

## Conjoint Behavioral Consultation: An Emerging and Effective Model for Developing Home-School Partnerships

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### Abstract

Conjoint Behavioral Consultation (CBC) is discussed as an emerging and effective model of home-school collaboration and shared problem solving. A case study is presented to demonstrate how practitioners can use CBC to deliver high quality consultation and intervention services to students, teachers, and parents in a real world setting. An evidence-based intervention (EBI) was implemented in the context of CBC to enhance the on-task and compliant behavior of a student referred for consultation. Results indicated a significant increase in teacher ratings of behavioral control (on-task and compliant behavior) following consultation. Positive treatment effects were maintained at a 4-week follow-up. Norm referenced measures produced statistically reliable and clinically meaningful changes in teacher perception of externalizing problem behavior. Consultees validated CBC as an acceptable and effective model of service delivery across home and school contexts. Limitations, future research, and implications for evidence-based practice are discussed.

*Keywords:* behavioral consultation, ecological-systems theory, home-school partnerships, self-management.

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The role of consultation in clinical and educational practice has expanded significantly over the past two decades. Consultation has become an important component in the shift from traditional assessment-driven structures to an ecological and problem solving paradigm of practice (Kratochwill & Stoiber, 2000; Sheridan & Gutkin, 2000). Research has established a preference for *behavioral consultation* (BC; Kratochwill & Bergan, 1990) among consumers and practitioners of psychological services, as well as the efficacy of this approach when compared to other consultation models (e.g., mental health, instructional, organizational). Reviews, meta-analyses, and case studies (e.g., Bramlett & Murphy, 1998; Kratochwill, Elliott, & Busse, 1995; McLeod, Jones, Sommers, & Havey, 2001; Medway & Updyke, 1985; Sheridan, Welch, & Orme, 1996; Wilkinson, 1997, 2003) have consistently documented the effectiveness of behavioral consultation as a vehicle for delivering interventions to students with a wide variety of learning and behavioral problems. The model is considered a powerful tool in remediating children's learning and behavioral problems and for delivering preventive interventions in general education settings.

### Family-School Mesosystem

The empirical support for developing home-school relationships is quite strong. The benefits of parental involvement in the educational process are unequivocal (Sheridan and Gutkin, 2000). Two decades of research clearly indicate that students benefit when families are involved in collaborative relationships with educators and that a strong home-school partnership maximizes the potential for children's success in the classroom (Christenson, 1990). Active parent participation is related to positive student outcomes such as increased student achievement and less discipline problems in the school and at home (Christenson, 1995; Christenson, Rounds, & Franklin, 1992). Moreover, positive interactions between parents and school personnel based on a common interest enhance the likelihood that behavioral interventions will be effective (Clark & Fiedler, 2003). Gains in student performance are greatest when interventions focus on the reciprocal relationship between home and school rather than focusing only on the classroom or home environment (Christenson & Sheridan, 2001).

## Conjoint Behavioral Consultation

Despite the support for collaborative home-school efforts, few structured models of parent consultation are available. For example, traditional behavioral consultation involves the psychologist as consultant and teacher as consultee. The model does not typically include parents or caregivers in the behavior change process, thus omitting a valuable resource and opportunity to improve treatment generalization. Yet, the validation and use of systematic and empirically documented models of parent-teacher consultation are especially important for children whose disruptive behavior extends across home and school settings, as these problems have far reaching implications for children's future adjustment. Conjoint rather than parallel consultation is necessary in order to provide the structure and support for teachers and parents to address the behavioral needs of children at home and in the classroom (Sheridan, Kratochwill, & Bergan, 1996).

