Running Head: RELATIONAL COMMUNICATION IN CBC

Patterns of Relational Communication in Conjoint Behavioral Consultation and their Relationships with Outcomes

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Abstract

This study was an investigation of the patterns of relational communication in conjoint behavioral consultation (CBC) for children with behavioral problems. This study compared the patterns of relational communication when different processes (i.e., decision-making versus information gathering) are used to meet the objectives of CBC during the Conjoint Problem Identification Interview (CPII) and the Conjoint Problem Analysis Interview (CPAI). It also explored the relationship between patterns of relational communication and the outcome of CBC. Twenty-one children with identified behavioral problems (ages 3 to 8), the mothers and teachers of these children (i.e., the consultees), and advanced graduate students (i.e., the consultants) participated in this study. Relational communication was measured via the Family Relational Communication Control Coding System (FRCCCS, Heatherington & Friedlander, 1987). The two summary variables that were derived from the FRCCCS are domineeringness and dominance (Courtright, Millar, & Rogers-Millar, 1979; Rogers-Millar & Millar, 1979).The measure of outcome was the improvements in children's target behavior from baseline to intervention at home and at school, as measured by effect size statistics. The extent to which consultants, parents and teachers intent to direct the other and how the others receive their directiveness, appear to vary as a function of the interview as well as the process use to meet objectives within an interview. Some patterns of relational communication were found to be associated with the outcome of consultation. The original contributions as well as the implications of this research are discussed.

Résumé

Cette étude avait pour but d'examiner les modèles types de communication relationnelle lors de consultations conjointes sur le comportement (CCC). Les modèles types de communication relationnelle furent comparés lorsque différents processus sont utilisés pour rencontrer les objectifs de CCC (c'est-à-dire la prise de décisions ou la collecte d'information sur le comportement). La relation entre les modèles types de communication relationnelle et l'efficacité de la consultation a également été explorée. Les parents et les enseignants de 21 enfants âgés de 3 à 8 ans et ayant des troubles de comportement participèrent aux consultations. Six étudiantes de troisième cycle universitaire ont agi à titre de consultant. L'entrevue conjointe pour l'identification du comportement à cibler et l'entrevue conjointe pour l'évaluation du comportement ciblé des 21 cas de consultations furent codés à l'aide du "Family Relational Communication Control Coding System" (FRCCCS, Heatherington & Friedlander, 1987). Les modèles types de communication relationnelle furent obtenus à l'aide des variables "domineeringness" et "dominance" qui sont dérivées du FRCCCS (Courtright, Millar, & Rogers-Millar, 1979). Pour cette étude, le progrès de chaque enfant face à son comportement ciblé, de la phase pré-intervention jusqu'à la fin de la phase d'intervention fut utilisé comme indice d'efficacité de la CCC. Les modèles types de communication relationnelle des consultants, parents, et enseignants semblent être modifiés par les processus qui sont utilisés pour rencontrer les objectifs de CCC et l'entrevue dans laquelle les modèles types de communication relationnelle sont observés. Certains modèles types de communication relationnelle semblent être associés à l'efficacité de la CCC. Les résultats sont discutés et analysés en vue des implications pratiques et théoriques.

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CHAPTER I

Introduction

Most children exhibit hitting or noncompliance to parental requests at one time or another (Kalb & Loeber, 2003). However, some children demonstrate persistent and frequent patterns of noncompliance and aggressive behaviors resulting in significant impairment in everyday functioning at home and at school. Recent data from Canada and the United Sates show that the number of children who experience behavioral problems has increased significantly in the past 15 years (Webster-Stratton, 2000). It has been estimated that the incidence of behavioral problems has tripled over this time frame (Conseil supérieur de l'éducation, 2001). Within the province of Quebec it is estimated that 13.5% of preschool children (Statistic Canada, 2001) and 2.5% of children at the elementary level (Conseil supérieur de l'éducation, 2001) evidenced behavioral difficulties. Behind these figures are children who have difficulty relating to other children and to adults in their environment. Children with behavioral difficulties are often considered unmanageable by parents and teachers and are frequently rejected by their peers (Keane & Calkins, 2004; Webster-Stratton, 2000).

Children with behavioral difficulties are clearly in need of services. However, it has been estimated that fewer than 10% of children with behavioral problems receive intervention services (Conseil supérieur de l'éducation, 2001; Kazdin & Kendall, 1998; Dworet & Rathberger, 1996). This figure is alarming in view of the evidence that without interventions, children's behavior deficits have been shown to be fairly stable over time, and are frequently predictive of future maladjustment in adolescence such as juvenile delinquency (Coie, Terry, Lenox, & Lochman, 1995; Loeber, 1982; Loeber, Burke, Lahey, Winters & Zera, 2000; Parker & Asher, 1987; Robins, 1998).

Few children with behavioral difficulties receive services, in part, due to the lack of available services particularly when traditional delivery services are considered, such as individual therapy (Sheridan, Kratochwill, & Bergan, 1996). However, indirect models of service delivery such as consultation provide an alternative modality to address the academic, behavioral and social needs of children with behavioral difficulties (Zins & Erchul, 2002). The most widely recognized feature of consultation is its indirect service delivery approach (Zins & Erchul, 2002). Usually, a consultant (e.g., a psychologist) works with a consultee (e.g., a teacher or a parent) who, in turn, provides services to a child in the school or community setting. The indirect approach to service delivery generally is regarded as a distinct advantage of consultation because it allows the consultant to provide services to many more children compared to a direct service approach (Zins & Erchul, 2002). Another key feature of consultation is the focus on the importance of enhancing the consultee's problem-solving skills (Zins & Erchul, 2002). In the school setting, consultation is becoming recognized as the most preferred and satisfying function of psychologists (Gutkin & Curtis, 1999; Kratochwill, Elliott & Callan-Stoiber, 2002)).

The use of consultation as a service delivery approach dates back to 1886 where it is reported to have been used at Lightner Witmer's child psychology clinic at the University of Pennsylvania (Mannino & Shore, 1986). Gerald Caplan (1963) later used this indirect method of service delivery and formalized the mental health model of consultation, which served as the cornerstone for the development of other consultation models. Caplan described mental health consultation as an interaction between two professionals, where one professional (i.e., the consultee) seeks the help of a specialist (the consultant) with regard to a psychological aspect of a current work problem that the consultee perceives as being within the expertise of the consultant. An essential aspect of Caplan's description is that the consultee can accept or reject

the advice given by the consultant. Hence, the consultee accepts professional responsibility for the client, and as such, takes ownership of the problems and the solutions generated to resolve them. According to Caplan's model, behaviors are explained and changed psychodynamically. That is, problems are viewed as being primarily caused by factors within the consultee. Notable here is that the consultant-consultee relationship is seen as clearly hierarchical.

A second theoretical perspective is depicted by the behavioral consultation model. Over the years, numerous descriptions of behavioral consultation have been proposed. One of the most widely recognized behavioral models however, is the one presented by Bergan (1977) and Bergan and Kratochwill (1990). In this approach, behavioral and social learning principles are utilized to help consultees solve problems. The focus of the consultation process is moved away from the intrapsychic focus described in mental health consultation, to a focus on the observable behaviors of children and adults in their social contexts (Bergan & Kratochwill, 1990). Within this model, a consultant (e.g., school psychologist) provides services, to a consultee (e.g., teacher or parent), who in turn provides services to a child in the school or community setting (Bergan & Kratochwill, 1990).

Conjoint behavioral consultation (CBC) is a conceptual extension of behavioral consultation (BC) that joins parents *and* teachers with a consultant in a collaborative problem-solving effort (Sheridan et al., 1996). Traditionally, BC focused on the process of consultation via one consultee, usually a teacher. In contrast, CBC, as described by Sheridan et al. (1996), focuses on the importance of bridging the gap between home and school by including both teachers and parents in the consultation process. CBC is a type of consultation that can be classified under the general model of consultation referred to as "problem-solving consultation" (PSC) (Kratochwill et al., 2002; Sladeczek, Kratochwill, Steinbach, Kumke & Hagermoser,

2003). Problem-solving consultation (PSC) emphasizes a wide range of assessment and intervention strategies from diverse theoretical origins that expands upon BC and CBC, which have traditionally been associated with behavior modification, behavior analysis, and theories from behavioral psychology (Kratochwill et al., 2002).

In CBC, the relationship between the consultant, the parent(s) and the teacher(s) is viewed as a collaborative and interactive partnership with shared ownership and responsibility for solving problems (Sheridan et al., 1996). Hence the assumption is that consultant and consultees have equal authority in the decision-making process. Also, according to Sheridan and Kratochwill (1992), during CBC the consultant should actively direct the conversation to allow equal input from both the parent(s) and the teacher(s). They also suggest that the consultant should encourage the consultees to work together as a special unified subsystem, rather than two separate systems working in parallel. As suggested by Witt and his colleagues (Noell & Witt, 1996; Witt, 1997), it is important to investigate how these assumptions are actually translated into practice. One venue for doing so is through the examination of the verbal interactions between the consultant and the consultees as they move through the consultation process.

In consultation, a strong emphasis is placed on the verbal interchange between the consultant and consultees (Witt, 1997). In fact, as an indirect form of service delivery, a principal characteristic of CBC is the reliance on the consultant's ability to communicate effectively with parents and teachers to produce change in a child's behavior (Sheridan, 1997). Although, verbal interactions are only one of the components of CBC, they are central to achieving the problem-solving objectives of behavioral consultation (Kratochwill, Bergan, Sheridan & Elliott, 1998). Hence, the outcomes of CBC can be influenced by the consultant's and consultees' verbal interactions. Verbal interactions can be examined for the literal meanings of exchanged messages

(i.e. investigating what is said) or they can be examined for the pragmatic aspects of messages (i.e. investigating how it is said).

Through this research, the interactional nature of verbal interactions (i.e., relational communication) in conjoint behavioral consultation was explored. More specifically, the focus was on relational control, a concept that is central to relational communication. Interpersonal control was of primary interest because conjoint behavioral consultation, as an indirect method of service delivery, depends to a large extent on the consultant's ability to influence the behavior of the consultees (Erchul & Chewning, 1990). A clearer understanding of the relational control patterns in CBC was deemed necessary to better inform consultants on how to communicate effectively with both parents and teachers to produce changes in children exhibiting behavioral difficulties. During this research, the relational control patterns in CBC for children with behavioral problems were explored. More specifically, the changes in relational control patterns over the course of CBC as different processes are used to meet the objectives of consultation were examined. The relationship between patterns of relational control and improvements in the behaviors of children as the outcome of CBC was also examined.

CHAPTER II

Literature Review

As suggested in the introduction, an understanding of the optimal interpersonal verbal communication patterns in CBC is essential to better prepare consultants to communicate effectively with both parents and teachers to produce changes in children exhibiting behavioral difficulties. The literature that guided the formulation of the rationale underlying the proposed study will be presented in three sections. The purpose of the first section is to offer a more detailed description of conjoint behavioral consultation and to present evidence supporting the effectiveness of this form of intervention. The second section will review the literature on the analysis of verbal interactions in the context of behavioral consultation and conjoint behavioral consultation. To that effect, a description of the different verbal interaction coding schemes that have been reported in the behavioral consultation literature will be offered. Moreover, the results of empirical studies using these different coding schemes will be presented. Finally, the areas of inquiry and the predictions for the present study will be delineated in the third section.

Conjoint Behavioral Consultation

As outlined in the introduction conjoint behavioral consultation (CBC) is based on the seminal work on behavioral consultation by Bergan (1977), which was later refined by Bergan and Kratochwill (1990). It is an indirect form of service delivery that joins parents and teachers with a consultant in a collaborative problem-solving effort (Sheridan et al., 1996). CBC consists of a four-stage process (problem identification, problem analysis, treatment implementation, and treatment evaluation); operationalized by a series of three standardized interviews (Sheridan et al., 1996).

The goals of the problem identification stage, the first stage of the consultation process are the identification of problem behaviors, and the implementation of baseline data gathering procedures. The Conjoint Problem Identification Interview (CPII) provides a format for the consultant, parent(s), and teacher(s) to work together to identify and define the problem(s) to be targeted. To that effect, the situational conditions surrounding the occurrence of the identified problem(s) are described; the severity and frequency of the problem(s) are identified; and a goal for behavior change is discussed. During the CPII, a method of baseline data collection is also discussed and agreed upon with the parent(s) and teacher(s) (Sheridan et al., 1996).

The problem analysis stage focuses on identifying variables and conditions that are hypothesized to influence the child's behavior. This goal is met during the Conjoint Problem Analysis Interview (CPAI). During the CPAI, the consultant and the consultees explore the strength of the problem behavior using the baseline data and identify the variables that might be contributing to the problem behavior (Sheridan et al., 1996). More specifically, the consultant and the consultees attempt to establish a functional relationship between the identified problem behavior and the events occurring immediately prior, during, and following the problem behavior. At times it may be necessary to gather additional data about the target behavior when questions about who, what, when, and where are not sufficiently clarified from previously collected data (Bergan & Kratochwill, 1990). Generally, it is at this point that recommendations about interventions are made.

The third stage in conjoint behavioral consultation involves implementing an intervention plan. This involves two processes: (a) choosing a suitable intervention; and (b) implementing that intervention (Sheridan et al., 1996). During this phase, the consultant and consultees work together to generate an agreed upon intervention strategy. If necessary, the consultant may model

for the consultees the skills they need to learn for the intervention to be successful. This is then followed by the consultees practicing these same techniques with the consultant, until a certain level of proficiency is reached (Kratochwill, Elliott, & Carringto Rotto, 1995). Although there is no formal interview during the treatment implementation phase, the consultant monitors the implementation of the intervention (e.g., through weekly phone calls).

In the final stage of CBC, the intervention plan is evaluated. This stage is implemented through a structured Conjoint Treatment Evaluation Interview (CTEI) and is undertaken to determine whether consultation goals have been reached. The discrepancy between the child's present behavior and a desired level of functioning are discussed. If the child's problem behavior has reached a desired or acceptable level (i.e., frequency, duration, and intensity) for the consultees and the child, consultation is usually terminated. However, if an acceptable level of behavior has not been reached, it may be necessary to return to a previous stage and modify the original intervention plan (Bergan & Kratochwill, 1990).

There is increasing evidence of the effectiveness of CBC for children with behavioral difficulties. In a recent large scale study Sheridan, Eagle, Cowan and Mickelson (2001) evaluated the efficacy of CBC. The study included 52 students in kindergarten through ninth grade, with behavior disorders as well as students with attention-deficit hyperactivity disorder, anxiety disorders, and learning disabilities. Changes in children's target behaviors at home and at school were measured by mean single subject effect size, derived primarily from controlled case study (A/B) procedure or multiple baseline designs. The authors found that CBC was an effective model of service delivery at home and at school for children with behavioral disorders as well as children with other diagnoses such as attention-deficit hyperactivity disorder, anxiety disorders, and learning disabilities (overall average effect size = 1.10; confidence interval based

on confidence level of 95%= .83 – 1.36) Client age and symptom severity was found to predict school effect size relatively well. Client age was determined based on parent report of the child's age in years. Symptom severity was defined as the sum of severity ratings provided by parents and teachers prior to the initiation of CBC services. Specifically each parent and teacher provided a pre-CBC rating of the severity of the referral concern (i.e., target behavior) on a scale of 1 (less severe) to 7 (more severe). Scores of 6 and less were considered low, whereas values of 11 or greater were considered high. Using a multiple regression model, the authors found that older children (11 years and older) with less severe symptoms or the younger children (5 to 7 years) with more severe symptoms obtained higher school effect sizes. On the other hand, older clients with high levels of symptom severity obtained smaller school effect sizes. Client age and symptom severity was not predictive of home effect sizes.

In a case study Sladeczek (1996) demonstrated the effectiveness of CBC for a child with behavioral difficulties. The child was described by his mother as experiencing behavioral problems (i.e., tantrums, and difficulties with cooperation, assertion, and self-control), while his teacher viewed him as experiencing social skill deficits (i.e., territorial behavior with peers, infrequent play initiation). The behaviors targeted for intervention were aggression (i.e., hitting, kicking) and territorial behaviors (i.e., screeching when other children intrude in his environment). Following treatment implementation, both the mother and teacher observed a significant decrease in the child's aggressive/territorial behaviors both at home and at school. In addition, both the mother and teacher found the strategies presented during CBC useful.

Case studies have also supported CBC for a range of difficulties exhibited by children. Colton and Sheridan (1998) found that a behavioral social skills intervention delivered in the context of CBC was effective in increasing the cooperative peer interactions of young boys

diagnosed with attention deficit hyperactivity disorder (ADHD). Specifically, the mothers and the teachers of three boys between the ages of 8 and 9 who were diagnosed with ADHD and who were exhibiting deficits in cooperative play behaviors (i.e., low frequency of praising, conversing, smiling, and sharing) participated in CBC. Using a multiple baseline design the authors found that CBC significantly increased the frequency of cooperative peer interactions. Positive changes were also noted in social skills from pre-treatment to post-treatment as measured by the Social Skills Rating System (Gresham & Elliott, 1990). Additionally, the intervention was perceived as acceptable by parents and teachers as well as children as measured by the Behavior Intervention Rating System (BIRS; Von Brock & Eliiott, 1987 as cited in Colton & Sheridan, 1998) and the Children's Intervention Rating Profile (CIRP; Witt & Elliott, 1985 as cited in Colton & Sheridan, 1998) respectively.

In another investigation, Sheridan, Kratochwill and Elliott (1990) studied the effectiveness of CBC in increasing the social initiations of children who were socially withdrawn. Four elementary school children between the ages of 9 and 12 years comprised the sample. These children were selected for the intervention based on their specific difficulty of initiating interaction with peers. There were two forms of consultation being investigated. Two children were assigned to the conjoint behavioral consultation condition, while another two children were assigned to the teacher-only behavioral consultation condition. Based on direct observations, behavior rating scales, and children self-reports, conjoint behavioral consultation was found to be an effective means of increasing social initiation both at home and at school. teacher-only consultation was shown to be effective for increasing the social interaction of withdrawn children at school only. Moreover, at the four-month follow-up, maintenance of the intervention effects was greater when the parents were involved in the consultation process.

