavior that we have decided to work on.</p> <p>Consultant: Let's talk about how we will collect some information on [child's name] behavior. I think that will help with the sheet you are sending home.</p>	

Examples of Ineffective Use of Strategy

Parent: I just think he doesn't have a positive male role model in his life. I think that has a lot to do with it. I don't know if he could get some sort of mentor....

Consultant: I don't know either

[Consultant could've explored these options with the family]

3. Consultant helps develop family, teacher, and child abilities.

Examples of Effective Use of Strategy

Consultant: We will focus a good portion of our meeting today really defining a behavior. That will be helpful because through this process we will also collect some information before [we develop and put in place a plan] to get a good picture of what is going on and after to determine if we see desired success.

Consultant: [During discussion defining target behavior] I know this is a little silly because we all know what crying is, but we want to really define it so we have a clear picture of what it is when we go to collect some information on it. We know what we are looking for—when it is happening, when it is not. This will be helpful for us, but it will also be helpful for [child's name] because when we go to put a plan in place she will know exactly what we want her to do and what we do not want to her do.

Consultant: [Talking about selecting a target behavior] When are picking just one behavior to work on, we can consider picking a behavior that he likely to experience some success with, or that would make the classroom or house function better, or a behavior that might trickle down and capture some other behaviors you are having difficulty with

Consultant: [Talking about the function of the behavior] Okay let's talk about what we thinking is motivating this behavior or why it is happening. We'll talk about what's happening before, during, and after [child's name] has a tantrum to help us develop a hypothesis for why it is happening. The reason we do this is because this will be critical to the plan we develop in our next meeting. For example, if we decide that she is tantruming because when she does she gets attention from you guys or peers or siblings then we will want to figure out a way to give her attention, but when she is not tantruming.

Consultant: [Talking about data collection] Like I said earlier, we will want to collect some information before we put a plan in place so that we can compare his behavior now with his behavior after we put the plan in place. To see if it is working. But we also want to use this time to really observe him when he isn't following directions. To see if what he hypothesized—attention is

Consultant: [Child's name] has a lot of wonderful strengths! It's great to share these because we will keep them in mind when developing our plans. We with build in those things that she likes and that she is good at.

motivating his behavior—is consistent with what we are seeing. We will talk about that in our next meeting.	
Examples of Ineffective Use of Strategy	
<p>Consultant: Okay, sounds like you have a lot of concerns for [child's name]. I'm going to ask you now to pick just one behavior to work on for me.</p> <p>Parent: Oh, we are just picking one behavior?</p> <p>Consultant: Yes</p> <p><i>[Consultant could've explained why picking one behavior to work on is important]</i></p>	

7. Resourceful and Shares Information

Definition: The consultant locates and communicates additional resources, options, and opportunities available to the family and teacher. The consultant provides information pertinent to the case (e.g., rating scales, observation data, and developmental information).

Guidelines

1. Consultant provides many choices to family and teacher.

Examples of Effective Use of Strategy
<p>Consultant: [Discussing defining a target behavior] Okay, so it sounds like we want to address her off-task behavior. There is a couple different ways we can think about defining that. We're going to want to define it really clearly and concretely so that we all know what that looks like for [child's name]. We can define it as off-task—kind of what we are talking about now—or we can define it in terms of what we want to see her doing. Or in terms of being on-task. It's really up to you, what you think it going to be most meaningful for [child's name].</p> <p>Parent: I think it makes sense to do on-task. That way she knows what we want to see her doing rather than just what we don't want her doing. I think that will be helpful in the classroom and at home.</p> <p>Teacher: I agree</p>
Examples of Ineffective Use of Strategy
<p>Consultant: [Talking about data collection] To collect information on following directions, the easiest way to do it is to tally the number of directions you give him and then circle the directions that he follows. [Teacher's name] you'll do this during centers and [parent's name] you'll do this during dinner time.</p> <p><i>[Consultant could've provided some different options or discussed how to collect data on following directions rather than telling the parent and teacher what to do]</i></p>

