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Running Head: PARENT TREATMENT ACCEPTABILITY

# Remediating Behavior Problems of Young Children: The Impact of Parent Treatment Acceptability and the Efficacy of Conjoint Behavioral Consultation and Videotape Therapy

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*A journey of a thousand miles begins with a single step*
- Lao-tzu, Chinese philosopher

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## Abstract

The present study was an exploratory investigation of the efficacy and acceptability of a parent-teacher mediated intervention program for young boys demonstrating externalizing behavior problems. A primary purpose of the study was to compare the efficacy of three indirect models of service delivery: a highly individualized behavioral consultation model (BC); group videotape therapy with minimal consultation (GVT); and a self-administered videotape therapy (VT) program. A second purpose was to investigate the acceptability and satisfaction with these programs as evaluated by parents. More specifically, the relationships between treatment acceptability and outcome as well as factors influencing parent treatment acceptability were examined. Thirty preschool and elementary school children, their parents, and teachers were assigned to one of three intervention conditions (BC, VT, and GVT). A total of 37 parents (29 mothers, 7 fathers, 1 grandmother) participated in the delivery of intervention services over an 8 to 10 week period. An A-B research design was used to analyze the effectiveness of consultation. Outcome variables included parent and teacher ratings of social skills and problem behaviors as well as direct observations. Results indicated that children's target behaviors improved from baseline to treatment in all three intervention conditions. Pretest and posttest parent treatment acceptability was assessed via rating scales, and at the end of the program parents also completed a satisfaction questionnaire. During the intervention phase, a brief semi-structured interview was used to assess parental perceptions of acceptability. High acceptability and satisfaction ratings were reported by parents in all three intervention conditions. There was partial support indicating a relationship between treatment effectiveness and acceptability but there was little evidence of an association between parental perceptions of problem-solving skill, parenting competence, and acceptability. The original contributions as well as the implications of this research are discussed.

## Résumé

Cette étude pilote avait pour but d'examiner l'efficacité de trois programmes d'intervention indirect pour des garçons ayant des troubles de comportements, ainsi que l'attitude des parents envers ces programmes. Premièrement, l'efficacité de trois modèles de service indirect ont été comparés: un modèle très individualisé de la consultation de comportement (BC), la thérapie par vidéo avec visionnage individuel (VT); et la thérapie par vidéo avec visionnage en groupe combinée avec la consultation de comportement (GVT). De plus, cette étude avait pour but d'examiner l'attitude des parents et l'efficacité des programmes ainsi que les facteurs influençant l'attitude des parents ont été examinés. Les parents et les enseignants de 30 garçons d'âge préscolaire et primaire ayant des troubles de comportements, furent assignés à un des trois modèles d'intervention (BC, VT, et GVT). Trente-sept parents (29 mères, 7 pères, et 1 grand-mère) participèrent aux programmes d'intervention pour une période de 8 à 10 semaines. Une méthode de recherche "A/B" a été utilisée pour déterminer l'efficacité des trois différents modèles de consultation. Pour cette étude, le progrès de chaque enfant de la phase pré-intervention à la phase post-intervention face à son comportement ciblé, ses habilités sociales, et ses comportements externes furent utilisés comme indices d'efficacité. Les résultats ont démontré l'efficacité de trois programmes d'intervention. L'attitude des parents à été mesurée a l'aide de questionnaires remplies à la phase pré-intervention ainsi que à la phase post-intervention. De plus, un bref entrevue a été utilisé pour évaluer l'attitude hebdomadaire des parents. Les évidences préliminaires démontrent un niveau élevé de satisfaction et de d'acceptation de la part des parents pour les trois modèles de service indirect. L'hypothèse suggérant une relation entre l'attitude des parents et l'efficacité des programmes a été partiellement appuyée. Les résultats sont discutés et analysés en vue des implications pratiques et théoriques.

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# CHAPTER 1

## Introduction

### Statement of the Problem

Children with behavioral difficulties are of serious concern to parents and educators. Prevalence rates cited in European, Australian, and North American studies indicate that 3 to 10% of children exhibit serious and persistent conduct problems (Sholevar & Sholevar, 1995). Recent Canadian statistics indicate that up to 12% of school-aged children are in need of special education services due to behavior problems that interfere with their academic performance (Dworet & Rathgeber, 1996). Moreover, in Canada, children with behavior problems are underserved across provincial systems of education and receive less attention than in the early 1980s (Dworet & Rathgeber, 1990). The situation is particularly serious in Quebec where future cuts in professional support to teachers and students are anticipated despite the fact that this province has one of highest prevalence rates of behavior problems in Canada (Dworet & Rathgeber, 1996). In Quebec, approximately 2% of students at the elementary and high school levels and 12% of kindergarten children have been identified as having behavior problems (Dworet & Rathgeber, 1996). In fact, children with behavioral difficulties constitute the second largest category of students with special needs (19.3%) in the province (Ministère de l'Éducation du Québec, 1999).