Galloway and Sheridan (1994) found that CBC combined with home notes was effective in improving the school performance of children with academic difficulties. Six students from grades 1 through 3, as well as their parents and teachers participated in this study. Students were randomly assigned to one of two conditions. In the first condition, a home-note only procedure was utilized. Through this procedure parents received daily information on the student's daily math scores, task completion behaviors and work completion percentages. Parents also received a self-instructional manual on home notes. In the second condition a similar home-note procedure was implemented within the conjoint behavioral consultation framework. The goal in both conditions was to improve accuracy and task-completion in mathematics. They found that all six children showed an improvement in accuracy and task-completion from baseline to intervention. However, only those children receiving conjoint behavioral consultation documented consistent performance and statistically significant differences between the baseline condition and the intervention condition. Furthermore, the maintenance of intervention gains was stronger for those receiving home notes with conjoint behavioral consultation than the home-note only condition at the seven week follow-up.

With the accumulating evidence supporting the effectiveness of CBC, it is important to move our research focus towards understanding how the processes that constitute CBC contribute to change. This will permit the identification of the processes that contribute to maximizing the positive outcomes of this promising model of service delivery. In consultation a strong emphasis is placed on the verbal interchange between the consultant and the consultees (Witt, 1997). In fact, as an indirect form of service delivery, a principal characteristic of CBC is the reliance on the consultant's ability to communicate effectively with parents and teachers to produce change in a child's behavior (Sheridan, 1997). Hence, conducting detailed analyses of

consultant's and consultees' communication behavior would appear to be an excellent place to start investigating the process variables that are central to providing effective CBC.

Verbal Communication in Consultation

Researchers investigating adult psychotherapy, counseling and family therapy have developed an empirical knowledge base concerning communication processes in therapeutic interventions (Witt, 1990). From this body of research different coding methodologies have been adapted to the field of consultation. The two methodologies that have been used to analyze verbal interactions in the context of school-based consultation are content coding methodology and relational coding methodology (Erchul et al., 1999).

Content Coding Methodology

Content coding systems emphasize individuals' isolated verbal behaviors, as well as the literal meanings of exchanged messages (Friedlander & Heatherington, 1989). The most notable content coding scheme developed and applied to behavioral consultation is the Consultation Analysis Record (CAR) (Bergan & Tombari, 1975). It represents the only verbal interaction coding scheme specific to consultation. The CAR coding system requires verbatim transcripts of audiotaped consultation interviews. Then verbal interactions between a consultant and a consultee are fragmented into independent clauses (i.e., an utterance that can be stated as a sentence and conveys a subject-action-object relationship). Each independent clause is then coded according to the source of the statement (consultant or consultee), the content under discussion (e.g., background environment, behavior setting), and the process served by the statement (e.g., inference, validation, evaluation). Finally, each independent clause is coded according to how it controls the dialogue. The control category separates independent clauses

into two sub-categories: elicitors (requesting action or information) or emitters (providing information).

Relational Coding Methodology

The relational coding methodology is more reflective of the relationship between participants. It categorizes verbalizations relative to the content and intent of the message of the previous speakers (Friedlander & Heatherington, 1989). Hence, with relational coding systems the personal context in which a given message is delivered is emphasized rather than merely what is said (Heatherington & Friedlander, 2004).

The Relational Communication Control Coding System (RCCCS) (Roger & Farace, 1975) represents one of the most empirically sound relational coding systems. This coding scheme was originally designed for research on couples' interactions. Within the RCCCS the smallest unit of analysis is the message (i.e., a speaking turn beginning with person A's first word and continuing until person B speaks). Using verbatim transcripts of audiotaped interviews, each message is coded according to the speaker (e.g., consultant, consultee), the grammatical form of the message (e.g., assertion, question) and the response mode relative to the previous message (e.g., answer, topic change). Then the message is assigned a control code based on its grammatical format and its response mode. There are three control codes: one-up (i.e., messages that attempt to assert control), one-down (i.e., messages that attempt to give up control), or one-across (i.e., messages that are neutral with respect to control).

Courtright, Millar, and Rogers-Millar (1979) and Rogers-Millar and Millar (1979) have developed two measures of relational communication based on the RCCCS. Domineeringness is an individual measure of relational communication that indicates a person's directiveness or attempt to influence or define a relationship. Domineeringness for person A is the number of A's

one-up messages divided by the total number of A's messages. Because domineeringness is an individual measure of relational communication, it cannot offer any information on how person B responded to person A's attempts to direct or structure the course of the interview. However, dominance may be considered an index of a person's demonstrated influence or success in controlling or defining a relationship in consultation. Dominance for person A is the proportion of one-down messages given by person B to all of A's one-up messages.

The Family Relational Communication Control System (FRCCCS) (Heatherington & Friedlander, 1987), an extension of the RCCCS to group contexts. The coding procedure for the FRCCCS is the same as that for the RCCCS, except that it considers aspects that are unique to group communication (Heatherington & Friedlander, 2004). It considers: (a) the use of intercepts, as a speaker's intrusion on the previous two speakers' exchanges (Friedlander & Heatherington, 1989, p.142); and (b) the occurrence of particular kinds of disconfirmation, such as when a speaker bypasses the previous speaker by addressing a different party. The FRCCCS can also be used to obtain the measures of relational communication, domineeringness and dominance developed by Courtright et al. (1979) and Rogers-Millar and Millar (1979)

Another relational coding scheme used in behavioral consultation communication research is the Request-Centered Coding System (R-C) (Folger & Puck, 1976). Similarly to the RCCCS, the smallest unit of analysis in the R-CCS is the message. The R-CCS was originally developed to analyze doctor-patient interviews and it considers only requests and responses to these requests rather than all verbal messages. Specifically, based on verbatim transcripts of audiotaped interviews the R-CCS is used to code person A's requests or "bids" (e.g., questions, instructions, orders) and person B's responses to these requests (e.g., acceptance, rejection, evasion). Requests are coded as dominant (i.e., request to take action) or submissive (i.e., request

seeking permission to take an action). Dominant and submissive requests may be further coded as affiliative or hostile based on how the request is phrased. Responses to requests are then coded as accepted (i.e., agreeing to perform a requested action, giving permission or answering a question), rejected (i.e., not performing requested action), or evaded, based on person B's reply.

The Topic Following-Topic Initiation Coding System (TF/TI) (Tracey & Rey, 1984) is another relation coding scheme utilized in the context of behavioral consultation. Developed to analyze counseling interviews, with the TF/TI messages are coded as either a topic initiation or a topic following response. A message is coded as a topic following, if it continues the topic of the previous speaker. Topic initiation is coded, if the statement differs from the topic of the previous speaker in any one of five ways (e.g., different content, different time reference). Within this system, the topic initiation and the topic following variables are transformed into contextual variables. The two contextual variables generated are topic determination (i.e., the proportion of all topic initiation messages by person A that are succeeded by topic following message by person B) and topic continuation (i.e., the proportion of topic following messages by person A that precede a topic following message by person B).

Review of Empirical Evidence on Verbal Communication in Context of Behavioral Consultation

There exists a body of research within the school psychology literature accumulated over the past 30 years describing the patterns of verbal communication in behavioral consultation. The research efforts have focused on patterns of interpersonal control in consultation, namely speaker's attempts at defining the relationship and speaker's success at defining the relationship. The relationship between patterns of control and intervention outcomes has also been investigated. Interpersonal control has been of primary interest because behavioral consultation,

as an indirect method of service delivery, depends to a large extent on the consultant's ability to influence the behavior of the consultees (Erchul & Chewning, 1990).

Measures of speakers' attempts and success at defining the relationship vary based on the coding schemes. With the RCCCS (Roger & Farace, 1975 and the FRCCCS (Heatherington & Friedlander, 1987) one's attempt to define a relationship is measured by domineeringness (the proportion of messages transmitted by participant A that are one-up messages). While one's success in defining a relationship is measured by dominance (the proportion of one-up messages by one participant that is followed by a one-down response from another participant). With the R-CCS (Folger & Puck, 1976), dominant requests can be seen as attempts to define the relationship and with the TF/TC (Tracey & Rey, 1984) topic initiation is considered a measure of a person's attempt to define a relationship while topic determination is considered a measure of one's success in defining a relationship.

Within the content coding schemes, the number or percentage of elicitor statements as measured with the CAR (Bergan & Tombari, 1975), could be seen as a measure of a speaker's attempt at defining the relationship. However, as was previously emphasized unlike relational coding schemes, content coding schemes such as at the CAR only code verbalizations relative to the content of the verbalization and not the intent of the message of the previous speaker. Hence, content coding schemes may not be optimal to measure patterns of interpersonal control. The next section will provide a summary of the results from research on patterns of interpersonal control through verbal communication during consultation.

Several studies have explored the patterns of control during consultation. Overall there is a consistent trend across all research in both BC and CBC where consultants are found to exert more attempts at defining the relationships than consultees. The results are similar whether

attempts at defining the relationships are measured via elicitor statements (Busse, Kratochwill, & Elliott 1999; Gutkin, 1996; Martens, Lewandowski, & Houk, 1989; Sheridan, 1997), domineeringness (Erchul, 1987; Martens, Erchul, & Witt, 1992; Erchul et al., 1997, 1999; Grissom, Erchul, & Sheridan, 2003) or dominant bids (Erchul, Convington, Hughes, & Meyers, 1995; Erchul & Chewning, 1990). With respect to success at defining the relationship, the type of consultation appears to influence this type of verbal interaction. In the context of teacher-only behavioral consultation, consultants have been found to be more successful than teachers with their attempts at defining the relationship as measured by dominance (Erchul, 1987; Martens et al., 1992) and topic determination (Witt, Erchul, McKee, Pardue, & Wickstorm, 1991; Martens et al., 1992). In a small sample of 4 conjoint behavioral consultation cases which included two CBC cases with a counselling emphasis, Erchul and his colleagues (1997, 1999) found that parents and teachers demonstrated more dominance than consultants. In a larger, study, Grissom et al. (2003) found that during the CPII, consultant, teacher, and parents appear to be more equally successful with their attempts at defining the relationship as measured by dominance.

Some authors have established a relationship between the consultant's attempt and/or success at defining the relationship and outcome measures (Erchul, 1987; Erchul et al, 1995; Witt et al, 1991; Hughes et al, 1997). The consultant's attempt and/or success at defining the relationship in the PII as measured by dominant affiliate bids (Erchul et al., 1995), frequency of inference questions (Hughes et al., 1997) and dominance (Erchul, 1987) have been positively associated with consultees' perceptions of consultant effectiveness as measured by the Consultant Evaluation Form (Erchul, 1987). The consultant's success at defining the relationship in the PII, as measured by topic determination has also been positively associated with the consultant's perception of consultees' willingness to implement the treatment plan (Witt et al.,

1991). However, the consultant's attempt at defining the relationship in the PII as measured by dominant bids (Erchul et al., 1995) and elicitor statements (Hughes & Forest, 1993) has been negatively associated with consultees' perceptions of the consultant's effectiveness as measured by the Consultant Evaluation Form (Erchul, 1987). In summary, in the PII, the consultant's use of direct commands or instructions can be associated with negative outcomes (Erchul et al., 1995; Hughes & forest, 1993). However, if the consultant asks questions, gives commands with an affiliative intonation or if the consultant is successful at defining the relationship as measured by topic determination or dominance it can be associated with positive outcomes (Erchul, 1987, Erchul et al., 1995; Hughes et al., 1997; Witt et al., 1991). In a large scale study Busse et al. (1999) failed to find a relationship between the consultant's elicitor in the PII and the PAI and three measures of outcome namely teachers' perceptions of consultant effectiveness as measured by the Consultant Evaluation Form (Erchul, 1987), teachers' perception of goal attainment as measured by Convergent Evidence Scaling (Kratochwill et al., 1995) and improvement in children's target behavior quantified as effect sizes (Busk & Serlin, 1992). However, as mentioned by Busse et al., they may have failed to replicate previous results because measuring control only with elicitors provides a less sensitive index of the interactional process of control.

A relationship has also been established between the consultees' attempts to define the relationship and outcome measures (Erchul, 1987; Erchul & Chewning, 1990). Consultees' attempts at defining the relationship in the PII as measured by domineeringness (Erchul, 1987) and dominant affiliative bids (Erchul & Chewning, 1990) have been negatively associated with consultees' perceptions of the consultant's effectiveness as measured by the Consultant Evaluation Form (Erchul, 1987) and with the consultant's perception of consultee's willingness to collect baseline data (Erchul & Chewning, 1990), respectively. Grissom et al. (2003) also

found a negative relationship between parents' success at defining the relationship in the CPII as measured by dominance and teachers' perception of the effectiveness of consultation as measured by the Behavior Intervention Rating Scale (Van Brock & Elliott, 1987 as cited in Grissom et al., 2003) as well as parents' perception of goal attainment as measured by Goal Attainment Scaling (Kiresuk et al., 1994 as cited in Grissom et al., 2003). Hence, there is some evidence that when the consultees exert control in the PII, it can negatively influence the outcome of consultation (Erchul, 1987; Erchul & Chewning, 1990; Grissom et al., 2003). Table 1 presents the investigations that were included in this review.

Table 1

Review of Empirical Evidence on Verbal Interactions in Behavioral Consultation

Authors	*Context*	*Sample size*	*Interviews included*	*Coding scheme*	*Results for patterns of control*	*Outcome measures*	*Relationship between patterns of control and outcome measures*
Erchul (1987)	BC	8	PII PAI TEI	RCCCS	C > T domineeringness. C > T dominance.	CEF WB	-*r* between T domineeringness and WB. Trend for +r between C dominance and CEF.
Martens et al. (1989)	BC	20	PII	CAR	C > T for % of elicitors.	PCQ	No *r* between % elicitors by C and T and PCQ
Erchul & Chewning (1990)	BC	10	PII PAI TEI	R-CCS	C > T for # of dominant bids. C > T for # of dominant-affiliative bids.	CEF WB WT	–*r* between # of dominant-affiliative bids by T and WB
Witt et al. (1991)	BC	8	PII PAI TEI	TF/TI	C > T for topic determination.	CEF WB WT	+*r* between topic determination by C in PII and TEI and WB

Authors	*Context*	*Sample size*	*Interviews included*	*Coding scheme*	*Results for patterns of control*	*Outcome measures*	*Relationship between patterns of control and outcome measures*
Martens et al. (1992)	BC	4	PII	CAR RCCCS R-C TF/TI	C > T for # and % of elicitors. C > T for domineeringness. C > T for dominance. C > T for # and % of dominant bids. C > T for # and % of topic initiation. C > T topic determination.	N/A	N/A
Hughes & Forest (1993)	BC+	17	PII	CAR	Verbalizations only coded for C.	CEF	*-r* between % of elicitors by C and CEF.
Erchul et al. (1995)	S-B	26	PII	R-CCS	C > T for # of dominant bids. C > T for # of dominant-affiliative bids.	CEF	Subsample of BC cases: *-r* between # of dominant bids by C and CEF *+r* between # of dominant-affiliative bids by C and CEF.

Authors	*Context*	*Sample size*	*Interviews included*	*Coding scheme*	*Results for patterns of control*	*Outcome measures*	*Relationship between patterns of control and outcome measures*
Gutkin (1996)	S-B	41	PII	CAR	C > T for % of elicitors	N/A	N/A
Hughes et al. (1997)	BC	41	PII	Q	Verbalizations only coded for C	CEF	+*r* between frequency of inference questions by C and CEF.
Sheridan (1997)	CBC	6	CPII	CAR	C > P & T for % of elicitors. P = T for % of elicitors.	N/A	N/A
Busse et al. (1999)	BC	37	PII PAI TEI	CAR	C > T for % of elicitors.	CEF GAS ES	No *r* between % of elicitors and outcome measures.
Erchul et al. (1997, 1999)	CBC & CBC+C	4	CPII CPAI CTEI	FRCCCS	C to T & C to P > T to C & P to C for domineeringness. C to T & C to P < T to C & P to C for dominance.	N/A	N/A

Authors	*Context*	*Sample size*	*Interviews included*	*Coding scheme*	*Results for patterns of control*	*Outcome measures*	*Relationship between patterns of control and outcome measures*
Grissom et al. (2003)	CBC	20	CPII	FRCCCS	C > T & P for domineeringness. C = T = P for dominance.	BIRS GAS CEF	-*r* P to C dominance and BIRS by T . -*r* P to C dominance and GAS by P. -*r* P to T dominance and GAS by P.

Context
BC = Behavioral Consultation (Bergan & Tombari, 1976)
BC + = Expanded Behavioral Consultation (Sheridan, 1992).
CBC = Conjoint Behavioral Consultation (Sheridan, 1997; Sheridan et al., 1996)
CBC + C = Conjoint Behavioral Consultation with a counselling emphasis (Erchul et al., 1997, 1999)
S-B = School-based consultation employing different recognized-models of consultation.

Interviews Included
(C)PII = (Conjoint) Problem Identification Interview
(C)PAI = (Conjoint) Problem Analysis Interview
(C)TEI = (Conjoint) Treatment Analysis Interview
N.S. = Not specified

Coding Schemes for Verbal Interactions
CAR = Consultant Analysis Record (Bergan & Tombari, 1975)
FRCCCS = Family Relational Communication Control Coding Scheme (Heatherington & Friedlander, 1987)
Q = Use of questions (Hughes et al., 1997)
R-CCS = Request-Centered Coding Scheme (Folger & Puck, 1976)
RCCCS = Relational Communication Control Coding (Rogers & Farace, 1975)
TF/TI = Topic Following / Topic Initiation (Tracey & Rey, 1984)

Outcome Measures

BIRS = Behavior Intervention Rating Scale (Van Brock & Elliott, 1987 as cited in Grissom et al., 2003). A 24-item instrument with 3 factors measuring treatment acceptability, effectiveness, and time to effect based on a 6-point rating scale, with higher scores indicating greater acceptability/effectiveness

CEF = Consultant Evaluation Form (Erchul, 1987). Assesses consultees' perceptions of consultant effectiveness based on 12 statements rated on a 7-point rating scale (1= strongly disagree, 7 = strongly agree)

GAS = Goal Attainment Scaling (Kiresuk et al., 1994 as cited in Grissom et al., 2003). A single-item rating that assesses consultees' perceptions of goal attainment. Ratings are on a 5-point rating scale ranging from –2 (situation got significantly worse) to +2 (situation got significantly better).