2. Consultant provides information about the resources and options that are available to family and teacher.

Examples of Effective Use of Strategy
<p>Parent: [Referring to the function of target behavior] I think she does it for attention. It doesn't have to be good attention.</p> <p>Consultant: That is certainly something that maintains a behavior. Some kids don't care if it is good or bad attention. Some attention is better than nothing, especially because your other kids are younger and require more attention</p>
Examples of Ineffective Use of Strategy
<p>Teacher: [Setting a behavioral goal for child] Oh, following directions 100% of the time is not even a possibility!</p> <p>Consultant: Okay.</p> <p><i>[Consultant could've provided information about the developmental appropriateness of setting goals]</i></p>

3. Consultant provides useful suggestions.

Examples of Effective Use of Strategy	
Consultant: [Referring to child's target behavior] I think this is one of those behaviors that is tricky because we don't really know what is triggering it. So, I think as we collect information on it, paying attention to what is happening and triggering her to cry will be helpful.	
Examples of Ineffective Use of Strategy	
Teacher: [Talking about data collection] It seems like a lot of work to check in on her every few minutes. I'm scared I won't be able to do that with everything else going on in the classroom. Consultant: Okay, try it out. <i>[Consultant could've provided suggestions on how to make data collection easier (e.g., using a timer)]</i>	

4. Consultant helps family and teacher find solutions to problems.

Examples of Effective Use of Strategy	
Parent: [Talking about target behavior definition]. I think if we define it [tantrums] that way we will also get at the frustration. That is a big thing for her. Consultant: Well maybe at home, we also need to think about focusing on following directions without arguing or getting frustrating.	Consultant: [Referring to plan] Maybe we just take all the things she needs to do when she gets home on a checklist and put each one on a timer because then you don't even have the interaction to her. If she does it without getting upset, she gets that attention from you. Parent: Like a reward system? Yea, if she can do that then I'll put a sticker on the chart and if she gets so many stickers she gets a bigger treat.
Parent: I just think he has ADHD. I don't know—is this process going to help determine that. What do you think [directed to consultant]? Consultant: Well, we won't give him an ADHD diagnosis through this process, but what we can do is work on those ADHD-like behaviors that are causing him difficulty so we can help him be successful at home and school. Parent: Okay Consultant: If you are really interested in an evaluation for ADHD you and I can talk more about that after the meeting.	
Examples of Ineffective Use of Strategy	
Parent: He's an only child. Sometimes I feel bad about that—like he could really use an older sibling to help show him the ropes. I've thought about putting him in one of those big brother/big sister type programs. I'm just not sure...I don't even know if they have those around here. Well, you're the expert [talking to consultant]. Do you know? Consultant: I'm not sure. But let's talk more about which behavior we want to focus on during this process. <i>[Consultant could've talked more or helped the parents find the resources they were looking for]</i>	

Interactional Sense Making Rating Scale

Item Definitions and Ratings

Engagement

1. ***Involvement:*** refers to liveliness of the meeting or the degree to which parents and teachers express interest in participating and engaging in the meeting.

<i>Uninvolved</i>				<i>Involved</i>
1	2	3	4	5
Parents and teachers do not seem interested in the meeting. There is little to no liveliness; participating in the meeting seems like a chore.	Parents and teachers are less animated and interested in the meeting. They less frequently engage in involvement behaviors during the meeting. One participant might be involved while the other is quite uninvolved.	There is either a balance between involvement and uninvolved or moderate involvement throughout. Parents and teachers are at times verbally engaged in the meeting and at time seems to “tune out” from involvement. Or, one participant is highly involved in the meeting and the other participant(s) are sometimes involved and sometimes uninvolved.	Both parents and teachers are animated and engaged for most of the meeting, with infrequent occurrences of “tuning out” at certain points in the meeting. Or one participant is highly involved throughout and the other participant(s) are involved during parts of the meeting and not involved at other times.	Both parents and teachers are verbally engaged in the meeting. Each person shows interest in talking during the meeting. Parents and teachers are animated, interested.