Behavior problems exist along a continuum, varying from externalizing symptoms such as aggression, hyperactivity, impulsivity, and noncompliance to more internalizing symptoms such as anxiety, depression, fear, and social withdrawal (Achenbach & Edelbrock, 1978). Children who exhibit chronic externalizing behaviors are at risk for academic failure, parental abuse, peer rejection, as well as legal and psychological problems during adolescence and adulthood (Kazdin, 1987; Offord & Bennett, 1994; Quay & Hogan, 1999). The long-term outcomes associated with externalizing behaviors are at considerable financial and emotional costs to children, their families, and the communities in which they live (Beitchman, Inglis, & Schachter, 1992a). Children with internalizing behaviors are also at risk for peer rejection and later emotional problems (Ollendick & King, 1994). While internalizing problems in and of themselves may have slightly less of a negative impact on

children, their families, and the community than do externalizing problems (Beitchman, Inglis, & Schachter, 1992b), comorbidity of internalizing symptoms with externalizing problems is not uncommon (Ollendick & King, 1994). Thus, children with internalizing disorders are also of considerable concern to society (Beitchman et al., 1992b).

Given the potentially serious outcomes associated with childhood problem behaviors, researchers advocate remediation programs that target early intervention across multiple contexts such as the home, school, and community (e.g., Prinz, 1995; Tremblay, LeMarquand, & Vitaro, 1999; Webster-Stratton & Herbert, 1994). For example, a central assumption underlying family-based interventions such as behavioral parent training is that child aggression and noncompliance are acquired and maintained through social learning processes within the family (Wells, 1995). Results from a recent survey of over 22,000 Canadian children and their families indicate that parenting style is the strongest predictor of aggressive behavior in children (Stevenson, 1999). More specifically, mothers and fathers who used ineffective, inconsistent, and aversive parenting practices were more likely to have a child with behavior problems than parents applying techniques in a positive and consistent manner. In this study, other family characteristics such as single parent status, low socioeconomic status, and a higher number of siblings within the family were also found to be associated with behavior problems in children.

However, a more thorough understanding of child development and psychopathology dictates consideration of factors beyond the family environment (Bronfenbrenner, 1986). Bronfenbrenner asserts that child development research has focused primarily on microsystems such as child-centred processes and has ignored mesosystems and exosystems. Mesosystems are social milieus outside of the family where children interact such as day cares, peer groups, and schools. Exosytems refer to the elements in a parent's world affecting a child's development such as parental employment, support networks, and community life. Rather than continuing to emphasize the insular and limiting parent-child dyad, he argues that the study of child development must also be expanded to include the effects of mesosystems and exosystems. Within such a framework, researchers and clinicians are increasingly acknowledging the role of social context in

understanding and treating conduct problems (Bigelow, 1989; Prinz, 1995). Consequently, intervention efforts aimed at children with behavior problems are focusing on the development of effective home and school partnerships (Cole, 1990, 1996; Kramer, 1990; Sheridan, Kratochwill, & Elliott, 1990; Webster-Stratton, 1993). For example, Webster-Stratton (1993) argues that strong family and school ties are particularly important in the treatment of conduct problems because the negative teacher-parent relationships that may develop as a result of children's social and academic difficulties only serve to exacerbate a child's acting-out behaviors.

The need for effective interventions that can be implemented across home and school environments parallels the current movement within psychology to document empirically supported treatments. For example, in the clinical child psychology field, the American Psychological Association has established a task force aimed at identifying effective psychosocial interventions for children and adolescents with mental health needs (Lonigan, Elbert, & Johnson, 1998). In response to this call for more effective and wide-reaching interventions, school psychologists are increasingly being called upon to work with families as well as teachers in providing effective psychological services (Bartell, 1995; Christenson, 1995; Cole, 1996; Kramer, 1990). As such, indirect models of service delivery are gaining prominence as school psychology responds to the challenge of working with parents and teachers. Intervention approaches such as parent training and consultation have been proposed as ways to increase parent-teacher collaboration (Cole & Siegel, 1990; Kramer, 1990; Zins, Kratochwill, & Elliott, 1993).