ES = Single-case data quantified as Effect Size (Busk & Serlin, 1992)

PCQ = Perceptions of Consultation Questionnaire (Martens et al., 1989). Assesses consultees' perceptions of the consultation interaction based on 35 items rated on a 6-point rating scale 1= strongly disagree, 6 = strongly agree)

WB = Consultant`s perception of Consultees' Willingness to collect Baseline (Erchul & Chewning, 1990). Consultants' rating of consultees' willingness to collect baseline data rated on a 7-point rating scale (1= did not participate at all, 7 = participated fully)

WT = Consultant`s perception of Consultees' Willingness to implement Treatment (Erchul & Chewning, 1990). Consultants' rating of consultees' willingness to implement the treatment plan rated on a 7-point rating scale (1= did not participate at all, 7 = participated fully)

Other

C = Consultants

P = Parents

T = teachers

As mentioned previously, one of the basic assumptions of CBC is that the relationship between the consultant, the parent(s) and the teacher(s) is a collaborative and interactive partnership with shared ownership and responsibility for solving problems (Sheridan, 1996). In view of the accumulating evidence that BC and CBC are processes primarily directed by consultants, questions have been raised about the collaborative nature of BC and CBC. This has been referred to as the "collaboration versus control debate" (Erchul 1999; Gutkin, 1999). Gutkin (1999) proposed that the evidence suggesting that consultants are more directive than consultees can be integrated in a model of consultation that views the consultant-consultee relationship as collaborative. As suggested by Gutkin, during consultation, the consultant and consultees have different roles and these different roles will influence their behaviors. For example, Erchul and Chewning (1990) proposed that behavioral consultation, as an indirect method of service delivery, depends to a large extent on the consultant's ability to influence the behavior of the consultees. Also, according to Sheridan and Kratochwill (1992), during CBC the consultant should actively direct the conversation to allow equal input from both the parent(s) and the teacher(s). These roles will require that the consultant exert directiveness, but it does not imply a lack of collaboration between the consultant and consultees. Sheridan, Meegan and Eagle (2002) used the Psychosocial Process Coding Scheme (PPCS) (Leaper, 1991) to investigate communicative processes in 19 initial CBC interviews. The PPCS categorizes speech acts on two dimensions: influence (direct vs. nondirect) and involvement (affiliative vs. distancing). They found that interactions during the initial interview of CBC are predominantly affiliative, a conversational style considered to be collaborative. It is important to note that as suggested by Schulte and Osborne (2003) the "collaboration versus control debate" needs to be interpreted in the context of the absence of a universally accepted definition of collaboration.

Critique. This body of research as provided us with accumulating evidence on patterns of verbal communication in behavioral consultation and their relationships with outcome. However, data was often obtained from a small sample of consultation cases, several authors reported sample sizes of 10 cases or less (i.e., Erchul, 1987; Erchul & Chewning, 1990; Erchul et al., 1999; Martens et al., 1992; Sheridan, 1997; Witt et al., 1991). Hence, limiting one's ability to generalize the results. Also, most researchers (i.e., Erchul et al., 1995; Grissom et al., 2003; Gutkin, 1996; Hughes & Forest, 1993; Hughes et al, 1997; Martens et al., 1992; Martens et al., 1989; Sheridan, 1997) investigated verbal interactions in the first interview of the consultation process (i.e. in the PII). Consequently, little is known about patterns of verbal interactions in subsequent consultation interviews.

Moreover, the research focus, with a few exceptions (e.g., Busse et al, 1999; Grissom et al., 2003) has been on examining the relationship between patterns of verbal interactions in consultation and perceptions of consultation processes and effectiveness as measures of outcome. Changes in the child's target behavior as measures of outcome have usually not been included.

Also, researchers often failed to report data on the extent to which the intervention was implemented as intended (i.e., treatment integrity). Treatment integrity is critical for researchers to be able to draw conclusions about the relationship between an intervention and its outcome (Sladeczek et al., 2003). As proposed by Erchul et al. (1995) treatment integrity data could be a key component in the relationship between patterns of verbal interactions and the outcome of consultation.

Expanding the literature on verbal interactions in CBC. To the author's knowledge Grissom, et al., (2003) is the only research group that has examined the relationship between patterns of control in CBC and intervention outcomes. Using time sampling as proposed by

Erchul and Schulte (1990), Grissom et al. analyzed 30-minute segments of twenty CPII. Considering the importance that is placed on verbal interactions to achieve the objectives of CBC we need to further explore communication patterns in CBC and their relationships with outcome.

To date, authors investigating patterns of control in BC (e.g., Erchul et al., 1995; Hughes et al., 1997; Hughes & DeForest, 1993; Martens et al., 1989) have mainly focused on one interview, namely the PII. By using this research methodology the researchers are assuming that patterns of control are stable between the interviews. However, the few researchers who have compared patterns of control in the PII, the PAI and the TEI (e.g., Erchul & Chewning, 1990; Witt et al., 1991) have found a shift in the influence of the different speaker between the PII, the PAI and the TEI. Erchul and Chewning (1990) found that participants' attempts at defining the relationship, as measured by dominant bids, were not parallel for consultants and teachers across the interviews. For the teachers the number of dominant bids was very similar across interviews. For consultants the number of dominant bids was stable from the PII to the PAI but there was a significant decrease in the TEI. Also, Witt et al. (1991) found that participants' success at defining the relationship, as measured by topic determination, was not parallel for consultants and teachers across the PII and the PAI. While mean level of topic determination for consultants was very similar across interviews, there was a significant increase in topic determination for the teachers from the PII to the PAI. These results suggest that patterns of leadership in BC are not a stable process that can be summarized by one interview. When reviewing the few studies that have examined verbal interactions within conjoint behavioral consultation, it is important to note that most studies had a sample too small to permit comparisons between interviews (i.e., Erchul et al, 1999; Sheridan, 1997), while Grissom et al. (2003) focused on the analysis of the CPII. To the author's knowledge differences in the patterns of leadership between interviews have not

been examined in the context of CBC. The CPAI is a critical component of the consultation process as it is during this interview that an intervention plan is established to modify the target behavior. Hence, it is essential to understand the patterns of relational control that unfold during this interview and to determine whether patterns of control during this interview are related to outcome.

After acknowledging the importance of identifying the patterns of relational communication in both the CPII and the CPAI, one needs to consider variability within interviews. As suggested by Kratochwill et al., (1995) as well Sheridan et al. (1996), BC and CBC are not homogeneous processes. Rather, they consist of four stages namely: the problem identification stage, the problem analysis stage, the treatment implementation stage, and the treatment (plan) evaluation stage. The three interviews that comprise CBC (CPII, CPAI and CTEI) provide a format for guiding consultants and consultees to meet the objectives of each stage (See Table 2 for the objectives of each stage of consultation). There are two main categories of objectives based on the primary goal of the objective, namely problem assessment objectives and procedural objectives (Kratochwill et al., 1995). The problem assessment objectives involve gathering precise information of the child's behavior, carefully analyzing the conditions under which the problems occur, and establishing some indications of the level of persistence or strength of the problems (Kratochwill et al., 1995). Procedural objectives involve decision-making regarding the procedures that are central to the behavioral consultation process such as establishing the procedure for data collection, for the intervention plan, as well as for the course of contacts between the consultant and the consultees. There is also a third category of objectives which is specific to the problem identification stage namely, goal specification objectives (Kratochwill et al., 1995). Goal specification objectives involve decision-making

regarding the selection of target behaviors and the goal of consultation. Hence, some objectives involve decision-making while others involve information gathering. To the authors' knowledge, differences in patterns of relational communication during the different processes used to meet the objectives have yet to be addressed in the literature.

Table 2

Objectives of the stages of CBC

Stages	*Objectives*	*Category of the objectives*	*Processes involved to reach the objectives*
Problem Identification	1. Select target behavior.	Goal specification	Decision-making
	2. Provide a tentative identification of behavior in terms of antecedents, situation, and consequent across settings.	Assessment of the problem	Information gathering
	3. Provide a tentative strength of the behavior across settings.	Assessment of the problem	Information gathering
	4. Discuss and reach agreement on a goal for behavior change across setting.	Goal specification	Decision-making
	5. Evaluate positive features of the child.	Assessment of the problem	Information gathering
	6. Evaluate existing procedures.	Assessment of the problem	Decision making

Stages	*Objectives*	*Category of the objectives*	*Processes involved to reach the objectives*
	7. Establish a procedure for collection of baseline data across settings.	Procedural	Decision-making
	8. Establish subsequent contacts.	Procedural	Decision-making
Problem Analysis	1. Evaluate the sufficiency and adequacy of baseline data across settings.	Assessment of the problem	Information gathering
	2. Conduct a tentative functional analysis of the behavior across settings.	Assessment of the problem	Information gathering
	3. Establish an intervention plan.	Procedural	Decision-making
	4. Reaffirm record-keeping procedures.	Procedural	Decision making
	5. Establish subsequent contact.	Procedural	Decision making
Treatment Evaluation	1. Determine if the goals have been reached across settings.	Assessment of the problem	Information gathering
	2. Evaluate the effectiveness of the treatment plan across settings.	Assessment of the problem	Information gathering
	3. Discuss continuation, modification or termination of the treatment plan.	Procedural	Decision-making

Areas of Inquiry and Predictions of the Present Study

The study was designed to compare the patterns of relational communication in CBC when different processes (decision-making and information gathering) are used to meet the objectives of consultation during the CPII and the CPAI, as well as to explore the relationship between patterns of relational communication and behavioral outcomes. The relational coding methodology was used to explore communication patterns in CBC.

As suggested by Heatherington and Friedlander (2004) the relational coding methodology is more reflective of the relationship between participants because it categorizes verbalizations relative to the content and intent of the message of the previous speaker. More specifically, the Family Relational Communication Control Coding System (FRCCCS) (Heatherington & Friedlander, 1987) was used in this research because. The FRCCCS is an empirically sound relational coding systems (Erchul et al., 1999; Grissom et al., 2003). It considers aspects unique to group communication, which is important in the context of CBC. In order to address the goals of this research, the following areas of inquiry were explored:

First Area of Inquiry: *The Patterns of Domineeringness that Unfold in the CPII and the CPAI*

Domineeringness is an individual measure of relational communication based on the FRCCCS that indicates a person's directiveness or attempt to influence or define a relationship (Courtright et al, 1979; Rogers-Millar & Millar, 1979).

Prediction 1. Grissom et al. (2003) reported that in the context of CBC, consultants exert more domineeringness than both parents and teachers in the CPII. Based on this finding, it was predicted that consultants would exert more domineeringness than both parents and teachers in the CPII as well as the CPAI.

Prediction 2. An exploration of the patterns of domineeringness as different processes are used to meet the different objectives of CBC was also proposed. As suggested earlier some objectives involve information gathering, while other objectives involve decision-making. Sheridan and Kratochwill (1992) suggested that there are situations where consultants need to actively direct the conversation, for example, when gathering information on the target behavior. However, Sheridan et al. (1996) proposed that consultants and consultees should have equal authority over decision-making. Accordingly, the following predictions were made:

a. Consultees would exert more domineeringness when meeting objectives that involve decision-making compare to when the objectives involve information gathering in both the CPII and the CPAI.

b. Consultants would exert more domineeringness when meeting objectives that involve information gathering compare to when the objectives involve decision-making in both the CPII and the CPAI

Second Area of Inquiry: The Patterns of Dominance that Unfold in the CPII and the CPAI

Dominance is a measure of relational communication based on the FRCCCS that may be considered an index of a person's demonstrated influence or success in controlling or defining a relationship in consultation (Courtright, et al., 1979; Rogers-Millar & Millar, 1979).

Prediction 3. Grissom et al. (2003) reported that in the context of CBC consultants, parents and teachers exert similar levels of dominance in the CPII. Hence, it was predicted that consultants, parents and teachers would exert similar levels of dominance in the CPII as well as in the CPAI.

Third Area of Inquiry: The Relationship Between Domineeringness and Dominance and Intervention Outcomes Measured Via Effect Sizes for Target Behaviors at Home and at School.

Prediction 4. It was predicted that the relationship between the outcome of consultation and consultants' attempts at defining relationship as well consultants' success at defining the relationship, would vary as a function of the process used to meet the objectives. More specifically, it was predicted that:

a. When meeting objectives involving information gathering, an increase in consultants' domineeringness and dominance in both the CPII and the CPAI would be associated with more improvement in the target behavior at home and at school.
b. When meeting objectives involving decision-making a decrease in consultants' domineeringness and dominance in both the CPII and the CPAI would be associated with more improvement in the target behavior home and at school.

Prediction 5. It was also predicted that the relationship between the outcome of consultation and consultees' attempts at defining the relationship as well as consultees' success at defining the relationship would vary as a function of the action used to meet the objectives of consultation. More specifically, it was predicted that:

a. When meeting objectives involving information gathering, a decrease in parents' and teachers' domineeringness and dominance in the CPII and the CPAI would be associated with more improvement in the target behavior at home and school respectively.
b. When meeting objectives involving decision-making, an increase in parents' and teachers' domineeringness and dominance in the CPII and the CPAI would be associated with more improvement in the target behavior at home and school respectively.

CHAPTER III

Method

Participants

The consultation cases included in this study were derived from a larger study that compared the efficacy of three models of service delivery: conjoint behavioral consultation (CBC), group videotape therapy with minimal consultation (GVT), and a self-administered videotape therapy (VT). Since the study was designed to explore the patterns of relational communication in CBC, the cases were selected from the CBC condition only.

The following criteria were used to select the CBC cases to be included in this investigation: The CPII, the CPAI and the CTEI needed to have been completed, and both parent(s) and teacher(s) needed to have been present during all the interviews (versus separate parent and teacher interviews with the consultant).

The CBC cases included in this investigation were also selected based on the integrity with which consultants completed the CBC interviews and the integrity with which consultees implemented the consultation-derived interventions. This was deemed necessary as this study investigated the relationship between processes in CBC and the outcome of CBC. The integrity with which consultants completed CBC interviews according to the structured protocol was assessed via reviews of audio recordings of all interviews using the CBC Objective Checklist (Sheridan et al., 1996). The interviews were coded by one of two independent, trained observers. For the case to be included in the analysis, the integrity of the CPII, the CPAI and the CTEI needed to exceed the recommended 85% competency level as recommended by Sheridan et al. (1996).

Integrity of consultees' implementation of the consultation-derived interventions across home and school was determined through parents' and teachers' self-report data on intervention plan worksheets. The skills presented in the intervention plan were rated on a scale of 1 (indicating that the consultee never used the skill as planned) to 10 (indicating that the consultee always used the skill as planned). For the case to be included for analysis, the integrity of consultees' implementation of the consultation-derived interventions needed to exceed 70%. This level was determined by using the integrity level reported in a large study that demonstrated the effectiveness of CBC (Sheridan et al., 2001). It is recognized that this measure of consultees' implementation of the consultation-derived interventions is liberal. It nevertheless yielded some data on parents' and teachers' adherence to the intervention plan, information that is not available in previously published studies of verbal communication in behavioral consultation.

Twenty-one cases from the larger study met all of the above criteria. This represented 62% of the 34 CBC cases eligible for the larger project. In three cases, parents and teachers withdrew from the program, and services were discontinued. In four cases, parents or teachers declined to participate and treatment services were conducted with teachers or parents only. In four cases, the interviews with parents and teachers were conducted separately. In two additional cases, the set level of integrity of consultees' implementation of the consultation-derived interventions was not met.

Children

Children participating in the larger study were recruited from daycares and elementary schools in a metropolitan area. A brochure and an information package were distributed to parents and teachers to inform them of the consultation services to be provided. Most referrals came from teachers or other staff in the preschools and elementary schools. Children were

identified by their parents and teachers as experiencing significant social skills deficits and/or externalizing problem behaviors both at home and at school.

To participate in the larger study children had to be between 3 and 8 years of age. Moreover children's profile on the Social Skills Ratings System (SSRS; Gresham & Elliott, 1990) completed by parents and teachers, the Child Behavior Checklist (CBCL; Achenbach, 1991a; Achenbach & Rescorla, 2001a, 2001b) completed by the parents and the Teacher Report Form (TRF; Achenbach, 1991b; Achenbach & Rescorla, 2001a, 2001b) completed by the teachers were used to determine eligibility to the larger study. The SSRS is a questionnaire designed to measure social skills and problem behaviors in children. SSRS results are reported as standard scores in which $M = 100$ and $SD = 15$. The CBCL and the TRF are instruments designed to quantify children's internalizing and externalizing behaviors. The results are reported as T scores with $M = 50$ and $SD = 10$. The psychometric properties of the SSRS (Gresham & Elliott, 1990), the CBCL (Achenbach, 1991a,; Achenbach & Rescorla, 2001a, 2001b) and the TRF (Achenbach, 1991b; Achenbach & Rescorla, 2001a, 2001b) indicate good reliability and validity with the criteria used to determine eligibility. More specifically, the following criteria were used to select the children who participated in the larger study: (a) a score of one standard deviation or more (15 points) below the mean (i.e., a score less than 85) in the social skills domain of the Social Skills Ratings System (parent or teacher version) (SSRS; Gresham & Elliott, 1990), (b) a score of one standard deviation or more (15 points) above the mean (i.e., a score greater than 115) in the problem behavior domain of the SSRS (parent or teacher version), (c) a score within the "clinical range" on the externalizing band of the Child Behavior Checklist (CBCL; Achenbach, 1991a; Achenbach & Rescorla, 2001a, 2001b) or (d) a score within the "clinical range" on the externalizing band of the Teacher Report Form (TRF; Achenbach, 1991b;

Achenbach & Rescorla, 2001a, 2001b). One of the indicators for the parent on the CBCL or the SSRS and one of the indicators for the teacher on the TRF or the SSRS had to be significant to be eligible for participation in the study.

Children's descriptive data (i.e., age of child, target behaviors and effect sizes) are presented in Table 3. The mean age of children prior to treatment was 5.13 years (SD = 1.3). All the children were males. Sixteen children were Caucasian. Eight of the children and their families had consulted with professionals for help with their child's behavior problems in the past, although none were receiving psychological services other than those provided during the period of the larger study. Two children had been previously diagnosed with oppositional defiant disorder and five with attention deficit hyperactivity disorder (ADHD). Two of the children with ADHD were taking a psychostimulant on a daily basis at the time of treatment.