Verbal Indicator	Meeting Content	Examples
Vocal animation	Indications of: <ul style="list-style-type: none"> Excitement Interest (e.g., asking clarifying questions) Engagement <i>As opposed to little liveliness during the meeting</i>	Teacher: I have high hopes for this process Parent: Me too! Me too!
Use of minimal encouragers	Use of: <ul style="list-style-type: none"> Uh-uh, um-hm, yea, etc. Right, sure <i>As opposed to situations where meeting participants do not talk to each other</i>	Teacher: [Talking about strengths] That’s a plus for him, all the kids like him! Parent: Um-hm, yea
Verbal contributions to the meeting	Contributing useful information together about: <ul style="list-style-type: none"> Child’s, family, or classroom environment, strengths and needs Target behavior definition 	Consultant: [Discussing selecting and defining a target behavior] Is it like a defiance thing when it comes to following a direction or is it he is faced with something

	<p>and goals</p> <ul style="list-style-type: none"> • Function of behavior and data collection procedures • Intervention ideas • Adding to other parties contributions <p><i>As opposed to participation where participants do not contribute to the meeting or what the other party is saying</i></p>	<p>frustrating and he shuts down?</p> <p>Parent: I think it's a little of both...</p> <p>Teacher: I'm not sure...</p> <p>Parent: Yea</p> <p>Teacher: I'm not sure...nothing follows patterns it seems to me for the most part</p>
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2. **Warmth:** refers to the degree to which the interaction is characterized by warmth, affection, and positive affect versus coldness, distance, and dissociation from each other and/or negative affect.

<i>Cold</i>				<i>Warm</i>
1	2	3	4	5
Parents and teachers appear distant and cold. There is very little warmth and encouragement. Parents and teachers do not appear associated with one another. May express negativity.	Parents and teachers are more distant than they are warm. There may be one or two instances of laughter, attentiveness, or encouragement, but, in general, the interaction is distant. Expressions of negative affect are also possible.	The meeting is balanced between warm attentiveness and distance or neither is warm nor cold, but relatively neutral.	Parents and teachers are mostly warm with some instances of participants disassociating themselves from the interaction and/or the meeting is often, but not always characterized by warmth and encouragement.	Parent and teacher interactions are characterized by warm interactions including laughter, attentiveness, and encouragement.

Verbal Indicator	Meeting Content	Examples/Non-Examples
Verbal affirmations	<p>Statements of:</p> <ul style="list-style-type: none"> • Encouragement • Affection • Positive humor • Approval <p><i>As opposed to statements of negativity toward each other</i></p>	<p>Parent: <i>[Talking about intervention ideas]</i> Right now, we use daddy dates! She really likes earning those.</p> <p>Teacher: Oh, daddy dates! You are so good. That's a great idea, I'm going to have to steal that.</p> <p>Teacher: We use a 5-second warning. All students get 5-seconds to get started and I count down for them.</p> <p>Parent: Oh, that's a great idea. Since he likes structure, I bet that helps him.</p> <p>Teacher: Yep, he will goof off for 5 seconds, but then get started on his work.</p> <p>[Non-Example] Consultant: <i>[Discussing child's needs]</i> We are going to talk about what is getting in the way of her being successful at school...</p> <p>Parent: ...She doesn't like this school. She says [teacher's name] is mean to her and I'm not the only person she has told that to.</p>
Attentiveness	<p>Expressions of:</p> <ul style="list-style-type: none"> • Attentiveness to the other's 	Teacher: If I can just get him to not scream, yell, and cry.

	<p>contributions</p> <ul style="list-style-type: none"> • Positive feelings/affect about each other and the interaction <p><i>As opposed to interactions that are distant and cold where meeting participants do not associate with one another</i></p>	<p>He doesn't have to do the work, just not scream.</p> <p>Parent: Yea, Yea,,,I would rather he do it. I would rather him do it! [Laughs]</p> <p>Teacher: [Laughs] And I think that's the next step. Chances are if we can get him to not do that, he will do the work.</p> <p>Parent: If he can communicate with us calmly</p>
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Turn Taking

3. **Dynamic:** refers to the degree to which parents and teachers' turn-taking or shifts in speech are segmented and compartmentalized versus mixed, free-flowing, and dynamic.

<i>Structured</i>				<i>Fluid</i>
1	2	3	4	5
Turn-taking is extremely structured. The meeting is characterized by one person talking, followed by the next person. Each person has a turn and they rarely deviate from that format.	Parents and teachers rarely jump in to add to another's comments. Aside from a few additional or interruptions, parents and teachers wait their turn to talk.	Parents and teachers occasionally interrupt each other and build dynamically upon each other's comments, but they tend to listen politely and wait their turn to talk. Or part of the meeting maybe characterized by one participant talking and the other half is marked by interruptions, overlaps, and energy.	The interaction is fluid and flowing, but somewhat more reserved. Parents and teachers may still interrupt and build off one another freely, but they ask more frequently (e.g., "I just have something to add here").	Parents and teachers interact in a fluid, dynamic, and free manner. The interaction is marked by interruptions, overlaps, and energy. Little attention is paid to structured/polite turn-taking. Parents and teachers add without asking.