Parent training represents an intervention approach that has been used to modify children's behavior problems at home and school. Programs based on behavioral principles and social learning concepts, known as behavioral parent training, have been heralded as the most promising interventions for children with conduct problems (Brestan & Eyberg, 1998; Kazdin, 1987; McMahon & Wells, 1989). Numerous literature reviews and meta-analytic studies have documented the effectiveness of behavioral parent training in reducing undesirable child behaviors, increasing prosocial behaviors, and improving parenting practices (e.g., Dumas, 1989; Graziano & Diament, 1992; Kramer, 1990; Serketich &

Dumas, 1996; Webster-Stratton & Herbert, 1994; Wells, 1995). Materials originally developed for parents such as Webster-Stratton's (1982b; 1992b) videotape therapy program have also been successfully used in the classroom within a consultation framework to help teachers change children's problem behaviors (e.g., Kratochwill, Elliott, Loitz, Sladeczek, & Carlson, 1999).

In the field of school psychology, consultation has emerged as an effective service delivery approach for children with behavior problems (Cole & Siegel, 1990; Erchul & Martens, 1997; Zins et al., 1993). This is particularly the case in the United States, where consultation has been an important feature within school psychology for almost twenty five years (Sladeczek & Heath, 1997). In Canada, the emergence of consultation in schools has been slower and less well researched, but consultation research and practice is gaining prominence within Canadian systems of education (Cole, 1996; Sladeczek & Heath, 1997). A variety of consultation models have been developed, and the behavioral consultation model pioneered by Bergan (1977) and later refined by Bergan and Kratochwill (1990) has been shown to be a particularly successful framework through which to remediate children's behavior problems (Alpert & Yammer, 1983; Mannino & Shore, 1975; Medway & Updyke, 1985; Sheridan, Welch, & Orme, 1996). Behavioral consultation represents a collaborative problem-solving approach between a consultant (e.g., a school psychologist) and a consultee (e.g., a teacher) in order to bring about behavioral change in another party (e.g., a child). The behavioral consultation framework has been expanded beyond teachers to include parents in the consultation process (Sheridan, 1993), and further refinement of this model has resulted in an approach that allows consultants to work simultaneously with parents and teachers known as conjoint behavioral consultation (Sheridan & Kratochwill, 1992; Sheridan, Kratochwill, & Bergan, 1996).

Conjoint behavioral consultation (CBC) was developed in response to the growing acknowledgement of the mutual influence of both home and school on children's academic and social development (Sheridan et al., 1990). The advantage of this approach is that services typically provided separately to families through parent training and to educators through school-based consultation can now be combined (Zins et al., 1993). There is an

expanding literature base on the effectiveness of CBC (Sheridan, 1997; Sheridan, Kratochwill et al., 1996), and a number of studies have investigated CBC as a framework for treating children's internalizing and externalizing behavior problems (e.g., Kratochwill et al., 1999; Sheridan et al., 1990; Sheridan & Colton, 1994; Sladeczek, 1996). However, these studies have typically used small sample sizes and have not directly evaluated CBC in relation to other types of intervention approaches such as behavioral parent training. A criticism of the behavioral consultation literature as a whole has been the lack of research comparing this model to other intervention approaches (Noell & Witt, 1996). Thus, there is a need to compare CBC with other treatment modalities.

Intervention research centred around children and adolescents has primarily focused on treatment outcome issues such as the efficacy of an intervention in relation to no treatment or in comparison to other intervention approaches (Kazdin & Kendall, 1998). However, in addition to documenting changes in behavior, the acceptability of procedures and satisfaction with the intervention are also important considerations in treatment outcome research (Kazdin, 1977; Kazdin & Kendall, 1998; Peterson & Bell-Dolan, 1995). Referred to as "social validity," Wolf (1978) was one of the first to argue that treatment goals, procedures, and outcomes needed to be socially relevant and significant. In the consultation literature there has been an emphasis on the acceptability of treatment procedures, and treatment acceptability represents a critical component of an intervention's effectiveness (Elliott & Busse, 1993, Elliott, Witt, & Kratochwill, 1991; Gresham & Lopez, 1996; Sheridan, Kratochwill et al., 1996). The issue of treatment acceptability is one of practical and ethical importance for researchers and clinicians (Kratochwill & Van Someren, 1985; Reimers, Wacker, & Koeppl, 1987; Schwartz & Baer, 1991; Witt & Elliott, 1985). As Wolf (1978) notes, "If the participants don't like the treatment, they may avoid it, or run away, or complain loudly . . . thus, society will be less likely to use our technology, no matter how potentially effective and efficient it might be" (p. 206). From an ethical standpoint, it is also necessary to determine whether participants view the procedures they are implementing to be fair and acceptable (Paget, 1991; Wolf, 1978).