Table 3

Children's Descriptive Data

Case	*Age**	*Target Behavior*	*ES Home*	*ES School*	*# Parents*	*# Teachers*
1	43	Noncompliance	-.30	.04	1	1
2	42	Noncompliance	-.73	-1.75	1	1
3	36	Noncompliance	-.56	1.02	2	2
4	67	Aggression	-.56	-.19	1	1
5	74	Socially Inappropriate	-6.50	-1.97	1	1
6	78	Socially Inappropriate	-.12	-.40	1	2
7	66	Noncompliance	-.51	-1.24	1	1
8	36	Aggression	-.68	-.66	2	1

9	70	Aggression	-.10	-.80	1	1
10	96	Impulsivity	-.39	-.52	1	1
11	67	Socially Inappropriate	-.84	-.91	2	2
12	47	Noncompliance	-.59	-.66	1	1
13	76	Noncompliance	-.67	-2.12	1	1
14	48	Noncompliance	-5.96	-2.67	1	1
15	65	Tantrumming	-.88	-.89	1	1
16	65	Aggression	-.42	-.56	1	2
17	63	Aggression	-.69	-.59	1	1
18	49	Noncompliance	-6.72	-1.78	1	1
19	62	Tantrumming	-.74	-.82	1	2
20	57	Noncompliance	-.67	.98	1	1
21	87	Aggression	-.31	-.57	1	1

* Pretreatment age expressed in months. ES = Effect Size. Effect sizes are positive when the mean frequency of the target behavior is greater during the treatment phase than during the baseline phase, and the effect sizes are negative when the frequency of the target behavior decreases from baseline to treatment. # Parent = number of parents who acted as consultees. # Teacher = number of teachers who acted as consultees.

Consultees

For the twenty-one cases CBC cases included in this study, 18 mothers and 3 mother/father couples acted as consultees. Nineteen parents were Caucasian. The majority of the participating parents were married mothers with one or two children. Most of these mothers were homemakers. This demographic information is presented in Table 4. The twenty-six teachers who acted as consultees were females, 21 of them were Caucasian. Eleven teachers (42%) taught

at the preschool level and fifteen teachers (58%) taught at the grade school level (regular education). No teachers reported prior experience with behavioral consultation.

Table 4

Mothers' Demographic Data

Item	*Number*	*Percentage of Sample*
Marital Status		
Married	15	71.4%
Divorced	5	23.8%
Separated	1	4.8%
Number of Children		
1	5	23.8%
2	12	57.1%
3	3	14.3%
4	1	4.8%
Employment		
Homemaker	13	61.9%
Administrative Assistant	3	14.3%
Teacher	2	9.5%
Nurse	2	9.5%
Pharmacist	1	4.8%

Consultants

The consultants were six advanced graduate students trained in conjoint behavioral consultation. All the consultants were Caucasian. Training included: (a) reading relevant consultation literature (e.g., Bergan & Kratochwill, 1990; Sheridan et al., 1996); (b) attending workshops or taking a course in consultation which reviewed the theory and process of behavioral consultation; (c) conducting role-plays of CPII and CPAI interviews until a minimum of 85% proficiency was reached using the CBC Objective Checklist (Sheridan et al., 1996); and (d) supervised case experience in providing consultation services to parents and teachers. A recognized expert in conjoint behavioral consultation with more than 10 years of experience in CBC provided the rating of proficiency on the CBC Objective Checklist and supervision. Cases were randomly assigned to consultants. Three consultants were assigned 4 cases and 3 consultants were assigned 3 cases.

Measures

Family Relational Communication Control Coding System (FRCCCS)

The Family Relational Communication Control Coding System (FRCCCS) (Heatherington & Friedlander, 1987) is a relational coding scheme used to analyze verbal interactions in small group interactions (i.e., situations where three or more individuals are present). The FRCCCS attempts to define the nature of the relationship that exists between speakers. As with other relational coding systems, the personal context in which a given message is delivered is the focus, rather than merely what is said. The FRCCCS is an extension of the Rogers and Farace (1975) Relational Communication Control Coding System (RCCCS), which was designed to analyze verbal interactions where there are two individuals present.

Verbatim transcripts of audiotaped interviews are required to use the FRCCCS. Within the FRCCCS the smallest unit is a message. Essentially each speaking turn constitutes at least one message (i.e., a speaking turn begins with person A's first word and continues until person B speaks). The coding of messages proceeds in three phases. In the first phase, each message is coded along three dimensions: Participants, format, and response mode. On the first dimension, *participants* the message is coded for two elements: the speaker and the target(s) of the message. The speaker is the person who addresses the message. The target(s) of the message is the person who is addressed by the speaker. In most cases, the target(s) can be identified from the content of the message. On the second dimension, *format* the grammatical or structural format of the message is coded. Each message receives one of the following codes to represent its grammatical or structural form: assertion, open question, closed question, successful talkover, unsuccessful talkover, noncomplete, intercept, or indistinguishable (see Table 5 for definition of terms for message format). On the third dimension, *response mode* the pragmatic function of the message, relative to the message(s) that preceded it, is coded. Each message receives one of the following codes to represent its response mode: support, nonsupport, extension, answer to open question, instruction, order, disconfirmation, topic change, answer to a closed question, or indistinguishable (see Table 6 for definition of terms for message response mode).

Table 5

Definitions of Terms for Message Format from the FRCCCS (Heatherington & Friedlander, 1987)

Message Format	*Description*
Assertion	Any complete referential statement expressed in either the declarative or imperative form (e.g., Mother: "It's time we went home".)
Open Question	A question that is open-ended to allow a wide range of possible

Message Format	*Description*
	answers (e.g., Consultant: "How did you find that experience?")
Closed Question	An "interviewing" type question, which limits the answer to a specific domain of responses (e.g., Consultant: "How old is he?)
Successful Talkover	A talkover is any verbal intervention made while another person is talking. Talkovers are considered successful if the speaker relinquishes the floor after the second speaker starts talking. (e.g., Consultant: "Were you able to keep track of...", *Mother: "It was hard, but I was able to do it everyday"*.)
Unsuccessful Talkover	This is any interruption or verbal intervention made while another person is speaking, and in which the first speaker continues talking. (e.g., Teacher: "I tell him to stop...", *Mother: "But he continues"*, Teacher: "but it can last forever".)
Noncomplete	A phrase or a incomplete sentence. If there is no verb, and the format of the message is not clear, it is considered noncomplete (e.g., "But, what I. . .")
Intercept	An intercept is an interruption of an ongoing dyadic exchange by a third person.
Indistinguishable	This code is used for any messages that are inaudible or so unintelligible that a format cannot be ascertained.

Table 6

Definitions of Terms Response Mode from the FRCCCS (Heatherington & Friedlander, 1987)

Response Mode	*Description*
Support	Any message that offers or seeks agreement or assistance (e.g., Consultant: "Am I doing OK?")
Nonsupport	Any message that opposes via resistance, rejection, disagreement, demand, challenge or sarcasm (e.g., Mother: "That's ridiculous".)
Extension	A message that continues the flow or the theme of the preceding messages. (e.g., Mother: "And that hurts me", *Consultant: "You fell hurt and sad"*).
Answer to Open Question	A response with knowledge, firmness, advice, opinion, or substance that is a reply to an open question. (e.g., Consultant: "Why did you seek help now?" *Mother: "I couldn't handle it anymore"*.)
Instruction	A statement that is a qualified suggestion (e.g., Consultant: " What do you think about using time out?")
Order	A statement of command, involving little or no explanation, usually in the imperative form (e.g., Consultant: "Tell me about your relationship with your son".)
Disconfirmation	A response that disregards the demands or requests of the previous message. (e.g., Consultant: "How frequent are the temper tantrums?" *Teacher: "When is our next meeting?"*)
Topic Change	Any message that has little continuity with the previous message but no response continuity was requested (e.g., Mother: he never complies with my requests, *Consultant: "Now let's talk about Joe's strengths"*.)

Response Mode	*Description*
Answer to Closed Question	An answer to a closed question that will typically be a straightforward limited message that responds only to the "interrogating" closed question that preceded it. (e.g., Consultant: "How old is Joe?" *Mother: "Seven".*)
Indistinguishable	This code is used for any messages that are inaudible or so unintelligible that a response mode cannot be ascertained.

In the second phase of the coding process a control code was assigned to each message. The control code is determined using a set of rules based on the format and the response mode of the message (see Table 7 for control code assignment). Each message is translated into one of three control codes: one-up (⇑), one-down (⇓), or one-across (⇒). A one-up message attempts to control the relationship; a one-down message accepts or requests someone else's relational definition; and a one-across message neither seeks to gain nor to give up control

Table 7

Control Code Assignment for the FRCCCS (Heatherington & Friedlander, 1987)

	Response Mode							
Format	Support	Nonsupport	Extension	Answer to Open Quest.	Answer to Closed Quest.	Instruction	Disconfirmation	Topic Shift
Assertion	⇓	⇑	⇒	⇑	⇓	⇑	⇑	⇑
Closed Question	⇓	⇑	⇑	⇑	⇑	0	⇑	⇑
Open Question	⇓	⇑	⇓	⇑	⇑	0	⇑	⇑
Successful Talkovers	⇓	⇑	⇑	⇑	⇑	⇑	⇑	⇑
Unsuccessful Talkovers	⇓	⇑	⇒	⇑	⇓	⇑	⇑	⇑
Incomplete	⇓	⇑	⇒	⇑	⇓	⇑	⇑	⇑
Intercept	⇓	⇑	⇑	⇑	⇑	⇑	0	⇑

0 = format/response mode combination that are not impossible. ⇑ = one-up. ⇓ = one-down. ⇒ = one-across.

The third phase serves to identify sequential patterns of interaction. Sequences in which messages between two speakers are exchanged contiguously are identified. Exchanges are considered contiguous only when one speaker addresses another and the target responds. Finally, the control codes of the messages are paired.

The FRCCCS demonstrates good reliability (Erchul et al., 1999; Grissom et al., 2003; Heatherington & Friedlander, 1990). Using the FRCCCS to analyze relational communication in CBC, Grissom et al. (2003) reported mean Cohen's kappa of .94 for message format categories and .84 for response mode categories, while Erchul et al. (1999) reported mean Cohen's kappa of .92 for message format categories and .91 for response mode categories. In their research on relational communication using the FRCCCS in the context of family therapy, Heatherington, Friedlander and the colleagues (Friedlander, Heatherington & Wildman, 1991; Heatherington & Friedlander, 1990) obtained a Cohen's kappa of .84 for the message format category and Cohen's kappas that have ranged from .66 to .78 for coding response mode categories. The original Relational Communication Control Coding System (RCCCS) (Rogers & Farace, 1975) has been used extensively in psychotherapy. Mean inter-rater agreement rates have been reported at 86% (Ericson & Rogers, 1973) and 92% (Mark, 1971), and mean Cohen's kappas at .76 (Tracey & Miars, 1986) and .90 (Heatherington, 1985). In a study of relational communication in school consultation, Erchul (1987) obtained mean Cohen's kappa for inter-rater reliability at .93 for message format and .85 for response mode categories.

Gaul, Simon, Friedlander, Cutler and Heatherington (1991) examined the validity of the FRCCCS. Twenty-five experienced family therapists rated specific verbal messages in constructed videotaped vignettes for attempt to control the relationship (i.e.,⇑ or one-up), acceptance or request someone else's relational definition (i.e., ⇓ or one-down) or as messages

that neither seek to gain nor to give up control (i.e., ⇒ or one-across). A *z*-test of Cohen's kappa (.66) was statistically significant, $p < .0001$, indicating that therapists' perceptions corresponded with the coding rules more closely than would be expected by chance alone. Other studies of the original RCCCS (Rogers & Farace, 1975) have provided evidence of the coding system's predictive and criterion-related validity (e.g., Ayres & Miura, 1981; Heatherington, 1988; O'Donnell-Trujillo, 1981). For example, Heatherington (1988) demonstrated that outside observers' perceptions of control dynamics generally matched those constructed by the researcher based on the RCCS. It should be noted that validity for both the FRCCCS and the RCCS has only been investigated within the context of marital communication or counseling relationships and not in the context of behavioral consultation.

Relational Communication

For this investigation, two separate relational communication summary variables were used, domineeringness and dominance. These variables were derived from the relational communication research conducted by Courtright et al. (1979) and Rogers-Millar and Millar (1979). Domineeringness for person A is the number of A's one-up messages divided by the total number of A's messages. Dominance for person A is the proportion of one-down messages given by person B to all of A's one-up messages.

Target Behaviors

Parents and teachers collected data by observing the child and by quantifying the observed behavior into a molecular measure (frequency count). Training on record-keeping procedures agreed upon by the consultees, was provided during the CPII and reviewed during the CPAI. The frequency of each occurrence of the target behavior was recorded during baseline and continued during the period of intervention for each child. All the consultees agreed to record

every occurrence of the target behavior on a daily basis. Separate effect sizes (ES, Busk & Serlin, 1992) evaluating the changes in target behavior were calculated for each child for the home and the school environments. The effect size measure takes into account the lack of independence in the data typical of successive observations of the same individual. The effect size measure can be calculated by dividing the difference between the baseline and the intervention phase means by the standard deviation for the baseline phase (Busk & Serlin, 1992). Where there is a lack of variance during the baseline phase, the standard deviation of the baseline cannot be calculated. Therefore, an aggregate measure of the standard deviation is calculated by pooling the data from the baseline and the treatment phases (Busk & Serlin, 1992).

Effect sizes (ES) are interpreted as standard deviation units expressed in the form of *z* scores (Gresham & Noel, 1993). Consequently, the meaning of the ES can be viewed as overlapping distributions and comparable percentiles (Kavale & Glass, 1984). Effect sizes are positive when the mean frequency of the target behavior is greater during the treatment phase than during the baseline phase, and the effect sizes are negative when the frequency of the target behavior decreases from baseline to treatment. Hence, an ES of +1.00 would indicate an increase in target behavior from baseline to intervention of one standard deviation (Kavale & Glass, 1984; Gresham & Noell, 1993). Conventionally, effect sizes of ± .40 are considered to be significant (Forness, Kavale, Blum & Lloyd, 1997).

In the home setting, effect sizes ranged from -6.72 to -.10, with a mean ES of –1.38 (*SD* = 2.11) (see Table 3 for the effect sizes for home for each child). At home, improvements in target behaviors were found in all the cases. Improvements were significant in 76% of the cases. In the school setting, effect sizes ranged from -2.12 to 1.02, with a mean ES of -.76 (*SD* = .83) (see Table 3 for the effect sizes for school for each child). At school, improvements in target

behaviors were reported in 86% of the cases. Improvements were significant in 80% of the cases. The relationship between the effect sizes for home and the effect sizes for school was tested using Pearson product-moment correlations. A significant positive correlation was found between the two measures of changes in children's target behaviors ($r = .60$, $p = .005$, two tailed). This provides some evidence that the effect sizes were a reliable indicator of the changes in target behaviors of the children included in this study.

Procedure

Conjoint Behavioral Consultation (CBC)

CBC with parents and teachers was conducted across the three interviews (i.e., CPII, CPAI, CTEI) as described previously. Each interview was audiotaped. During the CPAI, a parent version and a teacher version of self-help manuals (Kratochwill et al., 2003) were used to design the individual intervention plan. The intervention plan was based on the child's problem(s) identified during the CPII, the results of the screening materials (i.e., CBCL, TRF and SSRS) and observational data gathered by the parents and the teachers prior to the CPAI. The teaching of skills and review of relevant components of the intervention plan occurred during the CPAI and weekly contacts. The skills presented in the intervention plan and described in the manuals include (a) skills selection and goal setting activities, (b) peer activities, and (c) child management.

The purpose of the skill selection section is to increase children's social skills. The manual outlines several steps on selecting a behavior targeted for improvement as well as providing guidelines for practicing these skills. Through "peer activity", guidelines for selecting a peer activity are provided for the teacher and the parents to encourage their student/child to play with a peer at least once a week. Child management reviews child management techniques

such as differential attention, which includes rewarding positive behavior and ignoring misbehavior, instruction giving, and time away procedures.

Although the exact nature of the program varied with respect to the problem behavior targeted for change, intervention plans generally focused on the reduction of problem behaviors (e.g., aggression, noncompliance) using the strategies outlined in the intervention manuals. During the course of the intervention, revisions of the intervention plan were made when necessary.

Between the CPAI and the CTEI the consultant and consultees maintained weekly contact to review relevant components of the intervention plan, to establish treatment integrity and to collect data on the frequency of occurrence of the target behavior. The length of the intervention phase ranged from 7 to 12 weeks, with a mean of 9.8 weeks ($SD = 2.1$).

Coding

The audiotapes of CPII and CPAI were transcribed verbatim. The 42 interviews were transcribed in their entirety. A goal of the study was to evaluate the interaction between patterns of relational control in CBC and changes in children's target behavior. Because the CTEI takes place after the intervention phase of CBC is completed and all the data on changes in the child's target behavior have been collected, they were not examined.

Three research assistants' unaware of the hypotheses were trained to code the transcribed CPII and CPAI interviews using the FRCCCS. Training for the coders included reading the FRCCCS coding manual (Heatherington & Friedlander, 1987) and practicing with the samples included in the coding manual. Messages were also coded according to the process used to meet the objective of CBC (i.e., decision-making, information gathering or other).

Intercoder reliability was established using CPII and CPAI interviews not included in this research project. Based on previous studies (Erchul et al., 1999; Grissom et al., 2003), Cohen's kappa levels of .92 for participants, .92 for message format and .84 for message response mode for each pair of coders were achieved in the training phase. For the process used to meet the objective of CBC, Cohen's kappa was set at .80. Intercoder reliability was verified at specific intervals, each interval representing 20% of the material to be coded by each coder. Intercoder reliability was verified by having the raters code passages of interviews not included in this research project. When the intercoder reliability was not maintained, retraining occurred until the set intercoder reliability levels were re-established. Retraining was necessary after the first verification, because one rater did not maintain intercoder reliability with the other two raters for message response mode and process used to meet the objective of CBC. The passage initially coded by this rater was re-coded by another rater. The transcriptions of the 42 interviews were coded in their entirety.