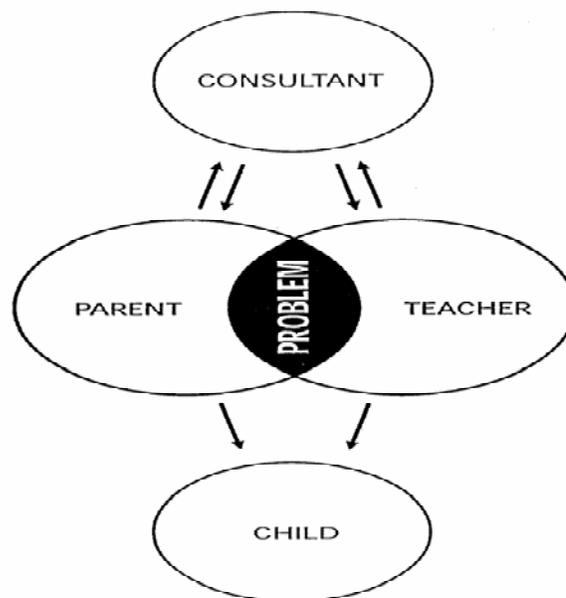
### *Theoretical Framework*

CBC is an emerging model of consultation that provides a solution-oriented focus in which educators and parents are linked in a collaborative problem-solving process to address the academic, social, or behavioral needs of a student for whom all parties assume some responsibility (Sheridan & Kratochwill, 1992; Sheridan et al., 1996). CBC incorporates the problem-solving stages and objectives of traditional behavioral consultation (problem identification, problem analysis, treatment implementation, treatment evaluation) and conceptually extends the model by focusing on the interacting systems in a child's life (home and school). Parents and teachers work cooperatively to identify and operationally define a problem, analyze behavioral data and develop a treatment plan, implement an intervention across settings, and conjointly evaluate the success of the treatment.

CBC is based on an integration of ecological-systems and behavior theory (Sheridan et al., 1996). The model is grounded on the assumption that behaviors are learned as a function of their interaction with the environment. The problem-solving process is guided by an examination of antecedent, situation, and consequent conditions in an effort to generate evidence-based interventions. However, unlike behavioral consultation in which a problem is analyzed molecularly, CBC considers the broader context in which behavior occurs (Sheridan et al., 1996). This conceptual framework recognizes the importance of the interrelations and linkages among a child's primary environments and the reciprocal influences of the home-school mesosystem on a child's behavior and learning (Bronfenbrenner, 1992; Sheridan, 1997). The child is considered a part of a system or network of systems. These systems overlap, and what occurs in one system affects the child's behavior in the other system. Moreover, problems do not reside exclusively within the child, or solely within his or her environments. Behavior is considered a function of the interaction of the system components in a child's life. CBC's theoretical perspective assumes that (a) change agents focus on observable behavior and not the underlying causes of behavior, (b) intervention strategies are based on learning principles, (c) interconnections between systems (home and school) in a child's life have a significant impact on behavior, and (d) problem resolution is shared between these systems (Sheridan, 1997; Sheridan et al., 1996). Thus, CBC combines the conceptual advantages of ecological-systems theory and the empirically validated structured approach of behavioral consultation to provide a potentially powerful model for intervention.

### *CBC Process*

CBC engages the parent and teacher in a collaborative problem-solving process with the assistance of a consultant, wherein the interconnections between home and school systems are considered critically important. Figure 1 depicts the interactive process in which the consultant joins the parent and teacher in a cooperative partnership with shared ownership of the problem. This process assumes that collaborative problem solving among all parties will afford the greatest benefits. Each person is recognized as possessing important knowledge and skills. Parents and teachers share information, value each another's input and incorporate their insights into intervention plans. Pooling resources, developing a clearer conceptualization of problems, and increasing the range of possible solutions are among the primary objectives of the CBC problem-solving process (Sheridan et al., 1996). A detailed description of CBC's process and outcome goals can be found in Sheridan et al., 1996.