Social validity research in the parent training literature has primarily focused on

parents' reported satisfaction with an intervention. Typically, satisfaction with a program is assessed by having parents complete a questionnaire at the end of treatment. While there is evidence to suggest that overvall, behavioral parent training is considered an acceptable and fair approach to dealing with children's conduct problems (Calvert & McMahon, 1987; McMahon & Forehand, 1983; Webster-Stratton, 1989), these ratings may be overinflated. Since ratings are solicited at only one point in time (i.e., following completion of the program), parents who are dissatisfied with a treatment and do not complete the program are not surveyed. Thus, current assessment practices in the parent training literature may obscure the actual acceptability and satisfaction associated with these programs.

Within the consultation literature, the traditional approach to investigating treatment acceptability has involved large sample, quasi-experimental studies employing analogue rather than naturalistic methods (Calvert & Johnston, 1990; Eckert & Shapiro, 1999; Elliott, 1988a, 1988b). Typically, in these studies participants are asked to read fictitious cases and rate hypothetical treatment plans as to their acceptability and perceived effectiveness. From such studies a sizeable knowledge base into the factors that influence treatment acceptability has emerged. For example, the personality characteristics of the rater, the severity of the problem, and the type of treatments proposed have been shown to influence the acceptability of behavioral interventions (Calvert & Johnston, 1990; Elliott, 1988a, 1988b). However, one limitation of this research is the extent to which results gathered through analogue methodology are applicable to clinical populations actually engaged in treatment (Eckert & Shapiro, 1999). More specifically, there has been little research into the factors that influence parents' perceptions of the procedures they are asked to implement during the course of an intervention.

Another limitation of the treatment acceptability literature has been the focus on comparing the acceptability of specific behavioral procedures such as reinforcement or time out rather than assessing the acceptability of various service delivery approaches through which behavioral interventions are implemented (Sheridan, 1993). Previous survey research indicates that school psychologists in Canada and the United States consider conjoint behavioral consultation to be an acceptable form of service delivery (Illsley, Sladeczek, &

Finn, 1999; Sheridan & Steck, 1995) as do parents and teachers (Freer & Watson, 1999). However, there has been little naturalistic investigation comparing the acceptability of various consultation approaches in actual treatment studies involving children. Moreover, there has been a lack of research focusing on the efficacy and acceptability of behavioral consultation in Canada (Sladeczek & Heath, 1997). Given the identified need for services to treat children with behavior problems in Canada, there is a heightened importance attached to such an investigation.

## Aims of the Present Study

The present study is an exploratory investigation into the efficacy and acceptability of a parent-teacher mediated intervention program for children demonstrating behavioral problems. This investigation is part of a larger research project comparing the efficacy of videotape therapy and behavioral consultation being conducted at McGill University under the direction of Dr. Ingrid Sladeczek.

One goal of this study was to investigate the efficacy of conjoint behavioral consultation and videotape therapy in treating children with behavior problems. A second goal of this investigation was to explore the relationship between treatment outcome and parent acceptability ratings. A third aim of this study was to explore some of the factors that may influence parent ratings of acceptability such as the mode of service delivery (varying levels of consultation and videotape parent training) as well as perceptions of parental problem-solving skills and parenting competence. In the next chapter, models for working with parents and the social validity literature in behavioral intervention research are reviewed as a means of providing a rationale for the hypotheses of this study.

# CHAPTER 2

## Literature Review

The first part of this chapter provides an overview of the various models that have been developed for working with parents. The principal aim of this section is to review the effectiveness of videotape parent training and conjoint behavioral consultation in the treatment of children with behavior problems.

The second part of this chapter addresses the importance of social validity in intervention research. Constructs such as treatment acceptability and consumer satisfaction are defined and discussed. The main goal of this section is to review the literature on treatment acceptability and consumer satisfaction with a particular emphasis on the factors that influence parental perceptions of treatment acceptability and satisfaction.

### Parent Education

Parent education is defined as "a systematic and conceptually based program intended to impart information, awareness, or skills to the participants on aspects of parenting" (Fine, 1980, p. 5-6). The objectives of parent education are to provide parents with information about child development, improve communication skills, foster a greater sense of self-awareness, and improve the overall quality of family life (Fine, 1980). However, in reality, parent education programs typically supply parents with a great deal of general information and place little emphasis on actual skill development or individual problems (Sheridan, 1993).