Verbal Indicator	Meeting Content	Examples
Additions to other's contributions	<p>Includes:</p> <ul style="list-style-type: none"> • Interruptions • Interjections • Elaborations <p><i>As opposed to structured turn-taking where turns are distinct and separate or explicit turn-taking behaviors such as, "And what would you like to add?"</i></p>	<p>Parent: <i>[Discussing the function of the child's behavior]</i> And I think that's the PTSD. He wants to be heard and to feel wanted—to get that attention...</p> <p>Teacher: That makes sense</p> <p>Parent: <i>[Defining target behavior]</i> I guess tantrums would kinda cover it all because...</p> <p>Teacher: I'm good with tantrums</p> <p>Parent: ...whining, arguing—they are all part of a tantrum</p> <p>Teacher: <i>[Discussing patterns in child's behavior]</i> And I was thinking maybe it's certain days...</p> <p>Parent: Yea, because some people were thinking maybe it's after therapy days</p> <p>Teacher: ..Yea</p>

4. ***Distribution of Turns:*** refers to the degree to the parent and the teacher both takes and is allowed to take turns during the meeting. This interactional quality focuses on the balance of talking across the meeting.

<i>Uneven</i>				<i>Even</i>
1	2	3	4	5
One participant dominates the meeting, with the other taking very few to no turns.	One participant has more room to talk than the other. Turns are more unevenly than evenly distributed.	Every person gets a turn, but there is a sense that one person takes more turns than the other. There is some uneven distribution.	The meeting is fairly evenly distributed across parents and teachers. The parent or teacher may dominate, but the other(s) contribute a fair/almost equal amount.	Parents and teachers contribute equally in the meeting. There is an even distribution of who gets to talk; how many turns each person takes.

Indicator	Meeting Content
Talk time	<p>Includes:</p> <ul style="list-style-type: none"> • Even distribution of who gets to talk • Even distribution of how many turns each person takes <p><i>As opposed to one participant dominating the talk time and the other participant taking few or no turns</i></p>

Perspective-Taking

5. **Attentiveness to Others' Perspectives:** the degree to which parents and teachers acknowledge each other's views and perspectives and combine and integrate them into their contributions.

<i>Ignored</i>				<i>Integrated</i>
1	2	3	4	5
Parents and teachers seem to ignore the perspectives of the other. There is a sense that the meeting experience is separate and distinct for each participant.	Parents and teachers rarely take each other's perspectives into account. They may occasionally verbally acknowledge the other persons' comments, but generally do not integrate these comments into their own and do not explicitly seek out others' perspectives. May be that one participant engages in moderate perspective-taking and one ignores others' perspectives.	Parents and teachers sometimes acknowledge the other person has a different experience/something to add and do not incorporate this perspective into their subsequent comments. There is a balance in perspective taking. It may be that one person consistently acknowledges others' perspectives, but the other participant does so minimally. Parents and teachers acknowledge others' perspectives, but do not integrate them into their own comments.	Parents and teachers sometimes acknowledge each other's perspectives and include them in their subsequent comments and/or one participant is particularly attentive to others' perspectives throughout the meeting.	During the meeting, parents and teachers demonstrate an understanding that others may have a different perspective, listen to others' views and incorporate others' perspectives into the meeting (acknowledge others' comments and make it part of their subsequent comments).