*CBC research*

**Figure 1. Model of Conjoint Consultation**

The extant research on CBC is promising and suggests that the model can be an effective strategy for delivering evidenced-based interventions (EBIs) to students with diverse problems such as social skills deficits, attention-deficit/hyperactivity disorder (ADHD), academic underachievement, and disruptive behavior disorders (Colton & Sheridan, 1998; Galloway & Sheridan, 1994; Sheridan, Eagle, Cowan, & Mickelson, 2001; Sheridan, Kratochwill, & Elliott, 1990; Weiner, Sheridan, & Jenson, 1998; Wilkinson, 2005a). Research also suggests that empirically supported treatments delivered via the CBC model result in greater behavior change than interventions implemented solely by teachers or parents (e.g., Galloway & Sheridan, 1994; Sheridan et al., 1990). Likewise, survey research indicates that CBC is more acceptable to parents, teachers, and school psychologists than parent-only or teacher-only consultation for implementing interventions for students with academic, behavior, and social/emotional problems (Freer & Watson, 1999; Sheridan & Steck, 1995).

Case Study Example

A case study example is presented here to demonstrate how practitioners can apply CBC and partner with parents and educators to address the learning and behavioral needs of children in a real world context. Application of the CBC model was informed by the strong empirical foundation for parent involvement and applied research indicating the importance of the family-school mesosystem when intervening with children's problems. CBC was used to structure and deliver positive behavioral support for a student referred for consultation. An evidence-based intervention (EBI) consisting of self-management, goal setting, and contingency reinforcement across settings was delivered via the consultation process to address the student's off-task and noncompliant behavior. Ratings of classroom behavior and an empirically based measure of externalizing problem behavior served as primary outcome measures. Assessment of social validity included teacher and parent subjective ratings of CBC's acceptability and effectiveness.

### *Participants*

Participant selection for this case vignette was based on teacher concerns and perceptions of classroom behavior. The primary reason for student referral was disruptive behavior that interfered with ability to complete tasks and comply with classroom rules. Selection criteria included (a) teacher referral, (b) verified disruptive behavior disorder through the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV TR*; American Psychiatric Association, 2000) classification system, (c) general education placement, (d) informed written consent, and (e) a clinically significant rating on the broad based Externalizing scale of the Child Behavior Checklist - Teacher's Report Form (CBCL-TRF; Achenbach & Rescorla, 2001).

### *Mark.*

Mark was an 11-year old fifth grade student identified with attention-deficit/hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) who fully included in his general education classroom with 27 classmates. He demonstrated chronic behavioral control problems characterized by significant impulsivity and noncompliance across settings. Parent and teacher reported high levels of attention problems, poor peer relationships, and oppositional behavior that interfered with learning and adjustment. Teacher ratings indicated that he was behaving and learning much less than same age peers and had marked difficulty regulating emotional and behavioral responses. Mark's cognitive and academic skills were considered to be within normal limits according to norm-referenced measures. TRF syndrome (Social Problems, Attention Problems, and Aggressive Behavior) and broad-based externalizing scale scores were elevated and indicated significantly more behavior problems than typically reported by teachers of students of a comparable age and gender. Teacher endorsements included: *Argues a lot; Impulsive, acts without thinking; Not liked by other students; Can't sit still, restless; Disturbs other students; and Fails to carry out assigned tasks.* Mark's mother and teacher, an educator with 17 years of classroom experience, served as joint consultees.

### *Consultation Phases*

The consultant and consultees participated jointly in 3 structured interviews: a conjoint problem identification interview (CPII), conjoint problem analysis interview (CPAI), and conjoint treatment evaluation interview (CTEI). The consultant incorporated a conjoint treatment monitoring interview (CTMI) as part of the CBC process to enhance fidelity to the intervention plan (treatment integrity). All interviews were conducted in the school's conference room at mutually convenient times and ranged from 60 to 90 minutes in length. The consultation phases were completed over a 6-week time period.

*Problem Identification Interview.* A conjoint problem identification interview (CPPI) were conducted with consultees to (a) establish rapport and a climate of shared responsibility, (b) share information about the goals of CBC, (c) establish agreement about roles and responsibilities, (d) operationally define target behaviors, and (e) discuss data collection procedures. Consistent with CBC, the consultation team reviewed the referral information and reached a consensus regarding the nature of the problem and the desired outcomes of consultation. The consultation team identified off-task behavior and noncompliance with teacher requests/classroom rules as the primary targets for classroom intervention. Off-task behavior was operationally defined as behaviors where the student, after initiating the appropriate task-relevant behavior, attends to stimuli other than the assigned work. Noncompliance was defined as failure on the part of the student to initiate appropriate behavior in response to an adult request or classroom rule. These target behaviors were considered appropriate as they were rated as the most problematic across school and home settings.