Parent education should not be confused with parent therapy, parent training, or parent consultation (Brown, Pryzwansky, & Schulte, 1991; Dembo, Sweitzer, & Lauritzen, 1985; Fine, 1980; Medway, 1989; Sheridan, 1993). Although the terms are often used interchangeably in the literature, parent education is conceptualized as a rubric under which specific approaches to working with parents are subsumed such as parent therapy, parent training, and parent consultation (Medway, 1989; Sheridan, 1993). Parent therapy, parent training, and parent consultation are more specific in their focus and usually involve trained professionals who teach parents actual skills (Fine, 1980; Sheridan, 1993). In the present literature review, parent training and consultation approaches are presented as different

models for working with parents. However, in practice it is often difficult to keep the boundaries between parent education, training, and consultation completely separate (Dembo et al., 1985; Sheridan, Kratochwill et al., 1996). At their core, all of these approaches involve parents and professionals in a child's treatment, and it is not uncommon for intervention programs to combine parent training and parent consultation approaches (Sheridan, Kratochwill et al., 1996).

Approaches to Parent Training

Parent training, also referred to as parent management training, is a form of parent education that emphasizes imparting specific skills to parents in order to improve parent-child interactions and overall family functioning (Dembo et al., 1985). In contrast to parent education, the parent training model is more focused on individual participants and seeks to provide parents with detailed knowledge as well as specific skills they can use with their children (Sheridan, 1993).

Traditionally, the parent training literature has been classified into three general categories: reflective, Adlerian, or behavioral (Dembo et al., 1985; Medway, 1989). The reflective or humanistic approach is based upon Rogers' (1951) client-centered approach to therapy. Reflective programs teach parents better communication skills and emphasize acceptance of children's feelings. One of the more renowned humanistic parent training programs is the Parent Effectiveness Training (PET) program (Gordon, 1975). PET teaches parents how to actively listen to their children and how to resolve conflicts using a humanistic approach. Adlerian-based programs are based on the theoretical work of Alfred Adler (1930) and teach parents about the motives underlying child behavior and the need for cooperative family environments. An example of an Adlerian-based program is Dinkmeyer and McKay's (1976) Systematic Training for Effective Parenting (STEP) program. The STEP program encourages parents to explore why behavior problems develop by focusing on issues involving power, attention, revenge, and feelings of inadequacy as underlying motivations for misbehavior. Behavioral parent training programs are based on behavioral principles and social learning theory. These programs aim to teach parents basic behavioral concepts such as the use of reinforcement and time-out procedures

as well as a repertoire of skills they can use to reduce undesirable behavior (e.g., aggression) or increase desirable behaviors (e.g., social skills) in their children.

Reviews of the literature provide moderate support as to the effectiveness of parent training programs (Dembo et al., 1985; Medway, 1989). Treatment outcomes are typically measured with respect to change along one or more of the following dimensions: parents' attitudes about their parenting practices; children's perceptions regarding their misbehavior; observed parenting behaviors; and observed child behaviors (Dembo et al., 1985). In a review of 27 parent training studies, an overall effect size of .90 for these treatment outcomes was reported (Medway, 1989). Medway (1989) also reported that parent training is equally as effective in changing parental attitudes and behavior (ES = .76) as well as child attitudes and behaviors (ES = .80). However, Dembo and colleagues (1985) reviewed 48 parent training studies and came to slightly different conclusions. Although the behaviorally-based programs reviewed in their study provided solid evidence of positive change in parenting attitudes, parenting behaviors, and child behaviors, the evidence for other parent training approaches was less convincing. Despite changes in parenting attitudes following completion of Adlerian programs, there was little evidence of actual behavior change in children (Dembo et al., 1985). Results were mixed for reflective programs with only some of the studies having reported changes in parental attitudes about childrearing. Moreover, none of the reflective programs provided outcome measures based on actual parent or child behaviors (Dembo et al., 1985).

It is difficult to ascertain whether one parent training approach is more effective than another for a number of reasons (Dembo et al., 1985; Medway, 1989). One problem is that direct comparison of parent training approaches is confounded by differences in group composition, group leader characteristics, and treatment outcome measures that are not controlled for across studies (Medway, 1989). A second problem is that there have been relatively few studies comparing different parent training approaches, and of these, results have been mixed (Dembo et al., 1985; Medway, 1989). However, the research evidence does suggest that the effectiveness of an approach is very much related to the intended goal of the intervention (Dembo et al., 1985; Medway, 1989). If the goal of a particular

intervention is to change parent or child attitudes, then a reflective or Adlerian approach may be the program of choice; if however, the goal is to improve behavior, then behavioral parent training may offer the best results (Medway, 1989).