Coding procedures followed those specified by Heatherington and Friedlander (1987) with a few exceptions. For this study, the verbal interactions between consultants, parents, and teachers were compared. Hence, only these three categories were used for coding the speaker and the target(s) of the message. When more than one parent or teacher was present during the interviews, only the messages from the parents and teachers who primarily delivered the intervention were included in the analysis. In three cases both the mother and the father participated in the interview, but it is the mother who primarily delivered the intervention it these three cases (see Table 3). In five cases two teachers participated in the interview (see Table 3). The messages of the teacher with whom the child spend the majority of the time (more than 75% of the time in all five cases) were included in the analyses.

Some modifications to the original coding system were also implemented based on the work of Erchul et al. (1999) and Grissom et al. (2003) who have used the FRCCCS in the context of CBC. Firstly, the original category of 'unsuccessful talkover" was eliminated, because Rogers and Farace (1975) did not use this category in their original research (Erchul et al., 1999; Grissom et al., 2003). Secondly, open question – extension messages were assigned a one-up control code rather than a one-down control code. Since questions represent an attempt to control the conversation, closed question – extensions are better represented by a one-up message (Erchul et al., 1999; Grissom et al., 2003). Thirdly, when pairing messages for the purpose of determining dominance scores, coders considered only up to four previous speaking turns as the first message in the paired-message exchange (Erchul et al., 1999; Grissom et al., 2003). Heatherington and Friedlander (1987) instead required the coder to rely on contextual cues to pair contiguous messages, however widely separated in the interview they may be. More than 98% of the messages exchanged between consultants, mothers and the teachers who primarily delivered the intervention were assigned a control code. Over 27,588 messages were included in the analysis.

Finally, Erchul et al. (1999) and Grissom et al. (2003) investigated patterns of relational communication according to speakers and targets (e.g., consultants to teachers, consultants to parents). This investigation focused on the patterns of relational communication in decision-making versus information gathering in the CPII as well as the CPAI. Consequently, the sample size did not permit to also consider the target of the message as an independent variable.

CHAPTER IV

Results

Data analysis occurred on two levels. Firstly, statistical analyses were used to compare consultants, mothers and teachers on the measures domineeringness and dominance computed during decision-making and information gathering in both the CPII and the CPAI. Secondly, statistical analysis were used to explore the relationship between these measures of relational communication and the outcome of consultation at home and at school measured by effect size statistics. The results are presented for each area of inquiry.

First Area of Inquiry: The Patterns of Domineeringness that unfold in the CPII and the CPAI

Consultants', mothers' and teachers' domineeringness scores computed during decision-making and information gathering in both the CPII and the CPAI were compared. Domineeringness scores range from 0 to 1, indicating the proportion of messages made by a speaker that were one-up messages. Table 8 presents mean domineeringness scores by speaker as a function of process (decision-making and information gathering) and interview (CPII and CPAI).

Table 8

Mean Domineeringness Scores by Speakers as a Function of Process and Interview

	Consultant		Mother		Teacher	
Interview	D-M	I G	D-M	I G	D-M	I G
CPII	.50 (.08)	.53 (.09)	.19 (.07)	.18 (.07)	.24 (.05)	.17 (.05)
CPAI	.44 (.07)	.42 (.07)	.19 (.10)	.18 (.11)	.24 (.04)	.18 (.10)

Note. Numbers in parentheses are standard deviations. D-M = Decision-making. I G = Information Gathering

Differences in the domineeringness scores of consultants, mothers and teachers were analyzed with a 3 x 2 x 2 (Speaker x Process x Interview) mixed analysis of variance with process (decision-making and information gathering) and interview (CPII and CPAI) serving as repeated measures (see Table 9).

Table 9

Analysis of Variance for Domineeringness

Source	*df*	*F*	η^2	*P*
		Between subjects		
Speaker (S)	2	137.50	.96	.000
Error (S)	60	(.016)		
		Within subjects		
Interview (I)	1	2.03	.03	.16
Process (P)	1	28.40	.32	.000
I x S	2	12.85	.32	.000
P x S	2	13.67	.31	.000
I x P	1	4.45	.07	.04
I x P x S	2	.34	.01	.72
Error (I)	60	(.006)		
Error (P)	60	(.002)		
Error (I x P)	60	(.003)		

Note. Values in parentheses represent mean square errors

Prediction 1: Differences in Domineeringness Between Consultants, Mothers and Teachers

It was predicted that consultants would exert more domineeringness than both parents and teachers in the CPII as well as the CPAI. A significant speaker main effect was found. As predicted, in both the CPII and the CPAI, consultants exerted more domineeringness than mothers during decision-making ($t(20) = 13.71$, $p = .0001$ for the CPII and $t(20) = 6.28$, $p = .0001$ for the CPAI) and during information gathering ($t(20) = 10.82$, $p = .0001$ for the CPII and $t(20) = 7.71$, $p = .0001$ for the CPAI). Consultants were also more domineering than teachers in both interviews during decision-making ($t(20) = 12.92$, $p = .0001$ for the CPII and $t(20) = 8.38$, $p = .0001$ for the CPAI) and during information gathering ($t(20) = 14.10$, $p = .0001$ for the CPII and $t(20) = 7.59$, $p = .0001$ for the CPAI). No significant differences in domineeringness were found between mothers and teachers in either interview.

Prediction 2: Comparing Domineeringness During Decision-making to that During Information Gathering

It was predicted that consultees would exert more domineeringness when the process involved decision-making compared to when the process involved information gathering in both the CPII and the CPAI. It was also predicted that consultants would exert more domineeringness during information gathering than decision-making. A significant interaction was found between speaker and process. As predicted, teachers were more domineering during decision-making than during information gathering in both the CPII $t(20) = 14.02$, $p = .0001$ and the CPAI $t(20) = 5.94$, $p = .002$. However, contrary to the original prediction, consultants and mothers obtained similar domineeringness scores during decision-making and information gathering in both the CPII and the CPAI.

Differences in Domineeringness Between the CPII and the CPAI

A significant interaction was noted between speaker and interview. There was a significant decrease in consultants' domineeringness from the CPII to the CPAI during both decision-making, $t(20) = 2.62$, $p = .01$ and information gathering $t(20) = 3.69$, $p = .002$. However, mothers and teachers obtained similar domineeringness scores in both interviews.

What Kinds of Messages do Consultants, Mothers, and Teachers Use to Exert Domineeringness?

Domineeringness indicates the proportion of messages made by a speaker that are one-up messages. A message is assigned a one-up code based on its format and response mode (see Table 7). Assertion-instruction, assertion-topic change, successful talkover – extension, successful talkover – answer to closed question, closed question – extension and closed question – topic change represented more than 80% of the one-up messages made by consultants, mothers and teachers. Table 10 presents the mean percentages of one-up messages represented by these 6 kinds of one-up messages.

Table 10

Mean Percentages of Format and Response Mode Combinations that Yielded a One-Up Code as a Function of Speaker and Interview.

	Consultants		Mothers		Teachers	
Format – Response Mode	CPII	CPAI	CPII	CPAI	CPII	CPAI
Assertion – Instruction	7.8	31.9	.8	2.8	.2	2
	(4.3)	(14.8)	(1.4)	(4.7)	(.6)	(2.4)
Assertion - Topic change	14.3	15.4	12.4	11.7	12.7	8.1
	(4)	(10.5)	(6.3)	(9.1)	(6.3)	(3.3)
Successful talkover – Extension	13.8	13.8	37.5	53.7	44	44.5

	(5)	(6.4)	(7.2)	(17.3)	(8.5)	(8.9)
Successful talkover – Answer to	.6	.6	14.4	4.7	10.6	5.4
closed question	(.6)	(.7)	(7)	(3.9)	(10.8)	(4)
Closed question – Extension	40	25.2	14.5	15.5	14.7	24.6
	(9.4)	(8.5)	(11.4)	(12)	(5.5)	(11.3)
Closed question – Topic change	17.6	6.5	3.1	1.9	2.6	2.4
	(6.5)	(4.3)	(2.9)	(2.3)	(2.6)	(2.5)

Note: Numbers in parentheses are standard deviations

The effect of speaker and interview on the six most frequent kinds of one-up messages were analyzed via a 3 x 2 (Speaker x Interview) mixed multivariate analysis of variance with interview (CPII and CPAI) serving as a repeated measure (see Table 11).

Table 11

MANOVA and ANOVA Results for the Six Most Frequent kinds of One-up Messages.

Measure	Source	*df*	*F*	η^2	*p*
MANOVA	Speaker	12[b]	17.63	.66	.000
	Interview	6[b]	29.96	.77	.000
	S x I	12[b]	13.59	.60	.000
Assertion – Instruction	Speaker (S)	2	111.87	.79	.000
	Error (S)	60	(42.22)		
	Interview (I)	1	57.47	.49	.000
	S x I	2	36.3	.55	.000
	Error (1)	60	(47.42)		
Assertion – Topic Change	Speaker (S)	2	3.32	.1	.04

	Error (S)	60	(65.73)		
	Interview (I)	1	1.84	.03	.18
	S x I	2	2.56	.08	.09
	Error (1)	60	(34.73)		
Successful Talkover – Extension	Speaker (S)	2	102.63	.77	.000
	Error (S)	60	(128.75)		
	Interview (I)	1	19.35	.24	.000
	S x I	2	18.32	.38	.000
	Error (1)	60	(62.50)		
Successful Talkover – Ans. to Closed Quest.	Speaker (S)	2	19.27	.39	.000
	Error (S)	60	(46.39)		
	Interview (I)	1	34.66	.37	.000
	S x I	2	10.29	.26	.000
	Error (1)	60	(19,67)		
Closed Question – Extension	Speaker (S)	2	27.93	.48	.000
	Error (S)	60	(119.82)		
	Interview (I)	1	1.59	.03	.21
	S x I	2	21.2	.41	.000
	Error (1)	60	(78.52)		
Closed Question – Topic Change	Speaker (S)	2	88.43	.75	.000
	Error (S)	60	(14.54)		
	Interview (I)	1	38.11	.39	.000
	S x I	2	25.74	.46	.000

	Error (1)	60	(14.62)

Note. Values in parentheses represent mean square errors. [a]Based on Wilks' Lambda [b]Hypothesis df

A significant speaker by interview interaction was found for the all the format –response mode combinations representing the majority of one-up messages except for assertion – topic changes. For assertion – topic changes, the speaker main effect was significant.

When comparing consultants to consultees, it was found that in both interviews consultants made a significantly higher proportion of assertion – instruction and closed question – topic change messages than mothers for both the CPII $t(20) = 6,69$, $p = .0001$ and $t(20) = 12.22$, $p = .0001$ and the CPAI $t(20) = 9.68$, $p = .001$ and $t(20) = 4.87$ $p = .0001$. Consultants also used assertion – instructions and closed question – topic changes with a significantly higher proportion than teachers in both the CPII ($t(20) = 8.15$, $p = .0001$ and $t(20) = 13.93$, $p = .0001$, respectively) and in the CPAI ($t(20) = 9.5$, $p = .0001$ and $t(20) = 4.31$, $p = .0001$, respectively). Also, in the CPII, consultants made a significantly higher proportion of closed question - extensions than mothers $t(20) = 15.27$, $p = .0001$ and teachers t (20) = 9.74 $p = .001$.

Moreover, in both interviews mothers made a significantly higher proportion of successful talkover – extensions and successful talkover – answer to closed questions than consultants ($t(20) = 13.24$, $p = .0001$ and $t(20) = 8.05$, $p = .0001$, respectively) in the CPII and in the CPAI ($t(20) = 11.08$, $p = .0001$ and $t(20) = 4.58$, $p = .001$, respectively). Teachers also used successful talkover – extensions and successful talkover – answer to closed questions with a significantly higher proportion than consultants in the CPII ($t(20) = 12.84$, $p = .0001$ and $t(20) = 4.17$, $p = .001$, respectively) as well as in the CPAI ($t(20) = 14.37$, $p = .0001$ and $t(20) = 6.35$, $p = .0001$, respectively). Finally, during the CPAI teachers used closed question – extensions with a significantly higher proportion than mothers $t(20) = 3.98$, $p = .0001$.

When looking at differences between the CPII and the CPAI in the kind of one-up messages made by consultants, there was a significant decrease in the proportion of one-up messages that were closed question - extensions $t(20) = 6.97, p = .0001$ and closed question – topic changes $t(20) = 6.5, p = .0001$ and a significant increase in the proportion of one-up messages that were assertion – instructions $t(20) = 6.85, p = .0001$. For teachers, there was a significant increase in the proportion of closed question – extensions from the CPII to the CPAI $t(20) = 4.02, p = .0001$.

Second Area of Inquiry: The Patterns of Dominance that Unfold in the CPII and the CPAI

Consultants', mothers', and teachers' dominance scores computed during decision-making and information gathering in both the CPII and the CPAI were compared. Dominance scores range from 0 to 1, indicating the proportion of one-up messages made by a speaker that were responded to by a one-down message by the target. Table 12 presents the mean dominance scores by speaker as a function of process (decision-making and information gathering) and interview (CPII and CPAI).

Table 12

Mean Dominance Scores by Speaker as a Function of Process and Interview

	Consultant		Mother		Teacher	
Interview	D-M	IG	D-M	IG	D-M	IG
CPII	.49 (.12)	.54 (.10)	.21 (.11)	.17 (.10)	.25 (.08)	.31 (.11)
CPAI	.35 (.08)	.49 (.14)	.32 (.09)	.11 (.11)	.31 (.17)	.21 (.09)

Note. Numbers in parentheses are standard deviations. D-M = Decision-making. IG = Information gathering

Differences in dominance scores were analyzed with a 3 x 2 x 2 (Speaker x Interview x Situations) mixed analysis of variance with process (decision-making and information gathering) and interview (CPII and CPAI) serving as repeated measures (see table 13).

Table 13

Analysis of Variance for Dominance Scores

Source	*df*	*F*	η^2	*p*
		Between subjects		
Speaker (S)	2	89.69	.75	.000
Error (S)	60	(.02)		
		Within subjects		
Interview (I)	1	7.74	.11	.007
Process (P)	1	.851	.01	.36
I x S	2	9.55	.24	.000
P x S	2	19.96	.40	.000
I x P	1	7.9	.12	.007
I x P x S	2	11.99	.29	.000
Error (I)	60	(.009)		
Error (C)	60	(.01)		

Note. Values in parentheses represent mean square errors

Prediction 3: Differences in Dominance Between Consultants, Mothers and Teachers

It was predicted that consultants, parents and teachers would exert similar levels of dominance in the CPII as well as in the CPAI. A significant interaction was found between speaker, situation and interview. Contrary to prediction, in the CPII consultants were more dominant than mothers ($t(20) = 9.67$, $p = .0001$) and teachers ($t(20) = 6.7$, $p = .0001$) during decision-making and during information gathering ($t(20) = 12.25$, $p = .0001$ vs. mothers and $t(20) = 4.8$, $p = .001$ vs. teachers). Teachers also exerted more dominance than mothers during information gathering in the CPII $t(20) = 5.94$, $p = .0001$. In the CPAI, consultants were more

dominant than mothers ($t(20) = 16.26, p = .0001$) and teachers ($t(20) = 5.92, p = .0001$) during information gathering. Teachers were also more dominant than mothers during information gathering in the CPAI $t(20) = 3.36, p = .003$. However, in the CPAI, consultants, mothers and teachers obtained similar dominance scores during decision-making.

Comparing Dominance During Decision-Making to that During Information Gathering

In the CPAI, consultants were significantly more dominant during information gathering than during decision-making $t(20) = 6.69, p = .0001$. Also during the CPAI, mothers were more dominant during decision-making than during information gathering $t(20) = 6.31, p = .0001$.

Differences in Dominance Between the CPII and the CPAI

Teachers were significantly more dominant during information gathering in the CPII than during information gathering in the CPAI ($t(20) = 5.48, p = .0001$). While mothers were more dominant during decision-making in the CPAI than during decision-making in the CPII $t(20) = 3.01, p = .007$).

Third Area of Inquiry: The Relationship Between Domineeringness and Dominance and Intervention Outcomes Measured Via Effect Size for Target Behavior at Home and at School.

The relationship between effects sizes for changes in children's target behaviors at home and at school, and consultants', mothers' and teachers' domineeringness and dominance computed during decision-making and information gathering in both the CPII and the CPAI was tested using Pearson product-moment correlations (see Table 14). Due to the multiple comparisons, the α level was set at .002 using Bonferonni's correction (Stevens, 1996).

It is important to remember that positive effect sizes result when there are higher incidences of the target behavior during the intervention phase than during the baseline phase. Conversely, negative effect sizes are generated when there are higher incidences of behaviors

reported during the baseline than during the intervention phase. Hence, negative correlations between measures of relational communication and effect sizes indicate that an increase in the measure of relational communication is associated with lower effect sizes (i.e., more improvement in the target behavior). On the other hand, positive correlations indicate that an increase in the measure of relational communication is associated with a higher effect sizes (i.e., less improvement in the target behavior).

Table 14

Correlations Between Domineeringness as well as Dominance Scores and Effect Sizes.

	Domineeringness				Dominance			
	CPII		CPAI		CPII		CPAI	
	D-M	IG	D-M	IG	D-M	IG	D-M	IG
Consultants								
ES Home	.09	-.57*	-.18	-.26	.04	.15	-.03	-.65*
ES School	.29	-.40	.07	.18	.16	.42	.31	-.14
Mothers								
ES Home	-.14	-.04	.62*	.37	.22	.72*	-.13	-.41
Teachers								
ES School	.08	.26	-.15	.39	-.57*	.08	.22	.41

note. D-M = Decision-making Situations, I G = Information Gathering Situations. *p < .002 (2-tailed)

Prediction 4: The Relationship Between Consultants' Domineeringness and Dominance and the Outcome of Consultation.

It was predicted that an increase in consultants' domineeringness and dominance during information gathering and a decrease in consultants' domineeringness and dominance during decision-making would be associated with better outcome. These predictions were not supported.

However, some significant relationships were found between consultants' domineeringness and dominance and the outcome of consultation at home and at school.