An observational ratings recording method was selected as the most convenient and efficient method of documenting Mark's challenging classroom behavior. Ratings recording provide a solution to the dilemma of balancing the need for an accurate measure of behavior with the demands of time, resources, and expertise available to the classroom teacher. This method has been shown to be an accurate, reliable, and efficient strategy for assessing the more global aspects of problem behavior in authentic classroom settings (Abidin & Robinson, 2002; Sattler, 2002; Steege, Davin, & Hathaway, 2001).

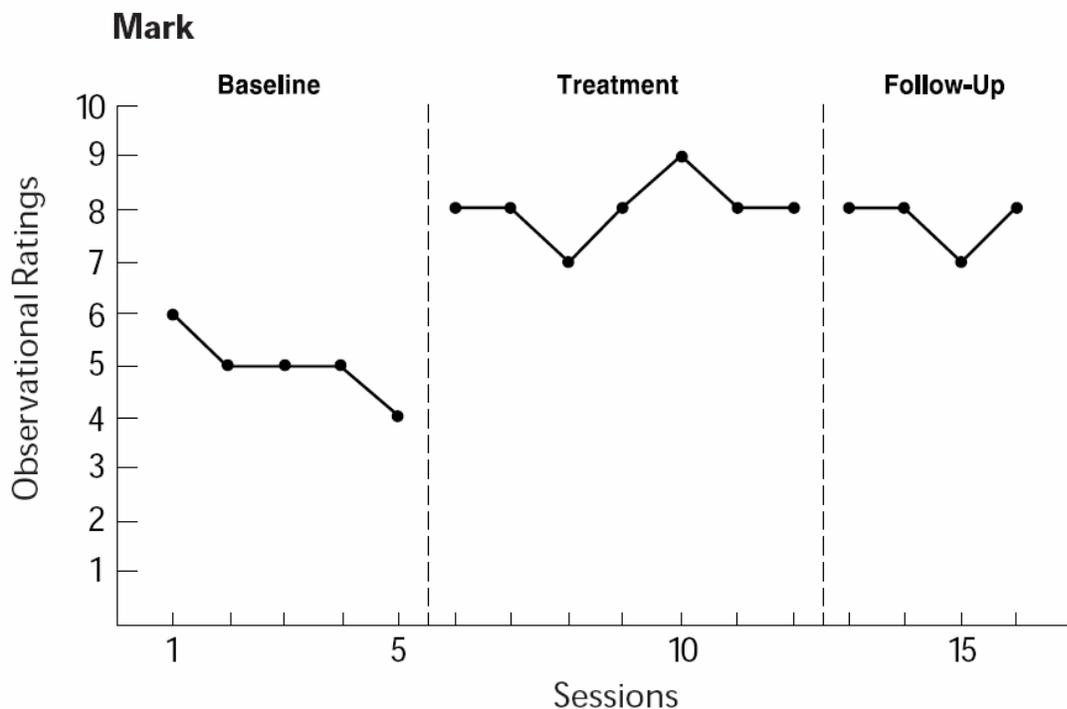
Mark's behavior was rated by his teacher two or three times weekly following 50-minute observational periods that included both independent and small-group instructional activities. This reduced the time demands required for observation but still provided a reasonable sample of student behavior with which to evaluate the intervention. The target behaviors of off-task behavior and noncompliant behavior were aggregated under the global category of "disruptive off-task behavior" (Hoff & DuPaul, 1998; Wilkinson, 1997). Ratings were made on a 9-point Likert-type scale with 1 indicating a high rate of problem behavior occurrence and 9 indicating a low rate of problem behavior occurrence (e.g., 1 to 3 = poor; 4 to 6 = needs improvement; 7 to 9 = good).