Behavioral parent training. Behavioral parent training programs are quite heterogeneous with respect to their content and focus (Briesmeister & Schaefer, 1998; Dembo et al., 1985; Medway, 1989). However, Miller and Prinz (1990) argue there are fundamental elements shared by all behavioral parent training programs which include: (a) accurately identifying problem behavior; (b) emphasizing prosocial behaviors as opposed to antisocial behaviors; (c) recording and documenting incidents of behavior; (d) administering tangible and social reinforcers, such as praise; (e) avoiding the use of punishment procedures that are physical or violent; (f) communicating clearly to children using developmentally-appropriate language; and (g) learning to anticipate and solve future problems. Teaching methods include direct instruction, discussion, role-playing, modeling, and coaching, and these strategies can be presented through written, oral, and video media (Wells, 1995). Although several programs for families of children with conduct problems have been developed, what follows is a brief review of three of the most renowned and researched intervention programs.

One of the earliest and most influential approaches to behavioral parent training was undertaken by Patterson and colleagues at the Oregon Social Learning Center (Patterson, 1982; Patterson, Reid, Jones, & Conger, 1975). A 20-hour program was developed for parents of children between the ages of 3 and 12 with conduct problems. At the start of the program, parents read material on parenting skills and complete homework assignments and tests. Group leaders teach parents how to identify problem behaviors, monitor child behavior, reward appropriate behaviors, reduce inappropriate behaviors, as well as how to negotiate and resolve problem situations. Parents practice new skills by carrying out an intervention program with their own child that is supervised by a therapist.

This program was modified and expanded for use with parents of adolescents with conduct disorders (Webster-Stratton, 1993). In contrast to the 20 hours of training in the preadolescent program, parents in the adolescent program complete 45 hours of instruction.

In the adolescent program, there is more emphasis on close supervision and identification of behaviors that contribute to delinquency such as drug use or breaking curfew. Since the program is intended for families of adolescents exhibiting delinquent behaviors, parents are also taught about legal issues and how to report criminal behaviors to the appropriate authorities.

Another well-known behavioral program was developed by Forehand and McMahon (1981). This program targets parents of young children between 2.5 and 8 years with conduct problems. The program is carried out in two phases: in the first phase, parents learn how to reinforce their child's prosocial behaviors. Parents are instructed how to use verbal and physical rewards to encourage prosocial and desirable behaviors and are taught to ignore minor inappropriate behaviors. They are also instructed to limit the questions and criticisms they direct at their children, described as "nattering" (Forehand & McMahon, 1981). During the second phase, parents are taught how to give their children effective commands and how to deal with noncompliance using time-out procedures. The instructional methods used in this program include role-playing, modeling, and coaching. Parents are fitted with a type of hearing-aid known as a "bug-in-the-ear" device that allows therapists to provide immediate feedback to parents as they play with their children in a clinic setting.

A third parent training program developed for families of young children with conduct problems is the *Parent and Child Video Series* (Webster-Stratton, 1982b, 1992b). This approach incorporates elements from both the Patterson (1982) and the Forehand and McMahon (1981) parent training programs and is based on research from the problem-solving and parent-child communication literatures (Webster-Stratton, 1993). The Webster-Stratton program has been shown to be an effective treatment for children with behavior problems (Brestan & Eyberg, 1998). Two versions of this program have been developed, the BASIC and ADVANCE series (Webster-Stratton, 1982b, 1992b).

In the BASIC program (Webster-Stratton, 1982b), parents complete 26 hours of training over 13 sessions. Topics center around play, the use of praise and punishment, limit setting, and management of problem behaviors. A unique feature of this program is the use

of video as an instructional method. Over 250 short vignettes 1-2 minutes in length are used to model skills to parents. These vignettes showcase mothers and fathers of varying ages, cultures, socioeconomic backgrounds, and temperaments in a variety of situations. Parents are also provided with handouts and homework assignments to be completed between sessions.

The BASIC program has been shown to be an effective intervention for reducing children's problem behaviors. In a series of studies, Webster-Stratton has reported positive treatment outcomes for large samples of children between the ages of 3 and 8 whose parents used the program to decrease their child's conduct problems (e.g., Webster-Stratton, 1982a, 1984, 1985a, 1985b, 1990, 1992a). The results of these studies indicated decreased acting-out behaviors as rated by parents and independent observers. In addition to examining the question of efficacy, Webster-Stratton also investigated the issue of cost effectiveness involved in participating in a parent training program and tested three different treatment formats: individual administration of videotape therapy; group administration of the videotape series supplemented by discussion, and discussion only. In the self-administered program, parents watch the tapes and do assignments on their own at home. In the group administration with discussion, a small group (8-12 parents) watches the tapes and participates in weekly sessions led by a therapist. In the third format, therapists lead a group discussion on the content covered in the videotapes but without the benefit of the videotape vignettes. Comparisons of the three administration formats with a control group indicated similar treatment outcomes for all three experimental groups measured immediately following treatment and at one-year follow-up (Webster-Stratton, Hollinsworth, & Kolpacoff, 1989; Webster-Stratton, Kolpacoff, & Hollinsworth, 1988). Although there is an added advantage to the individually administered program since it costs less to administer, subsequent research has suggested a possible interaction effect with the type of clientele using the program. In a study of highly stressed families completing the individually administered program, a number of variables were negatively related to treatment outcome such as parental depression, mothers' marital status, maternal socioeconomic status, maternal age, and paternal perceptions (Webster-Stratton, 1992a).