It was found that during the CPII, an increase in consultants' domineeringness during information gathering was associated with greater improvements in the target behaviors at home. Also, during the CPAI, an increase in consultants' dominance during information gathering was associated with better outcome for the target behaviors at home.

Prediction 5: The Relationship Between Consultees' Domineeringness and Dominance and the Outcome of Consultation.

It was predicted that a decrease in consultees' domineeringness and dominance during information gathering and an increase in consultees' domineeringness and dominance during decision-making would be associated with better outcome. These predictions were not supported. However, some significant correlations were found between consultees' domineeringness and dominance and the outcome of consultation of home and at school.

It was found that during the CPII, an increase in teachers' dominance during decision-making was associated with greater improvements in the target behaviors at school, while a decrease in mothers' dominance during information gathering was associated with greater improvements in the target behaviors at home. Also, during the CPAI, a decrease in mothers' domineeringness during decision-making was associated with better outcome for the target behaviors at home.

CHAPTER V

Discussion

Through this research, the patterns of relational communication that unfolded during CBC for children with behavioral problems were explored. Of particular interest were the differences between consultants, teachers and mothers in domineeringness and dominance during decision-making and information gathering over the course of the CPII and the CPAI. This study was also designed to investigate the relationships between improvements in the behaviors of children at the outcome of CBC and patterns of relational communication.

Domineeringness

Domineeringness reflects the kinds of messages made by a speaker. The more a speaker makes statements to exert some control, the more they are considered to be domineering. By comparing domineeringness scores of consultants, mothers, and teachers, it was found that, as predicted, consultants are more domineering than consultees during the CPII and the CPAI. This is consistent with the results of previous research on verbal communication in BC and CBC where consultants were found to be more directive than consultees (e.g., Busse et al., 1999; Grissom et al., 2003). These results support the idea proposed by Erchul and Chewning (1990) that behavioral consultation, as an indirect method of service delivery, depends to a large extent on the consultant's ability to influence the behavior of consultees. The findings also support Sheridan and Kratochwill's (1992) proposition that during CBC the consultant should actively direct the conversation to allow equal input from both the parent(s) and the teacher(s). Moreover, the consultants need to direct the conversation to meet the objectives of the CBC interviews, which include selecting the target behavior, conducting a functional analysis of the behavior, and establishing an intervention plan.

One interesting finding from this research is that there is a change in consultants' domineeringness over the course of CBC. Consultants are significantly less directive in the CPAI than in the CPII. Two explanations can be put forth to explain this finding. It is possible that the specific tasks and objectives of each interview influence the level of directiveness of consultants. For example, one of the objectives of the CPII that involve decision-making is establishing record-keeping procedures. Parents and teachers may not be familiar with these procedures; hence consultants' may need to be more directive to meet this objective. It is also important to consider that with the increased contact time with the teachers and the mothers, consultants may have felt more at ease in relinquishing their leadership role during the CPAI.

As predicted, teachers were significantly more domineering during decision-making than during information gathering in both the CPII and the CPAI. As suggested by Sheridan (1996) consultant and consultees should have equal authority during decision-making. It appears that through their training and through prior interactions with other professionals specializing in children's issues, teachers are aware of the importance of their involvement during decision-making. Nonetheless, consultants remained the most domineering speakers during decision-making and during information gathering. As suggested previously, consultants may need to play this role to obtain equal input from both the parent(s) and the teacher(s) as well as to meet the objectives of CBC regardless of the process (i.e., decision-making versus information gathering) used to meet the objective.

There are also interesting findings regarding the differences in the kinds of messages used by consultants, mothers and teachers to exert domineeringness. During the CPII, close to 60% of the messages used by consultants to exert domineeringness were closed questions. Closed questions are defined as: "interviewing type questions which limit the answer to a

specific domain of responses" (Heatherington & Friedlander, 1987, p. 23). During the CPAI, asking closed questions was still an important intervention through which consultants directed the process (closed questions represented more than 30% of the one-up messages emitted by the consultants during the CPAI). However, during the CPAI, consultants also exerted domineeringness by giving instructions (assertion-instructions represented more than 30% of the one-up messages of the consultants during the CPAI). Instructions are defined as: " A statement that is a qualified suggestion" (Heatherington & Friedlander, 1987, p. 30). The differences in the kinds of messages used by consultants in the CPII and the CPAI to exert control is consistent with the different objectives of the two interviews. One of the central goals of the CPII is to define the problem(s) to be targeted by the intervention (Sheridan et al., 1996). To that effect, the situational conditions surrounding the occurrence of the identified problem are described, the severity and frequency of the problem are identified (Sheridan et al., 1996), hence, consultants must ask closed questions to obtain this information. During the CPAI, closed questions may be used to explore the strength of the problem behavior using the baseline data and the variables that might be contributing to the problem behavior are identified and confirmed (Sheridan et al., 1996). While these objectives require that the consultants ask closed questions to gather this information, it is during the CPAI the intervention plan is also generated. During CBC, consultants are often viewed as having expert knowledge regarding behavioral management strategies, thus, it can be speculated that consultants use instructions as a way to provide suggestions to mothers and teachers about the strategies they could use to reduce the frequency of the child's behavioral problems.

The messages used by mothers and teachers to exert domineeringness, however, are largely defined by successful talkover. These represented more than 50% of the one-up messages

of the consultees in both the CPII and the CPAI. A talkover is any verbal intervention made while another person is talking (Heatherington & Friedlander (1987) and is considered successful if the speaker relinquishes the floor after the second speaker starts talking" (p.20). Hence, consultants and consultees appear to exert domineeringness in different ways. In this study, consultants exerted domineeringness primarily by asking closed questions for information gathering and by indicating expertise in behavioral management by providing strategies to parents and teachers. On the other hand, consultees exerted directiveness in the way they interacted during the interview. Talkovers may reflect engagement in the consultation process and consultees' eagerness to share their ideas. Because talkovers involve interrupting, however, they may also interfere with the communication process of CBC.

It is also interesting to note that from the CPII to the CPAI there was a significant increase in teachers' use of closed questions, more specifically the increase was noted for the use of closed question – extensions. Closed question – extensions are interviewing type questions that limit the answer to a specific domain of responses and continue the theme of the preceding message (Heatherington & Friedlander, 1987). In the CPAI, teachers' use of closed question – extensions was significantly higher than mothers' and was similar to that of consultants'. One explanation of this finding is that by the time the CPAI was held, teachers felt more able to exert a leadership role during the interview. The consultation process has many pedagogical aspects. By virtue of their professional training and experience, teachers may more readily master the process than parents. It is also possible that during the design of the intervention plan, teachers ask closed questions to clarify the strategies suggested by the consultants in order to consolidate their professional understanding.

Dominance

While domineeringness is communication with the intent to direct the other, dominance reflects how the other receives a speaker's directiveness. When directiveness is received with support, the speaker is considered to be more dominant. In a sample of four cases, Erchul et al. (1997, 1999) obtained some evidence that during CBC parents and teachers are more successful in their attempts to be directive than consultants. Two of the doctoral students who served as consultants had obtained training in behavioral consultation with a counseling emphasis (Erchul et al., 1997). By examining the transcripts of these consultants, Erchul et al. (1997) found that these two consultants were highly supportive, which could explain the higher dominance scores of the consultees. With a larger sample, Grissom et al., (2003) found that in the CPII consultants, parents and teachers were equally dominant. However, this investigation focused on a segment of the CPII at the beginning of this interview.

During the present investigation, it was found that in general, consultants were significantly more dominant than mothers and teachers. This is consistent with the results of other investigators who have found that in the context of teacher-only consultation, consultants are more successful than consultees in their attempts at defining the relationship (Erchul, 1987; Marten et al., 1992; Witt et al., 1991). One explanation for these results is that consultees are more likely to support consultants because they perceive them as experts. Moreover, as indicated previously, asking closed questions was an important intervention through which consultants directed the process during both interviews. It could be proposed that the use of closed questions is more likely to prompt a response which will be coded as an assertion – answer to closed question, a type of message that is assigned a one-down control code. This could have contributed to the higher dominance score of consultants.

During the present investigation it was also found that in general teachers were significantly more successful than mothers in their attempts to be directive during information gathering. The hypothesis previously stated to explain consultants' dominance could also be proposed here. It is possible that mothers support teachers because they also perceive them as experts. In order to test these hypotheses it would be necessary to determine who responds to teachers with support (mothers vs. consultants). Also teachers' increase use of closed questions in the CPAI could contribute to their higher dominance score during that interview.

In the present investigation there was one specific situation where consultants, mothers and teachers were found to be equally dominant or successful in their attempts to be directive. During decision-making in the CPAI all speakers received equal support from the other speakers. During the CPAI, the purpose of decision-making is to generate the intervention plan. It appears that when the intervention plan is generated, the input from all speakers is at least supported equally. In fact, these results may suggest that when the intervention plan is generated, the input from consultees is more valued. Although consultants were still significantly more directive than consultees during this situation, the dominance or receiving of support for directive message was equivalent. Consultants emitted more bids for dominance that were not supported, than mothers and teachers did, during decision-making in the CPAI. This may be a function of the consultees' superior knowledge of the child which is supported by the other speakers, during the shaping of the intervention plan.

The Relationship between Domineeringness and Dominance and Changes in Children's Target Behaviors

It was predicted that an increase in consultants' domineeringness and dominance during information gathering and a decrease in consultants' domineeringness and dominance during

decision-making would be associated with better outcome. It was also predicted that a decrease in consultees' domineeringness and dominance during information gathering and an increase in consultees' domineeringness and dominance during decision-making would be associated with better outcome. Although these predictions were not supported, significant associations were found between consultants', mothers' and teachers' domineeringness and dominance and the outcome of consultation at home and at school. It is essential to keep in mind the correlational nature of these associations.

Only cases that demonstrated adequate integrity of consultees' implementation of the consultation-derived interventions where included in the analyses. The significant associations that were found between consultants', mothers' and teachers' domineeringness and dominance and the outcome of consultation at home and at school, are probably not due to variations in the implementation of the intervention plan. The results also need to be interpreted in the context that all the children that were included in this study demonstrated some improvement in their target behavior at least in one setting. However, the extent of the improvement varied between children as the effect sizes demonstrating improvements ranged from -6.72 to -.10.

It was found that during the CPII, an increase in consultants' domineeringness during information gathering was associated with greater improvements in the target behaviors at home. During the CPII information gathering is used to define the problem to be targeted by the intervention. Problem identification is a critical component of successful consultation (Bergan & Tombari, 1976). Consultants' directivenes during information gathering may contribute to more adequate problem identification leading to behavioral improvements. As directiveness was related to improvements in the target behaviors at home but not at school, mothers may be listening and acting on consultants' domineeringness more than teachers are. The professional

training of teachers provides them with an awareness of other issues pertaining to children's behavioral problems and interventions. These may interfere with the impact of consultants' directiveness. Other investigators have also found a positive relationship between consultants' directiveness in the CPII and the outcome of consultation (e.g., Erchul et al, 1995; Hughes et al., 1997).

Consultants' dominance during information gathering in the CPAI was also significantly related to improvements in the target behavior at home. During the CPAI, information gathering is used to confirm the target behavior as well as the variables that might be contributing to the problem behavior. Consultees' support of the consultant in this process may help to clearly identify and define the target behavior, and contribute to improving outcomes. Again, mothers appear to be more sensitive to consultants' dominance, as consultants' dominance during information gathering in the CPAI was related to improvements in the target behaviors at home but not at school.

Some consultees' relational communication styles were also associated with consultation outcomes. It was found that mothers' dominance during information gathering in the CPII was associated with less improvement in the target behaviors at home. Grissom et al. (2003) also reported that parent dominance during the CPII was associated with less favorable outcomes for CBC. During the CPII, information gathering is used to define the problem to be targeted by the intervention. As previously mentioned, problem identification is considered a critical component of successful consultation (Bergan & Tombari, 1976). Teachers' and consultants' may respond to mothers' directiveness with support because they feel mothers need this support (Grissom et al., 2003). This focus on providing support to the mothers could move the conversation away from

the goal of appropriate home problem identification, resulting in less improvement in the target behavior.

Also, during the CPAI, mothers' domineeringness during decision-making (i.e., when the intervention plan is developed) was associated with less improvement in children's target behaviors at home. During the present investigation it was found that mothers exert directiveness primarily by the use of successful talkovers. It could therefore be suggested that mothers' use of talkovers may interfere with the communication process when the intervention plan is generated, thus resulting in an intervention plan that is not the most optimal for home application. As a consequence less improvement in children's target behavior is observed.

Finally, an increase in teachers' dominance during decision-making in the CPII was associated with greater improvements in the target behaviors at school. It could be suggested that when teachers obtain support early during consultation it increases their involvement in the consultation process. Because teachers are professionals who are likely to have prior experience with children who have behavioral problems, their increased involvement in the consultation process could contribute to more appropriate identification of the target behavior, the variables contributing to the target behavior and the design of a more adequate intervention plan, and consequently greater improvements in children's target behaviors at school.

Original Contributions

This study contributes to the conjoint behavioral literature by examining relational communication in both the CPII and the CPAI. This study expands the literature by providing a more detailed understanding of relational communication in CBC, by examining whether patterns of relational communication vary as a function of the process used to meet the

objectives of consultation in both the CPII and the CPAI and how these variations are related to the outcome of consultation.

To the author's knowledge this research is the first to examine the relationship between relational communication in the CPII as well as the CPAI in its entirety together with the outcomes of consultation. It is also the first to investigate the relationship between relational communication in CBC and child treatment outcome. Two methods of validating the integrity of the CBC intervention were used in this study; integrity with which consultants completed CBC interviews according to the structured protocol as well as the integrity of consultees implementation of the consultation-derived interventions applied at home and at school, which is an important issue in process-outcome research.

Implications of Findings

There are theoretical and practical implications that can be drawn from this investigation. Further evidence was provided to indicate that CBC is not a homogeneous process. Patterns of relational communication can vary as a function of the context in which an exchange takes place. More specifically, the extent to which consultants, parents and teachers proceed to direct the other and how the others receive their directiveness, appear to vary as a function of the interview as well as the process used to meet an objective within an interview. Consequently, a clear understanding of relational control as one of the process variables of CBC requires in depth investigation of the interviews, especially if relational control is considered a process variable that contributes to the effectiveness of CBC.

The implications for consultation practice also deserve mention. Practioners using consultation as a method of service delivery could benefit from becoming more familiar with the theory of relational communication, since it is one of the process variables that appear to mediate

the success of consultation. This study further informs consultants about the context of CBC in which consultees appear to be more sensitive to patterns of relational communication. For example, increased directiveness by the consultants when the target behavior is being defined in the CPII likely through the use of closed questions, can be associated with a greater improvement in the target behaviour. Also, when teachers are supported in their attempts to be directive during decision-making early in the consultation process, it seems to optimize the outcome of consultation.

Limitations

Although there are important strengths associated with this study, some limitations should be mentioned. The consultants were graduate students who received intensive training in CBC. According to Sheridan et al. (2001) it is unlikely that practitioners would receive extensive training or have time to implement CBC as comprehensively as was done in this investigation. Another issue pertaining to the use of graduate students as consultants is that teachers and parents are likely to respond differently to graduate students than they would to credentialed and experienced school psychologists. For example, consultees could be less likely to challenge a seasoned practitioner. Similarly, demographic information on teachers' education level and years of experience was not available for this research. These factors could impact on the teachers' degree of confidence about being more directive during consultation.

Another limitation concerns the use of event recording of observational data collected by the consultees to measure changes in target behavior. Event recording requires that parents and teachers maintain optimal levels of attention over long periods of time (Sattler & Hoge, 2006). Also, establishing reliability across different observers is often difficult (Sattler & Hoge, 2006). However, event recording allowed parents and teachers to keep tract of occurrences of the target

behavior in the child's natural setting even if the behavior was of low frequency (Sattler & Hoge, 2006). The use of event recording also provided a uniform measure of changes in target behavior even if the target behavior differed from child to child. Elliott, Sladeczek and Kratochwill (1995) have found a positive relationship between measures based on consultees' observations and scores on standardized measures. Moreover, a significant positive correlation was found between changes in children's target behaviors at home and at school. This provides some evidence that the effect sizes based on event recording of observational data by the consultees were a reliable indicator of the changes in target behaviors of the children included in this study.

The proposed study is an improvement over previous research investigating relational communication as it includes both the CPII and the CPAI. However, interactions that took place between the CPAI and CTEI (i.e., the weekly phone contacts) as well as the interactions during the CTEI were not investigated. These interactions could have also influenced the outcome of consultation.

Future Directions for Research

Erchul et al. (1999) as well as Grissom et al., (2003) presented evidence that the patterns of relational communication of consultants, parents and teachers can vary as a function of whom the speaker is communicating with (i.e., the target of their messages). Consequently, a priority should be given to investigations that explore the patterns of relational communication during decision-making and information gathering as a function of the target of the message. This is essential to obtain a clearer understanding of the patterns of relational communication over the course of CBC and their relationships with outcomes.

In their large scale study evaluating the efficacy of CBC, Sheridan et al. (2001), found that symptom severity was associated with the extent of the improvement in children's target

behavior. Hence, the severity of the child's difficulty could contribute to patterns of relational communication in CBC and their relationship with outcomes. More severe cases may have different trajectories than relatively simple ones linking communication patterns with the outcome of consultation and this warrants further exploration.

Also the present research focused on completed CBC cases. Beyebach and Escudero Carranza (1997) investigated the relational communication of sixteen dropouts versus sixteen continuation sessions of solution-focused therapy using the FRCCCS (Heatherington & Frielander, 1987). They found that clients were more domineering during therapies that were terminated prematurely (i.e., therapies that were terminated unilaterally as a decision of the client) compared to match therapies where clients had not dropped out. Therefore, the patterns of relational communication observed in the interviews of completed CBC cases could vary from cases where consultation was terminated after the CPII or after the CPAI. Comparing the patterns of relational communication in completed CBC to cases that were terminated prematurely could provide information to help prevent early termination.