Prior to data collection, the consultant didactically trained Mark's teacher to: (a) observe the student and identify target behaviors, (b) review the Likert scale, and (c) practice observing and recording the corresponding numerical rating. During the practice sessions, the consultant independently rated the student's behavior until interrater agreement reached 80%. Behavioral ratings data were collected throughout all phases of consultation (baseline, treatment implementation, and follow-up) and used as time-series data to document the effectiveness of the intervention plan.

*Problem Analysis Interview.* A conjoint problem analysis interview (CPAI) was conducted following the baseline phase of consultation. The consultation team analyzed the behavioral data, explored alternative intervention strategies, agreed upon a goal for behavioral change, and discussed implementation of a behavior intervention plan. A conditions analysis review of the baseline data revealed consistently high ratings of target problem behavior (noncompliance and off-task behavior) during unstructured activities such as independent and small group classroom instruction. Mark was most often oppositional and off-task when given a teacher/parent directive or when he desired individual attention and social control. He demonstrated considerable difficulty regulating his own behavior in these situations and relied on adults and other external contingencies to direct and maintain appropriate behavior. Traditional teacher managed contingency strategies were only minimally successful in reducing Mark's problematic behavior.

Following a discussion of intervention strategies with empirically validated acceptability and efficacy, and a closeness of match with home and school ecosystems, the consultant recommended a self-

management package consisting of self-monitoring, goal setting, and home-school contingency reinforcement as the CBC-based treatment plan. Self-management interventions have strong empirical support for improving a wide range of academic and behavioral outcomes for students (e.g., Cole & Bambara, 2000; Hoff & DuPaul, 1998; McDougall, 1998; Shapiro & Cole, 1994; Stage & Quiroz, 1997; Wilkinson, 2005b). The mutually agreed upon goal of the intervention was to reduce Mark's challenging behavior by applying a self-monitoring procedure in the classroom and contingent reinforcement across home and school settings. This technique afforded the student an opportunity to develop the strategies needed to increase prosocial behaviors and reduce his reliance on adults and teacher-managed contingencies. Parent and teacher were asked to involve Mark in the selection of incentives and develop a reinforcement menu of tangible and activity rewards to ensure he received positive reinforcement in school and at home.



*Treatment (Plan) Implementation.* The self-management intervention was delivered to Mark during the treatment implementation phase of CBC. Two primary components were involved in the procedure: (a) self-assessment and (b) self-recording. Self-assessment involved the covert questioning of behavior (e.g., Was I paying attention?) and self-recording the overt documentation of the response to the self-assessment question on a recording form. Mark was told “self-management means accepting responsibility for managing and controlling your own behavior so that you can accomplish the things you want in school and at home.” He was also given positive and negative examples of the behavioral cycle and a definition of the target behaviors to be self-monitored. On-task behavior was defined as (a) seated at

own desk, (b) eyes on the teacher, board, or seatwork, (c) work materials on desk, and (d) reading or working on an assignment. Compliant behavior was defined as following classroom rules by (a) asking relevant questions of teacher and neighbor, (b) raising hand and waiting turn before responding, (c) interacting appropriately with other students, and (d) complying with teacher instructions/directives. Mark's teacher modeled the on-task behaviors and described classroom scenarios indicative of appropriate behavior. The self-management procedure was also demonstrated to ensure the student's understanding of the self-assessment and self-recording components of the intervention.

Following 2 days of practice, Mark self-monitored his behavior on a daily basis for a 3-week period. This timeframe was considered sufficient to observe a change in behavioral functioning. A self-recording sheet was taped to the upper right hand corner of the student's desk. Because he was the only student who was self-monitoring in the classroom and other students might be disturbed by an auditory cue, Mark's teacher physically cued him to self-monitor by tapping the corner of the desk, on average, every 10 minutes during approximately 50 minutes of independent and small-group classroom instruction. (Cole, Marder, & McCann, 2000; Shapiro, Durnan, Post, & Skibitsky Levinson, 2002). When cued, Mark asked himself "Was I on task?" and "Was I following directions/classroom rules?" He then marked the self-recording sheet with a "plus" (yes) or "minus" (no), indicating the response to the self-assessment questions. Daily goals were set at equal to or greater than 80 % positive responses for on-task and compliant behavior. Mark's teacher held a brief meeting with him each day to review ratings, determine whether behavioral goals were met, and sign the self-recording sheet. When his daily goals were met, Mark could make a selection from a group of incentives such as additional computer time, access to a preferred game or activity, extra recess time, etc. Because home-school communication was an essential feature of consultation and treatment, the self-recording sheet was sent home each day for parent signature so that Mark's mother could review her child's behavior and provide rewards contingent on meeting behavioral goals. The self-management intervention continued for a minimum of 15 school days after which the procedure was faded by increasing the intervals between self-monitoring cues. The goal was to have Mark self-monitor his behavior independently.