The ADVANCE program (Webster-Stratton, 1992b) was developed in response to mounting research evidence that in addition to ineffective parenting skills, many parents of children with behavior problems also exhibit marital problems, psychopathology, and heightened levels of stress (Webster-Stratton & Herbert, 1994). The ADVANCE series builds on the first program and consists of a 28-hour program administered through six additional videotapes presented in conjunction with therapist-led discussion groups. The program is aimed at teaching parents how to improve anger management skills, coping skills for handling depression, communication skills, and problem-solving strategies for improving interactions between parents.

A study comparing the BASIC and ADVANCE programs indicated that parents who completed the BASIC program followed by the ADVANCE program enhanced their problem-solving and communication skills and reported increased satisfaction with their parenting skills compared to parents who completed only the BASIC program (Webster-Stratton, 1994). However, there were no differences reported between the treatment groups with respect to reported and observed changes in child behaviors or with respect to parental self-report ratings of marital satisfaction, anger management, or stress levels. Spaccarelli, Cotler, and Penman (1992) also investigated the use of the ADVANCE program for parents of children with behavior problems. After completing the videotape training program, parents in the experimental group received problem-solving training while parents in the control condition participated in extra discussion sessions. Parents in the experimental group demonstrated more improvements in their attitudes about their child's behaviors and reported a greater decrease in problem behaviors than control parents.

Assessing Treatment Outcomes in Behavioral Parent Training. In parent training research, multiple outcome measures are used to evaluate program effectiveness. Several criteria are used to judge the efficacy of behavioral parent training programs such as changes in child behaviors as observed or rated by parents and independent observers, changes in parenting behavior as observed by independent raters, and changes in attitudes about parenting expressed during and following program completion (Dembo et al., 1985; Graziano & Diament, 1992). Numerous literature reviews and meta-analytic studies have

consistently documented the effectiveness of behavioral parent training in reducing undesirable behavior and increasing prosocial behaviors in children as well as improving parenting practices (e.g., Dumas, 1989; Graziano & Diament, 1992; Kramer, 1990; Serketich & Dumas, 1996; Webster-Stratton & Herbert, 1994; Wells, 1995). In fact, Webster-Stratton's (1982b, 1992b) videotape therapy program is recognized as one of two intervention approaches that meet the American Psychological Association's criteria for well-established treatments for children with conduct problems (Brestan & Eyberg, 1998).

However, other indices of treatment outcome are equally important for documenting the effectiveness of behavioral parent training approaches such as the maintenance of treatment effects, generalization of treatment gains across settings and populations, and satisfaction ratings (McMahon & Forehand, 1983; Webster-Stratton & Herbert, 1994; Wells, 1995). A recent meta-analytic review of 16 outcome studies indicated that the long-term effectiveness of parent training remains inconclusive (Serketich & Dumas, 1996). For example, despite evidence of treatment gains persisting 1 to 4 years after program completion (e.g., Forehand & Long, 1988; Webster-Stratton, 1982a, 1990; Webster-Stratton et al., 1989; Webster-Stratton, 1990) there are also data to suggest that not all treatment gains are maintained and that some parenting skills diminish over time (Kramer, 1990). One implication of these findings is that follow-up training, often in the form of "booster sessions" may be necessary to ensure longer maintenance of treatment gains (Kazdin, 1987).

With regards to the issue of generalizability, there is also little evidence that behavior changes demonstrated in one context readily generalize or transfer to other settings (Kramer, 1990; Webster-Stratton & Herbert, 1994). While some studies have demonstrated generalization effects from the clinic setting to home or school settings (e.g., Peed, Roberts & Forehand, 1977; Webster-Stratton, 1984), others have failed to substantiate this claim (e.g., Briener & Forehand, 1981). Such results have led to suggestions that treatment services be provided conjointly and simultaneously across settings such as at home and school (e.g., Patterson et al., 1975; Kramer, 1990; Webster-Stratton, 1993). In a similar vein, the extent to which these programs are suitable for

populations other than children with conduct disorders has been questioned since the majority of the parent training research has focused the reduction of externalizing behaviors such as noncompliance and aggression (Graziano & Diament, 1992; Serketich & Dumas, 1996).