Verbal Indicator	Meeting Content	Examples
Acknowledging others' perspectives	Includes: <ul style="list-style-type: none"> Asking others about their perspectives explicitly Statements that indicate others may have seen things differently <p><i>As opposed to ignoring other's perspectives or differences in perspectives</i></p>	<p>Parent: And at home, it is "may I, please." Because, sure, you can...</p> <p>Teacher: And I need to be way better about that</p> <p>Parent: Oh, it's a mom thing</p> <p>Teacher: I should make him do that. I should...</p> <p>Parent: [Discussing interventions that they have tried] And we try to give him that one-on-one attention, but I have other kids. Now, I have a baby</p> <p>Teacher: [Parent's name] You have your hands full and you had your hands full before the baby was born. I give you a ton a credit!</p>
Integrating others'	Expressions that:	Parent: [Talking about child's

perspectives	<ul style="list-style-type: none"> • Include other's perspectives in one's own contributions. <p><i>As opposed interactions that indicate that each person's experience is distinct from the other's experience</i></p>	<p><i>problem behavior</i>] I would prefer him to be bad at home</p> <p>Teacher: And that's not just a [child's name] trait. All kindergarteners are pretty much like that—change is hard. If I'm gone and I come back, they will say, "she [talking about having a substitute teacher] didn't do that right."</p>
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6. **Confirmation of Perspectives:** refers to the degree to which parents and teachers are confirming of the experience/perspective of the other and respond positively to their contributions.

Disconfirming				Confirming
1	2	3	4	5
Parents and teachers consistently discredit each other's experiences. They continually disagree with the other person's comments. Disagreements are frequent and potentially negative.	Parents and teachers tend to disagree with each other's perspectives more than agree. There is more of a disconfirming tone in response to others' contributions than confirming comments. More disagreement.	Parents and teachers sometimes confirm and sometimes disconfirm (e.g., "that's not what happens") each other's perspectives or they are neither particularly confirming nor particularly disconfirming, but relatively neutral.	Parents and teachers confirm each other's perspectives some of the time and do not engage in any disconfirming.	Others' perspectives are always or almost always acknowledge and confirmed (e.g., "Oh, that's a good point"; "Yes, I can see where you would feel that way")

Verbal Indicator	Meeting Content	Examples/Non-Examples
Statements affirming the validity of others' experiences	<p>Includes:</p> <ul style="list-style-type: none"> Agreement with another's perspective (e.g., that's a good point) Agreement with the description of people's own experiences (e.g., "I can see where you would feel that way") <p><i>As opposed to discrediting other's experiences and disagreeing with another's comments</i></p>	<p>Parent: <i>[Discussing a bad day the child recently had]</i> That's horrible!</p> <p>Teacher: But that's the extreme. That was an extreme day!</p> <p>Parent: Yea, that's extreme!</p> <p>Teacher: <i>[Discussing interventions that they have tried]</i> So, it works when I take away his snack!</p> <p>Parent: Oh yea, you don't mess with this kid's food!</p> <p>[Non-Example] Parent: The other day she came home from school and was crying. I asked her what was wrong and she said that she raised her hand to ask for help and all the other kids made fun of her.</p> <p>Teacher: That's not happening.</p> <p>Parent: An 8-year-old is not going to come home and say something that didn't happen.</p> <p>Teacher: I tell you, that's not happening.</p>

Coherence

7. **Integration:** refers to the degree to which parents and teachers contributions hang together and make sense.

<i>Parallel</i>				<i>Collaborative</i>
1	2	3	4	5
Parents and teachers contribute in a parallel manner with little to no integration. Their contributions seem separate and don't hang together at all.	Parents and teachers generally contribute different and individual comments with rare additions from the other participants. Parents and teachers occasionally add onto one another's' comments, but it is rare.	Parents and teachers balance between adding to each other's contributions and contributing individual comments. Parents and teachers sometimes collaborate and sometimes provide parallel comments. Overall, their communication is moderately coherent with parts that fit together well and other parts that do not.	Parents and teachers often build on each other's comments, integrating their contributions, although occasionally one member participates more without much collaboration from the other. With some exceptions, parents and teachers contributions fit together.	Parents and teachers consistently add on to each other's comments. The various contributions "hang together"; a high degree of "jointness" in the meeting.

Verbal Indicator	Meeting Content	Examples
Contributions that are cohesive and coherent	<p>Includes:</p> <ul style="list-style-type: none"> • Adding on to each other's contributions • Contributions are integrated and "hang together" <p><i>As opposed to parallel, separate contributions that do not "hang together"</i></p>	<p>Parent: <i>[Discussing child's strengths]</i> He's very helpful at home. He loves to do dishes, help with the laundry, and feed his little sister.</p> <p>Teacher: It's similar at school. He is always asking to help me pass out papers and take things to the office.</p>