*Treatment monitoring interview.* Mark's teacher continued to collect observational data during the treatment implementation phase of consultation. The consultant checked data collection, visited the classroom, and conducted a conjoint treatment monitoring interview (CTMI) to (a) identify barriers and obstacles to plan implementation, (b) evaluate the extent to which the self-monitoring steps were completed, and (c) examine permanent products such as Mark's self-monitoring sheets, home-school notes, and consultees' behavioral reports/summaries. A performance review was then completed and social praise provided for accurate implementation of the intervention plan across settings. The primary objective of the CTMI was to facilitate consultees' cooperation by providing direct support and performance feedback, thus minimizing resistance and increasing the strength of the intervention plan (Butler, Weaver, Doggett, & Watson, 2002; Jones, Wickstrom & Friman, 1997; Noell, Duhon, Gatti, & Connell, 2002).

*Treatment Evaluation Interview.* A conjoint treatment evaluation interview (CTEI) was conducted following treatment implementation to discuss progress towards consultation goals, modifications to the treatment plan, and to determine whether the intervention plan was effective. A judgment of the congruence between consultation objectives and performance was based on the comparison of the data collected during the baseline and treatment phases of CBC. Parent and teacher were asked whether consultation services should be kept in place, modified or terminated. Because consultees were generally satisfied with the improvement in Mark's behavior, the self-monitoring intervention plan was faded. Consultees agreed to continue their home-school communication via a daily report of student behavior. Mark's teacher completed 4 observational ratings sessions approximately one month later to determine maintenance of treatment effects.

## Results

### *Observational Ratings*

Figure 1 graphically displays the observational ratings scale data for Mark across consultation phases. Visual analysis indicates a stable baseline and an immediate effect on his challenging behavior with the introduction of the treatment plan. Calculation of the magnitude of behavioral change produced a large treatment effect size ( $ES = 4.61$ ). The behavioral trend was positive with 100% nonoverlapping data points (*PND*) from baseline to treatment. Mark's behavioral control (on-task behavior and compliance) increased 60% over the baseline phase of consultation. Mean teacher ratings improved from 5.00 ( $SD = 0.66$ ) at baseline to 8.21 ( $SD = 0.69$ ) during treatment implementation. Behavior rating data collected at a 4-week follow-up reflects maintenance of positive treatment effects, Mark's behavior control remaining 42 % above baseline conditions.

### *Behavioral Checklist*

The Teacher's Report Form (TRF; Achenbach & Rescorla, 2001) was administered at baseline and following consultation to determine perceived changes in challenging behavior. The TRF is among the most frequently used empirically-based instruments for quantifying children's internalizing and externalizing behavior problems. The reliable change index (RC) was used to determine whether Mark's TRF scale scores were significantly reduced following treatment (Gresham & Noell, 1993; Jacobson, Follette, & Revenstorf, 1984). This index is the student's difference score (post - pre) divided by the standard error of measurement. An RC of larger than  $\pm 1.96$  indicates that treatment produced a significant ( $p < .05$ ) change in behavior. TRF raw scores were used for analyses rather than *T*-scores in order to maximize statistical power and take in account the full range of variation in the scales (Achenbach & Rescorla, 2001). Normative comparisons of TRF data were used to determine whether changes in Mark's *T*-scores moved from the clinical to the normative range of functioning following consultation.