Conclusion

The accumulating evidence supporting the effectiveness of CBC for children with behavioral problems is welcomed when we consider that these children are underserved when traditional delivery services, such as individual therapy, are considered (Sheridan et al., 1996). The evidence supporting the effectiveness of CBC is particularly important, in light of the alarming evidence that without interventions children's behavior deficits have been shown to be fairly stable over time, and are frequently predictive of future maladjustment in adolescence such as juvenile delinquency (Coie et al., 1995; Loeber, 1982; Loeber et al., 2000; Parker & Asher, 1987; Robins, 1998). This research was undertaken to obtain a clearer understanding of the

relational control patterns in CBC in order to better inform consultants on how to communicate effectively with both parents and teachers to produce changes in children exhibiting behavioral difficulties. The laborious work involved in analyzing small unit, such as messages, may direct researchers away from research on verbal communication in CBC. However, it is crucial to continue this line of work to identify the communication processes that contribute to maximizing the positive outcomes of CBC for children with behavioral problems.

CHAPTER IV

References

Achenbach, T. M. (1991a). *Manuals for the Child Behavior Checklist/4-18 and 1991 Profile.* Burlington, VT: Department of Psychiatry, University of Vermont.

Achenbach, T. M. (1991b). *Manuals for the Teacher's Report Form and 1991 Profile.* Burlington, VT: Department of Psychiatry, University of Vermont.

Achenbach, T. M., & Rescorla, L. A. (2001a) *Manual for the ASEBA Preschool Forms & Profiles.* Burlington, VT: University of Vermont Department of Psychiatry.

Achenbach, T. M. & Rescorla, L. A. (2001b) *Manual for the ASEBA School-Age Forms & Profiles.* Burlington, VT: University of Vermont Research Center for Children, Youth, and Families,

Ayres, J., & Miura, S. Y. (1981). Construct and predictive validity for coding relational control communication. *Western Journal of Speech Communication, 45,* 159-171.

Bergan, J. R. (1977). *Behavioral consultation.* Columbus, OH: Merrill.

Bergan, J. R., & Kratochwill, T. R. (1990). *Behavioral consultation and therapy.* New York: Plenum.

Bergan, J. R., & Tombari, M. L. (1975). The analysis of verbal interactions occurring during consultation. *Journal of School Psychology, 13,* 209-226.

Beyebach, M., & Escudero Carranza, V. (1997). Therapeutic interaction and dropout: Measuring relational communication in solution-focused therapy. *Journal of Family Therapy, 19,* 173-212.

Busk, P. L., & Serlin, R. C. (1992). Meta-analysis for single case research. In T. R. Kratochwill & J. R. Levin (Eds.). *Single-case research design and analysis: New directions for psychology and education* (pp. 187-212). San Francisco.

Busse, R. T., Kratochwill, T. R., & Elliott, S. N. (1999). Influences of verbal interactions during consultations on treatment outcome. *Journal of School Psychology, 37*, 117-143.

Caplan, G. (1963). Types of mental health consultation. *American Journal of Orthopsychiatry, 33*, 470-481.

Coie, J., Terry, R., Lennox, K., & Lochman, J. (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder, *Developmental Psychopathology, 7*, 697-713.

Colton, D. L., & Sheridan, S. M. (1998). Conjoint behavioral consultation and social skill training: Enhancing the play behaviors of boys with attention deficit hyperactivity disorder. *Journal of Educational and Psychological Consultation, 9*, 3-28.

Conseil supérieur de l'éducation. (2001). *Student with behavioral difficulties in elementary schools. Understanding, prevention and action.* Quebec, QC: Authors.

Courtright, J. A., Millar, F. E., & Rogers-Millar, L. E. (1979). Domineeringness and dominance: Replication and expansion. *Communication Monographs, 46*, 179-192.

Dworet, D. H., & Rathberger, A. J. (1996, April). *Behavior disorder in Canada,* Paper presented at the annual meeting of the Council for Exceptional Children, Orlando, FL.

Ericson, P. M., & Roger, L. E. (1973). New procedures for analyzing communication. *Family Processes, 12*, 245-267.

Erchul, W. P. (1987). A relational communication analysis of control in school consultation. *Professional School Psychology, 12*, 245-267.

Erchul, W. P., & Chewning, T. G. (1990). Behavioral consultation from a request-centered relational communication perspective. *School Psychology Quarterly, 5,* 1-20.

Erchul, W. P., Covington, C. G., Hughes, J. N., & Meyers, J. (1995). Further explorations of request-centered relational communication within school consultation. *School Psychology Review, 24,* 621-632.

Erchul, W. P., & Schulte (1990). The coding of consultation verbalizations: How much is enough? *School Psychology Quarterly, 5,* 256-264.

Erchul, W. P., Sheridan, S. M., Ryan, D. A., Grissom, P. F., Killough, C. E., & Mettler, D. W. (1997, August). *Patterns of relational communication in conjoint behavioral consultation.* Paper presented at the annual convention of the American Psychological Association, Chicago, IL.

Erchul, W. P., Sheridan, S. M., Ryan, D. A., Grissom, P. F., Killough, C. E., & Mettler, D. W. (1999). Patterns of relational communication in conjoint behavioral consultation. *School Psychology Quarterly, 14,* 121-147.

Elliott, S. N., Sladeczek. I. E., & Kratochwill, T. R. (August, 1995). *Goal attainment scaling: Its use as a progress monitoring and outcome effectiveness measure in behavioral consultation,* Poster session presented at the annual meeting of the American Psychological Association, New York, NY.

Folger, J., & Puck, S. (1976, April). *Coding relational communication: A question approach.* Paper presented at the annual meeting of the International Communication Association, Portland, OR.

Forness, S. R., Kavale, K. A., Blum, I. M., & Lloyd, J. W. (1997). Mega-analysis of meta-analyses: What works in special education and related services. *Teaching Exceptional Children, 29,* 4-9.

Friedlander, M.L., Wildman, J., & Heatherington, L. (1991). Interpersonal control in structural and Milan systemic family therapy. *Journal of Marital and Family Therapy, 17,* 395-408.

Galloway, J., & Sheridan, S. M. (1994). Implementing scientific practices through case studies: Examples using home-school interventions and consultation. *Journal of School Psychology, 32,* 385-413.

Gaul, R., Simon, L., Friedlander, M. L., Heatherington, L., & Cutler, C. (1991). Correspondance of family therapists' perceptions with the FRCCCS coding rules for triadic interactions. *Journal of Martial and Family Therapy, 17,* 379-394.

Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System: Manual.* Circle Pines, MN: American Guidance Service.

Gresham, F. M., & Noel, G. H. (1993). Documenting the effectiveness of consultation outcomes, In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.). *Handbook of consultation services for children: Application in educational and clinical settings* (pp. 249-273). San Francisco: Jossey-Bass.

Grissom, P. F., Erchul, W. P., & Sheridan, S. M. (2003). Relationship among relational communication processes and perceptions of outcomes in conjoint behavioral consultation. *Journal of Educational and Psychological Consultation, 14* (2), 157-180

Gutkin, T. B. (1996). Patterns of consultant and consultee verbalizations: Examining communication leadership during initial consultation interviews. *Journal of School Psychology, 34*, 199-219.

Gutkin, T. B. (1999). Collaborative versus directive/prescriptive/expert in school-based consultation: Reviewing and resolving a false dichotomy. *Journal of School Psychology, 37*, 161-190.

Gutkin, T. B. & Curtis, M. J. (1999). School-based consultation theory and practice: The art and science of indirect service delivery. In C. R. Reynolds & T. B. Gutkin (Eds.) *Handbook of School Psychology* (3rd ed., pp. 598-637). New York: Wiley & Sons.

Heatherington, L. (1988). Coding relational communication in counseling: Criterion validity. *Journal of Counseling Psychology, 35*, 41-46.

Heatherington, L., & Friedlander, M. L. (1987). *Family relational communication control coding: System manual.* Available from Laurie Heatherington, Psychology Department, Williams Collage, Williamstown, MA 11267.

Heatherington, L., & Friedlander, M. L. (1990). Complementary and symmetry in family communication. *Journal of Counseling Psychology, 37*, 261-268.

Heatherington, L. & Friedlander, M. L. (2004). From dyads to triads, and beyond: Relational control in individual and family therapy. In L. E. Rogers & V. Escudero (Eds.) *Relational Communication* (pp. 101-129). Hillside, NJ: Erlbaum.

Hughes, J. N., & DeForest, P. A. (1993). Consultant directiveness and support as predictors of consultation outcome. *Journal of School Psychology, 31*, 355-373.

Kalb, L. M. & Loeber, R. (2003). Child disobedience and noncompliance: A review. *Pediatrics*, 111, 641-652.

Kavale, K. A., & Glass, G. V. (1984). Meta-analysis and policy decisions in special education. In B. K. Keogh (Ed.), *Advances in special education,* (Vol. 4, pp. 163-194), London: JAI.

Kazdin, A. E., & Kendall, P. C., (1998), Current progress and future plans for developing effective treatments: Comments and perspectives. *Journal of Clinical Child Psychology, 27,* 217-226.

Keane, S. P. & Calkins, S. D. (2004). Predicting kindergarten peer social status from toddler and preschool problem behaviors. *Journal of Abnormal Child Psychology, 32,* 409-423.

Kratochwill, T. R. (1991). Defining constructs in consultation research: An important agenda in the 1990s. *Journal of Educational and Psychological Consultation, 2,* 291-294.

Kratochwill, T. R., Bergan, J. R., Sheridan, S. M., & Elliott, S. N. (1998). Assumptions of behavioral consultation: After all is said and done more has been done than said. *School Psychology Quarterly, 13,* 63-80.

Kratochwill, T. R., Elliott, S. N., & Callan-Stoiber, K. C. (2002). Best practices in school-based problem-solving consultation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (pp. 583- 608). Bethesda, MD: National Association of School Psychologists.

Kratochwill, T. R., Elliott, S. N., & Carrington Rotto, P. (1995). Best practices in school-based behavioral consultation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology III* (pp. 519- 535). Bethesda, MD: National Association of School Psychologists.

Kratochwill, T.R., Elliott, S.N., Loitz, P. A., Sladeczek, I.E., & Carlson, J. S. (2003). Conjoint behavioral consultation using self-administred manual and videotape parent-training: Effects on children behavioral difficulties. *School Psychology Quarterly, 18,* 269-302

Leaper, C. (1991). Influence and involvement in children's discourse: Age, gender, and partner effects. *Child Development, 62,* 797-811.

Loeber, R. (1982). The stability of antisocial and delinquent child behavior: A review. *Child Development, 53,* 1431-1446.

Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, Part I. *Journal of the American Academy of Child & Adolescent Psychiatry, 39,* 1468-1484.

Mannino, F. V., & Shore, M. F. (1986). History and development of mental health consultation. In F. V., Mannino, E. J. Trickett, M. F. Shore, M. G. Kidder, & G. Levin (Eds.), *Handbook of mental health consultation* (pp. 3-28). Washington, D.C.: U.S. Government Printing Office.

Mark, R. (1971). Coding communication at the relationship level. *Journal of Communication, 21,* 221-232.

Martens, B. K., Lewandowski, L. J., & Houk, J. K. (1989). Correlational analysis of verbal interactions during consultative interview and consultees' subsequent perceptions. *Professional Psychology: Research and Practice, 20,* 334-339.

Martens, B. K., Erchul, W. P., & Witt, J. C. (1992). Quantifying verbal interactions : A comparison of four coding schemes. *School Psychology Review, 21,* 109-124.

Noell, G. H., & Witt, J. C. (1996). A critical re-evaluation of five fundamental assumptions underlying behavioral consultation. *School Psychology Quarterly, 11,* 189-203.

O'Donnell-Trujillo, N. (1981). Relational Communication: A comparison of coding systems communication. *Monographs, 48,* 91-105.

Parker, J.G., & Asher, S.R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102,* 357-389.

Robins, L. N. (1998). A 70-year history of conduct disorder: Variations in definition, prevalence, and correlates. In P. Cohen, C. Slomkowski & L. N. Robins (Eds). *Historical and geographical influences on psychopathology* (pp. 37-56). Hillside, NJ : Erlbaum.

Rogers, L. L., & Farace, R. V. (1975). Analysis of relational communication in dyads: New measurement procedures. *Human Communication Research, 1,* 222-230.

Rogers-Millar, L. L., & Millar, F. L. (1979). Domineeringness and dominance: A transactional view. *Human Communication Research, 5,* 238-246.

Sattler, J. M., & Hoge, R. D. (2006). *Assessment of children: Behavioral, social and clinical* (5th ed.). La Mesa, CA: Jerome M. Sattler Publisher.

Schulte, A. C., & Osborne, S. S. (2003). When assumptive worlds collide: A review of definitions of collaboration in consultation. *Journal of Educational and Psychological Consultation, 14,* 109-138.

Sheridan, S. M. (1997). Conceptual and empirical bases of conjoint behavioral consultation. *School Psychology Quarterly, 12,* 119-133.

Sheridan, S. M., Eagle, J. W., Cowan, R. J., & Mickelson, W (2001). The effects of conjoint behavioral consultation: Results of a 4-year investigation. *Journal of School Psychology, 39,* 361-385.

Sheridan, S. M., & Kratochwill, T. R. (1992). Behavioral parent-teacher consultation: Conceptual and research considerations. *Journal of School Psychology, 30,* 117-139.

Sheridan, S. M., Kratochwill, T. R., & Bergan, J. R. (1996). *Conjoint behavioral consultation : A procedural manual.* New York : Plenum.

Sheridan, S. M., Kratochwill, T. R., & Elliott, S. N. (1990). Behavioral consultation with parent and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review, 19,* 33-52.

Sheridan, S. M., Meegan, S. P., & Eagle, J. W. (2002). Assessing the social context in initial conjoint behavioral consultation interviews: An exploratory analysis investigating processes and outcomes. *School Psychology Quarterly, 17,* 299-324.

Sladeczek, I. (1996). Aggressive and territorial behaviors: The case of Ken. In S.M. Sheridan, T. R. Kratochwill, & J. R. Bergan (Eds.) *Conjoint behavioral consultation: A procedural manual* (pp. 147-156). New York: Plenum.

Sladeczek, I. E., Kratochwill, T. R, Steinbach, C. L., Kumke, P., & Hagermuser, L. (2003). Problem-Solving Consultation in the New Millennium. In E. Cole & J. A. Siegel (Eds.). *Effective Consultation in School Psychology* (2nd ed.). Seattle: Hogrefe & Huber.

Statistic Canada (2001). *National Longitudinal Surveys of Children and Youth* (cycle 3). Ottawa, Ont., Canada: Authors.

Stevens, J. (1996). *Applied multivariate statistics for the social sciences.* Mahwah, NJ: Erlbaum.

Tracey, T. J., & Miars, R. D. (1986). Interpersonal control in psychotherapy: A comparison of two definitions. *Journal of Clinical Psychology, 42,* 585-592.

Tracey, T. J., & Ray, P. B. (1984). The stages of successful time-limited counseling: An interactional examination. *Journal of Counseling Psychology, 31,* 13-27.

Webster-Stratton, C. (2000). Oppositional-defiant and conduct-disordered children. In M. Hersen & R. T. Ammerman (Eds). *Advanced abnormal child psychology* (2nd ed.). Hillside, NJ: Erlbaum.

Witt, J. C. (1990). Face-to-face verbal interactions in school-based consultation: A review of the literature. *School Psychology Quarterly, 5,* 199-210.

Witt, J. C. (1997). Talk is not cheap. *School Psychology Quarterly, 12,* 281-292.

Witt, J. C., Erchul, W. P., McKee, W. T., Pardue, M., & Wickstorm, K. F. (1991). Conversational control in school-based consultation: The relationship between consultant and consultee and consultation outcome. *Journal of Educational and Psychological Consultation, 2,* 101-116.

Zins, J. E., & Erchul, W. P. (2002). Best Practices in School Consultation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (pp. 625-643). Bethesda, MD: National Association of School Psychologists.

Appendix A

Conjoint Problem Identification Interview

PII

Conjoint Behavioral Consultation: Problem Identification Interview (PII)

Child's Name:_____ Date:_____

Parent's Name:_____ Age: _____

Teacher's Name:_____ Grade:_____

School: _____

Consultant's Name:_____

PII Goals:

* Provide an overview of the project.
* Establish a working relationship between parents and teacher, and between the consultant and consultees.
* Confirm teacher and parent permission for project participation.
* Collect information about formal composition, receptivity, involvement, home problems, special needs, etc.
* Establish primary language of parent.
* Present the results of the screening.
* Define the problem(s) in behavioral terms (i.e. provide an operational definition).
* Provide a tentative identification of behavior in terms of antecedent, situation, and consequent conditions across settings.
* Provide a tentative strength of the behavior across settings (i.e. how often or severe).
* Discuss and reach agreement on a goal for behavior change across settings.
* Establish a procedure for collection of baseline data across settings in terms of sampling plan, what, who, and how the behavior is to be recorded.

Conjoint Behavioral Consultation:
Problem Identification Interview (PII)

The consultant should question and/or comment on all of the following:

OPENING SALUTATION

ESTABLISH PRIMARY LANGUAGE OF PARENTS

SUMMARIZE SCREENING RESULTS

GENERAL STATEMENT

What seems to be the problem?
What is it that you are concerned about?

HOME	SCHOOL

BEHAVIOR SPECIFICATION

a. Tell me what you mean by...
Give me some examples of what you mean by...
What does _____ do?

HOME	SCHOOL

b. What are some more examples?

HOME	SCHOOL

c. We've discussed several behaviors, such as...
Which of is most problematic across settings?
Do you both agree?

HOME	SCHOOL

** SUMMARIZE TARGET BEHAVIOR IN PRECISE, OBSERVABLE TERMS **

BEHAVIOR SETTING

a. Where does _____ display this behavior?

Give me some examples of where this occurs.

HOME	SCHOOL

b. What are some more examples of where this occurs?

HOME	SCHOOL

c. Which of the settings at school is most problematic?
Which of the settings at home is most problematic?

HOME	SCHOOL

IDENTIFY ANTECEDENTS

What usually happens at home/at school before the behavior occurs? What things do you notice before the behavior that might be contributing to its occurrence? What is a typical morning like before _____ goes to school?

HOME	SCHOOL

SEQUENTIAL CONDITIONS ANALYSIS

What else is typically happening in the classroom, on the playground, or at home when the behavior occurs?

What patterns do you notice in _____'s behavior?

What time of the day or week seems to be the most problematic at home/at school?