As indicated in Table 1 (next page), there was a statistically reliable change in behavior from pre- to post- treatment ( $p < .05$ ) on the TRF Attention Problems, Aggressive Behavior, Social Problems, and Externalizing behavior scales. Mark's *T*-scores also fell below the borderline clinical cut point to the normative range of functioning for the Attention Problems, Aggressive Behavior, and Social Problems syndrome scales ( $T = < 65$ ) and the broad based Externalizing behavior scale ( $T = < 60$ ) following consultation.

**Table 1**

*Pre- and Post Consultation TRF Scale Scores*

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<i>Raw Score</i>		<i>T-Score</i>	
<b>Pre</b>	<b>Post</b>	<b>Pre</b>	<b>Post</b>

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<b>Soc</b>	<b>7</b>	<b>3 *</b>	<b>68</b>	<b>59 **</b>
<b>Attn</b>	<b>38</b>	<b>19 *</b>	<b>70</b>	<b>59 **</b>
<b>Agg</b>	<b>14</b>	<b>3 *</b>	<b>65</b>	<b>55 **</b>
<b>Ext</b>	<b>11</b>	<b>3 *</b>	<b>60</b>	<b>53 **</b>

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Soc = Social Problems; Attn = Attention Problems; Agg = Aggressive Behavior; Ext = Externalizing behavior. \* Denotes a statistically reliable change between pre- and posttreatment ( $p < .05$ ). \*\* Denotes clinically significant change between pre- and posttreatment syndrome *T*-scores.

*Note.* The data are from "An evaluation of conjoint behavioral consultation as a model for supporting students with emotional and behavioral difficulties in mainstream classrooms," by L. A. Wilkinson, 2005, *Emotional and Behavioural Difficulties*, 10, p. 129. Copyright by 2005 by Sage Publications. Reprinted with permission.

### *Social Validity*

An adaptation of the Behavior Intervention Rating Scale (BIRS; Von Brock & Elliott, 1987) was used to assess consultees' perceptions of the acceptability and effectiveness of CBC and the self-management intervention. This instrument has been used to document social validity outcomes in consultation practice and research (Sheridan et al., 2001; Wilkinson, 2005a). Mark's parent and teacher completed the BIRS following the final consultation interview. The higher the ratings, the more acceptable and effective the consultation process and intervention plan.

On a 6-point Likert scale ranging from *Strongly Disagree* to *Strongly Agree*, Mark's parent and teacher reported average acceptability item ratings of 5.83 and 5.63, respectively. This translates to a high level of perceived acceptability. Among the items that consultees endorsed as highly acceptable were "Consultation was an acceptable intervention for the problem," "The problem was severe enough to warrant the use of consultation," "Most parents and teachers will find consultation appropriate for other behavior problems," and "I would be willing to use consultation again."

The consultees' subjective perception of the CBC's effectiveness yielded average parent and teacher ratings of 5.08 and 5.07, respectively. This suggests that consultees viewed CBC as a highly effective process. Items rated as most effective included "Consultation should produce a lasting improvement," "The child's behavior should remain at an improved level," and "consultation not only improved the child's behavior in the classroom and at home, but in other situations as well."

### *Treatment Integrity*

The success or failure of a behavioral intervention is largely dependent on the extent to which it is implemented as intended or planned by the change agent (e.g., teacher), or what has been termed *treatment integrity* (Gresham, 1989). Treatment integrity reflects the accuracy and consistency with which each component of the treatment or intervention plan is implemented. Therefore, it is essential that treatment integrity information be collected when implementing school-based interventions in order to distinguish between ineffective treatments and potentially effective treatments implemented with poor integrity (Gresham, 1989).

In order to enhance the treatment integrity of the consultation process the consultant used detailed protocols to ensure that each interview included the goals and objectives for CBC (see Sheridan et al, 1996). The treatment integrity of the intervention plan was assessed and monitored through direct observation, interviews with consultees, and permanent products. To verify fidelity to the self-management procedure, Mark's teacher was asked to complete a treatment plan checklist by indicating whether each component (e.g., cued student to self-monitor, gave incentive when earned, sent self-recording checklist home for signature) was fully or partially implemented. Checklists, home-school notes, self-recording sheets, and anecdotal records were analyzed during the treatment monitoring interview (CTMI) and at the conclusion of consultation to determine the level of treatment integrity. The consultation team posited that the self-monitoring program was consistently implemented as planned approximately 90% of the time, thereby indicting a high level of treatment fidelity.

### Case Discussion

This case study vignette illustrates the effectiveness of ecological systems theory in a relatively new and emerging area of consultation. Despite the constraints and limitations associated with applied research and practice (e.g., threats to internal validity), the data gathered across the baseline, treatment, and follow-up phases provide important and useful information. The intervention package consisting of CBC and self-management was associated with an immediate and distinguishable improvement in behavioral control (on-task and compliant behavior). The positive behavioral changes demonstrated during CBC were also maintained over time. Consultees expressed considerable satisfaction with the process (acceptability) and outcomes (effectiveness) of consultation. They consistently agreed that CBC was an acceptable and effective process to use for the students' behavior problems and that most parents and teachers would find the model appropriate for other behavior problems as well. Importantly, Mark's parent socially validated CBC and the treatment plan by reporting concurrent improvement in her children's home behavior, thereby suggesting generalization of treatment effects across settings (Gresham, 2004). Likewise, consultees indicated a strong willingness to use CBC again and recommended the use of consultation to other parents and teachers.

An important consideration is whether CBC and self-monitoring produced socially important changes in Mark's classroom behavior. According to the TRF, there was a statistically reliable and clinically meaningful change in his attention problems, noncompliance, and overall externalizing behavior following consultation. The reduction in aggressive behavior is especially salient in that decreases on the TRF aggressive behavior syndrome and broad-based externalizing problems scales are associated with significant improvement in classroom functioning as well as less restrictive educational placement (Mattison & Spitznagel, 2001). The decrease in Mark's attention problems is also important, further suggesting that CBC and self-monitoring might be a viable strategy for reducing the challenging behavior associated with ADHD (Barkley, 2006; DuPaul & Stoner, 2003).

A fundamental goal in school-based behavioral consultation is the demonstration that changes in behavior are related to the systematic implementation of intervention plans and not to other extraneous variables. Treatment plans are developed with the expectation that they will be implemented as intended

and not modified by the change agent (treatment integrity). Many failures in school-based consultation can be attributed to consultee resistance and absent or weak treatment integrity, despite an intervention's demonstrated empirical support (Cautilli, Riley-Tillman, Axelrod, & Hineline, 2005; Gresham, 1989). A noteworthy feature of this case study is the inclusion of a structured treatment monitoring interview (CTMI) designed to promote a collaborative consultant-consultee relationship, increase consultees' problem-solving efforts and shared ownership of the treatment plan, and improve their self-efficacy. Expanding the CBC model to include a treatment monitoring phase, rather than only brief informal contacts, can be a practical and effective method of providing valuable performance feedback to consultees, thereby lessening resistance, enhancing treatment integrity, and improving generalization (Coddling, Feinberg, Dunn, & Pace, 2005; Tillman, 2000).

### Conclusion

The case study presented here illustrates how CBC can be a useful vehicle for promoting a shared responsibility between home and school systems and that applying empirically supported interventions within the model can result in acceptable and effective behavioral outcomes. Research clearly indicates that students benefit from home-school partnerships and that parent involvement maximizes the potential of positive treatment effects for children (Christenson, 2004; Christenson & Sheridan 2001). CBC offers practitioners a structured approach for intervening and engaging educators and families in shared problem solving, which, in turn, has the potential for enhancing children's behavioral competency. The model provides a framework within which professionals can foster a collaborative process with parents and teachers and deliver high quality consultative services to all stakeholders in real world settings. CBC holds considerable promise for improving services to teachers, families, and students by bridging the gap between home and school contexts, promoting shared ownership across systems for problem solution, and strengthening relationships among participants (Sheridan et al., 1996).

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