HOME	SCHOOL

IDENTIFY CONSEQUENT CONDITIONS

What typically happens after the behavior occurs at home/at school?

What types of things do you notice at home/at school after the behavior occurs that might be maintaining its occurrence?

How are school-related problems handled at home?

HOME	SCHOOL

** SUMMARIZE AND VALIDATE CONDITIONS SURROUNDING THE BEHAVIOR **

BEHAVIOR STRENGTH

How often does this behavior occur at home/at school?
How long does it last?
On a scale of 0 - 10, how severe is the behavior at home/at school?

HOME	SCHOOL

** SUMMARIZE AND VALIDATE THE SPECIFIC BEHAVIOR AND ITS STRENGTH **

GOAL OF CONSULTATION

What would be an acceptable level of this behavior at home/at school?
What would _____ have to do to get along OK?
Is there a general agreement of our goal across home and school?

HOME	SCHOOL

CHILD'S STRENGTHS/ASSETS

What are some of the things that _____ is good at?
What are some of _____'s strengths?

HOME	SCHOOL

EXISTING PROCEDURES

What are some programs or procedures that are currently operating in the classroom?

How are problems currently dealt with when they occur at home/at school?

HOME	SCHOOL

** SUMMARIZE AND VALIDATE BEHAVIOR, STRENGTH, GOAL, ETC. **

PROVIDE A RATIONALE FOR DATA COLLECTION

It would be very helpful to watch _____ for a week or so and monitor the occurrence of the behavior. This will help us key in on some important facts that we may have missed, and also help us document the progress that is made towards our goal.

DISCUSS DATA COLLECTION PROCEDURES

What would be a simple way for you to keep track of the behavior at home/at school?

HOME	SCHOOL

** SUMMARIZE/VALIDATE DATA COLLECTION PROCEDURES **

DATE TO BEGIN DATA COLLECTION

When can you begin to collect data at home/at school?

HOME	SCHOOL

NEXT APPOINTMENT

When can we all get together again to discuss the data and determine where to go from here?

CLOSING SALUTATION

Appendix B

Conjoint Problem Analysis Interview

PAI

Behavioral Consultation:
Problem Analysis Interview (PAI)

Child's Name:_____ Date:_____

Parent's Name:_____ Age:_____

Teacher's Name:_____ Grade:_____

School:_____

Consultant's Name: _____

PAI Goals:

* Secure teacher and/or parent permission for treatment program
* Evaluate and obtain agreement on the sufficiency and adequacy of baseline data across settings.
* Conduct a tentative functional analysis of the behavior across settings (i.e., discuss antecedent, consequent, and sequential conditions).
* Identify setting events (events that are functionally related, but temporally or contextually distal to the target behavior), ecological conditions, and other cross-setting variables that may impact the target behaviors.
* Implement an intervention plan including specification of conditions to be changed.
* Reaffirm record-keeping procedures.

Conjoint Behavioral Consultation: Problem Analysis Interview (PAI)

The consultant should question and/or comment on the following:

OPENING SALUTATION

SECURE TEACHER AND/OR PARENT PERMISSION FOR TREATMENT

GENERAL STATEMENT RE: DATA AND PROBLEM

Were you able to keep a record of .....?

HOME	SCHOOL

BEHAVIOR STRENGTH

According to the data, it looks like the behavior occurred at home/at school.

HOME	SCHOOL

ANTECEDENT CONDITIONS

What did you notice before the problem occurred at home/at school? What things may have led up to its occurrence?
What happened before school on these days?

** Refer to baseline data!

HOME	SCHOOL

CONSEQUENT CONDITIONS

What typically happened after the occurrence of the behavior at home/at school?

What types of things did you notice afterwards that may have maintained its occurrence?

What happened after school on these days?

** Refer to baseline data!

HOME	SCHOOL

SEQUENTIAL CONDITIONS

What else was happening in the classroom, on the playground, or at home when the behavior occurred?

What time of day, or what day of the week seemed most problematic at home/at school?

What patterns did you notice in _____'s behavior at home/at school?

HOME	SCHOOL

** SUMMARIZE AND VALIDATE BEHAVIOR AND STRENGTH CONDITIONS **

INTERPRETATION OF BEHAVIOR

Why do you think _____ does this?

It sounds like the behavior might also be related to...?

HOME	SCHOOL

ESTABLISHING A TREATMENT PLAN

HOME

SCHOOL

** SUMMARIZE AND VALIDATE PLAN ACROSS SETTINGS **

CONTINUE DATA RECORDING PROCEDURES

It would be very helpful if we could continue to collect data on _____'s behavior.

Can we continue the same recording procedure as before?

HOME	SCHOOL

NEXT APPOINTMENT

When can all get together again to discuss the data and determine where to go from here?

CLOSING SALUTATION

Appendix C

Consent Forms

PARENTAL CONSENT FOR SCREENING PARTICIPATION

We are interested in helping young children who are having trouble interacting with other children, their parents, or their teachers. These children may benefit from our program, the Parent-Teacher Intervention Project (P-TIP). The purpose of this program is to help children who are experiencing social and/or academic difficulties. The Social Skills Rating System (SSRS) and the Child Behavior Checklist (CBCL) are questionnaires that help us to identify children who may benefit from our services. If the assessment indicates that *your* child could profit from the P-TIP, he or she *may* become involved with the project with your approval.

This program is being conducted by Dr. Ingrid Sladeczek and a group of advanced graduate students in School Psychology, from the Department of Educational and Counselling Psychology, at McGill University. Participation is voluntary, and you and your child may withdraw from the project at any time, without penalty or loss of benefit to you or your child. The confidentiality of your identity, as well as your child's, will be protected in any reports of the project. All information obtained on children is maintained in secure files and no information is released to any party without your written consent. No child is identified in any report of the project.

At this time, we are interested in identifying children who, from the parent's perspective, may benefit from this program. To do this we are asking you to take 30 minutes to complete the parent version of the SSRS and the CBCL. Based on your ratings, we may ask your child's teacher to fill out the SSRS and the Teacher Report Form (the teacher version of the CBCL). By signing below, you are agreeing to participate in the screening or identification process, and giving us permission to contact your child's teacher at a later date.

If your child qualifies for this project, an advanced graduate student in school psychology will meet with you and your child's teacher to discuss specific difficulties your child is having, suggest ways to improve your child's behaviour, and evaluate the effects of the program. At this point, you will decide whether you would like to participate in the second phase of this study in which an advanced graduate student in school psychology will serve as a consultant with you and/or your child's teacher. The benefit of your participation is that you will learn skills to help your child.

If you agree to participate in the screening or assessment phase of the project please sign the attached form. If you have any questions regarding the project, please contact one of our consultants at

Sincerely,

Ingrid E. Sladeczek, Ph.D.
Project Director

PARENT CONSENT FOR SCREENING PARTICIPATION

I acknowledge being informed of the goals , benefits, risks and procedures of the screening phase of the Parent-Teacher Intervention Project, and agree to participate. I understand that confidentiality of my identity, as well as the identity of my child, will be protected in any discussion of reports of this project. I also understand that I may withdraw at any time with no penalty or loss of benefit to me or my child.

_____
Child's name

_____ _____
Parent Signature Date

Home telephone number : _____

Work telephone number : _____

TEACHER CONSENT FOR SCREENING PARTICIPATION

Dear Teacher

Recently, the parents of _____ completed the Social Skills Rating System (SSRS) and the Child Behavior Checklist (CBCL). The results of the screening indicate that the parents and child may benefit from the Parent-Teacher Intervention Project (P-TIP), a research project whose goals are to (a) provide consultation services to parents and teachers, thereby encouraging a cooperative problem-solving venture between the two, (b) work collaboratively with parents and teachers to address specific difficulties of children with behaviour problems, and (c) implement an effective behavioural program to remediate the difficulties exhibited by the children.

This program is being conducted by Dr. Ingrid Sladeczek and a group of advanced graduate students in School Psychology, from the Department of Educational and Counselling Psychology, at McGill University. Participation is voluntary, and you may withdraw from the project at any time, without penalty or loss of benefit. The confidentiality of your identity will be protected in any reports of the project. All information obtained is maintained in secure files and no information is released to any party without your written consent. No one is identified in any report of the project.

At this time, we are interested in identifying children who, from the teacher's perspective, may benefit from this program. To do this we are asking you to take 30 minutes to complete the teacher version of the SSRS and the Teacher Report Form (TRF). By signing below, you are agreeing to participate in the screening or identification process, and giving us permission to contact you at a later date.

If the child named above qualifies for this project, an advanced graduate student in school psychology will meet with you and the child's parents during the school year. The student will meet with you and the parents to discuss specific difficulties the child is having suggest ways to improve the child's behaviour, and evaluate the effects of the program. The benefit of your participation is that you will learn skills to help the child named above, while also learning strategies that may benefit other children in your class.

If you agree to participate in the screening or assessment phase of the project please sign the attached form. If you have any questions regarding the project, please contact one of our consultants at

Sincerely,

Ingrid E. Sladeczek, Ph.D.
Project Director

TEACHER CONSENT FOR SCREENING PARTICIPATION

Child's name : _____

Please check one :

__I agree to participate in the screening or assessment of the above named student

__I do not agree to participate in the screening or assessment component of your research project

_____ _____

Teacher's Signature Date

PARENT CONSENT FOR PARTICIPATION

Dear Parent,

The purpose of this document is to review the responsibilities of the parent(s) participating in the Parent-Teacher Intervention Project. The project is designed to assist parents and teachers who have specific behavioural concerns with children at home or in the classroom. The project is specifically designed to serve children with behaviour problems

This program is being conducted by Dr. Ingrid Sladeczek and a group of advanced graduate students in School Psychology, from the Department of Educational and Counselling Psychology, at McGill University. The research has received approval from the McGill University Ethics Committee and involves minimal risk to participants

The specific goals of the project are: (a) to provide consultative services to parents and teachers, thereby encouraging a cooperative problem-solving venture between the two; (b) to work collaboratively with parents and teachers to address specific behavioural difficulties of children; and (c) to implement an effective behavioural program to remediate the difficulties exhibited by the nominated children. Participating parent(s) will be asked to assist in program implementation at various levels. Among the responsibilities of the parent are the following.

1. Assist in monitoring your child's progress by completing questionnaires, prior to and at the conclusion of treatment. This will require approximately an hour and a half of your time.

2. Meet with the consultant and your child's teacher(s) to discuss your child's possible inclusion in the program , review the program procedures in greater detail, and enlist cooperation and participation of the teacher

3. Meet with the consultant for regular interviews, in which specific concerns can be discussed, treatment goals, and objectives can be established and program procedures can be evaluated.

If you agree to participate, please sign the attached form. Parents should be aware that not all children *nominated* for services will qualify. However, all who qualify will receive services, but some at a later date. If you have any questions regarding the project, please contact one of our consultants at

Sincerely,

Ingrid Sladeczek, Ph.D.
Project Director

PARENT CONSENT FOR PARTICIPATION

Ingrid E. Sladeczek, Project Director

I acknowledge being informed to my satisfaction of the goals, benefits, risks, and procedures of the Parent-Teacher Intervention Project. It is my understanding that the procedures will involve:

1. Interviews and meetings with myself, the consultant, and my child's teacher(s);

2. The completion of various questionnaires prior and following treatment to provide information about my child's progress and my involvement in the treatment program;

3. Regular phone interviews with the consultant.

I understand that confidentiality of my child's identity is assured, and will not be reported in any formal discussion or publication of the project. I also understand that my child or myself may withdraw from the program at any time without penalty to my child or me

_____
Student's Name

_____ _____
Parent Signature Date

Audio/Video Recording

Audio or video recording are made of the sessions with the consultant. The recordings are used for training and research purposes. It is my understanding that the recordings and the information therein, shall be held in strict confidence. It is further understood that the tapes will be erased as soon as their usefulness for research or supervision purposes is completed.

I have read and had explained to me the above description of video-taping and audio-taping that might occur during the sessions with the consultant. I give my consent for recording of the sessions which include my child or myself.

_____ _____
Signature of parent Date

TEACHER CONSENT FOR PARTICIPATION

Dear Teacher,

The purpose of this document is to review the responsibilities of the teacher participating in the Parent-Teacher Intervention Project. The project is designed to assist parents and teachers who have specific behavioural concerns with children at home or in the classroom. The project is specifically designed to serve children with behaviour problems

This program is being conducted by Dr. Ingrid Sladeczek and a group of advanced graduate students in School Psychology, from the Department of Educational and Counselling Psychology, at McGill University. The research has received approval from the McGill University Ethics Committee and involves minimal risk to participants.

The specific goals of the project are: (a) to provide consultation services to parents and teachers, thereby encouraging a cooperative problem-solving venture between the two; (b) to work collaboratively with parents and teachers to address specific behavioural difficulties of children; and (c) to implement an effective behavioural program to remediate the difficulties exhibited by the children. Participating teachers will be asked to assist in program implementation at various levels. Among the responsibilities of the teachers are the following.

1. Assist in monitoring your pupil's progress by completing questionnaires, prior to and at the conclusion of treatment. This will require approximately an hour of your time.

2. Meet with the consultant and your pupil's parent(s) to discuss your student's inclusion in the program, review the program procedures in greater detail, and enlist cooperation and participation of the parent(s).

3. Meet with the consultant for regular interviews, in which specific concerns can be discussed, treatment goals and objectives can be established and program procedures can be evaluated.

If you agree to participate, please sign the attached form. Teachers should be aware that not all children *nominated* for services will qualify. However, all who qualify will receive services, but some at a later date. If you have any questions regarding the project, please contact one of our consultants at

Sincerely,

Ingrid Sladeczek, Ph.D.
Project Director

TEACHER CONSENT FOR PARTICIPATION

Ingrid E. Sladeczek, Project Director

I acknowledge being informed to my satisfaction of the goals, benefits, risks, and procedures of the Parent-Teacher Intervention Project. It is my understanding that the procedures will involve:

1. Interviews and meetings with myself, the consultant, and my student's parent(s);

2. The completion of various questionnaires prior and following treatment to provide information about my student's progress and my involvement in the treatment program;

3. Regular phone interviews with the consultant.

I understand that confidentiality of my student's identity is assured, and will not be reported in any formal discussion or publication of the project. I also understand that I may withdraw from the program at any time without penalty to my student or me.

_____
Student's Name

_____ _____
Teacher Signature Date

Audio/Video Recording

Audio or video recordings are made of the sessions with the consultant. The recordings are used for training and research purposes. It is my understanding that the recordings and the information therein, shall be held in strict confidence. It is further understood that the tapes will be erased as soon as their usefulness for research or supervision purposes is completed.

I have read and had explained to me the above description of video-taping and audio-taping that might occur during the sessions with the consultant. I give my consent for recording of the sessions.

_____ _____
Signature of teacher Date

Appendix D

Ethics Approval Certificate

McGill University – Faculty of Education
Research Ethics Board
ETHICS REVIEW - AMENDMENT REQUEST FORM

This form can be used to submit any changes/updates to be made to your currently approved research project. Explain what these changes are, and attach any relevant documentation that has been revised. Significant changes that have ethical implications must be reviewed and approved by the REB before they can be implemented. This form is also to be used for indicating changes to funding and personnel.

REB File #:

Project Title: Patterns of Relational Communication in Conjoint Behavioural Consultation and their Relationship with Outcomes

Principal Investigator: Chantal Martel

Department/Phone/Email: ECP / 514-271-1393 / chantal.martel@mail.mcgill.ca

Faculty Supervisor (for student PI): Dr. Ingrid Sladeczek

This study is part of a larger study being conducted by Dr. Ingrid Sladeczek and her students from the Problem-Solving Consultation Laboratory at McGill University. The larger study entitled Indirect Service Delivery Models for Children with Behavoural Problems has received approval from the McGill University Ethics Committee in 1999 (See Appendix A). The larger study compares the efficacy of three models of service delivery: conjoint behavioural consultation (CBC), group videotape therapy with minimal consultation (GVT), and a self-administered videotape therapy (VT). The methodology of the proposed project remains the same as the research project that received approval in 1999. However, the audiotapes of the Conjoint Behavioural Consultation (CBC) interviews will be coded using the Family Relational Communication Control Coding System (FRCCCS), a systematically based measure of naturally occurring verbal interactions in-group contexts (Heatherington & Friedlander, 1987). Based on this coding system, each message will be assigned one of three control codes: one-up (i.e., messages that attempt to assert control), one-down (i.e., messages that attempt to give up control), or one-across (i.e., messages that are neutral with respect to control). The two measures of relational control that are of interest for this study are domineeringness (i.e., % of messages transmitted by a participant A that are one-up messages) and dominance (i.e., % of one-up messages by one participant that is followed by a one-down response from another participant). Domineringness is considered a measure of a person's directiveness or attempt to define a relationship. Dominance is a considered a measure of one's influence or success in defining a relationship.

The proposed research will contribute to the conjoint behavioural literature by examining relational communication in both the CPII and the CPAI in a relatively large sample size. This is improvement over previous studies, which had samples too small to permit comparisons between interviews (i.e., Erchul et al, 1999; Sheridan, 1997) or focused on the analysis to a 30-minute excerpt from the CPIIs (Grissom, Erchul & Sheridan, 2003). Moreover, this study will provide a more detailed understanding of relational communication in CBC, by examining whether patterns relational communication varies as a function of the type of consultation objective being met and whether these variations in the patterns of relational communication are related to the outcome of consultation. To the authors knowledge the proposed research is the first to examine the relationship between relational

communication in the CPII as well as the CPAI and the outcomes of consultation. It is also the first to investigate the relationship between relational communication in CBC and child treatment outcome. Finally, two forms of integrity will be reported in this study, that is integrity with which consultants completed CBC interviews according to the structured protocol as well as the integrity of consultees implementation of the consultation-derived interventions across home and school. Previous research often failed to report information on integrity.

Principal Investigator Signature: Date: April 21, 2006

Faculty Supervisor Signature: Date: April 21, 2006
(for student PI)

For Administrative Use

____ Expedited Review ____ Full Review

_✓_ This amendment request has been approved.

Signature of REB Chair/ designate: Date: May 10, 2006

Submit to Carole Grossman, Education Ethics Coordinator, Education Bldg., rm 230, tel:398-7039 fax:398-1527

(version January/05)