Despite the documented success of parent training in treating families of children with conduct problems, there are also indications that parent training is not of equal benefit to all families and children (Dumas, 1989; Miller & Prinz, 1990; Wells, 1995). Some children fail to make any treatment gains, while other families drop out before completing the entire program. Information is often gathered from parents to assess the extent to which they are satisfied with the treatment program, and these data consistently demonstrate that participants report parent training to be an acceptable and fair approach for dealing with children's conduct problems (Calvert & McMahon, 1987; McMahon & Forehand, 1983; Webster-Stratton, 1989). However, because satisfaction ratings are often collected at the end of treatment, it is difficult to obtain an accurate reflection of parental satisfaction since the opinions of parents dropping out have not been assessed. The finding that drop-out rates among parent training programs may be as high as 28% (Forehand, Middlebrook, Rogers, & Streffe, 1983) as well as Kazdin's (1990) observation that attrition is related to problem severity raises questions as to parents' actual satisfaction with such programs. This has propelled some researchers to investigate variables that may be related to parent dropout rates as well as those that influence satisfaction ratings of behavioral parent training (Frankel & Simmon III, 1992; Furey & Basili, 1988; Heffer & Kelley, 1987; Miller & Kelley, 1992).

Thus, in an effort to limit attrition and increase program efficacy, the focus of intervention efforts have been expanded. For example, there are programs that target personal and marital adjustment in order to improve family system and parent-child relations (Webster-Stratton & Herbert, 1994; Wells, 1995). This approach is exemplified in Webster-Stratton's (1992b) ADVANCE videotape therapy program which supplements parent training with an emphasis on the parenting dyad and parents' ability to cope with stress. A second example is the reframing of behavior problems within a social context (Bigelow,

1989; Prinz, 1995) and the use of social skills training as an adjunct to behavior management components of parent training programs (Dumas, 1989; Kazdin, 1987). A third means of improving treatment success among families of children with behavior problems has been the focus on collaboration and the expansion of services across home and school settings to include teachers, psychologists, and the child's peers (Kramer, 1990; Miller & Prinz, 1990; Prinz, 1995; Webster-Stratton, 1993). For example, consultation approaches involving parents and teachers as active participants in the treatment process have recently been advocated as a means through which to modifiy children's behavior problems (Cole, 1990; Sheridan & Kratochwill, 1992; Sheridan, 1997). Within such a framework, Webster-Stratton's (1982b) videotape series has been succesfully paired with school consultation models that emphasize collaboration and problem solving between parents and teachers (Kratochwill et al., 1999). The next section of this chapter reviews the use of consultation in the treatment of children's behavior problems.

## Models of Consultation

Consultation is broadly defined as an indirect model of service delivery that involves interaction between individuals who are seeking to assist a third party undergo change (Zins et al., 1993). Consultation differs from therapy in that the consultant does not work directly with the client but with a consultee who then implements an intervention with the client (e.g., a child). What distinguishes consultation from other forms of service delivery such as parent training is the emphasis on the voluntary and collaborative nature of the problem-solving process between the consultant and consultee (Erchul & Martens, 1997; Zins et al., 1993). Several approaches to consultation have been developed, all of which share such common elements as an emphasis on problem-solving, a focus on collaboration, and the need for voluntary participation (Zins & Erchul, 1995). Three predominant consultation models have emerged: mental health, organizational, and behavioral consultation (Henning-Stout, 1993; Zins & Erchul, 1995).

The mental health field was the first to pioneer the use of consultation as a model of service delivery (Henning-Stout, 1993). Although consultation was first used by Lightner Witmer a century ago, Gerald Caplan (1970) is credited with developing a mental health

approach to consultation (Henning-Stout, 1993). Caplan's work emphasized four main themes: client-centered consultation which focuses on ways in which consultees can remedy client difficulties; consultee-centered consultation which addresses the intrapsychic barriers that impede consultees from working effectively with a client; program-centered administrative consultation as well as consultee-centered administrative consultation, both of which emphasize the role of organizational features and structures that affect consultation. Caplan's emphasis on child-centered consultative practices and administrative concerns served as the impetus for the later development of the organizational and behavioral approaches to consultation (Henning-Stout, 1993).

Organizational consultation is based upon principles of social and industrial-organizational psychology (Henning-Stout, 1993; Illback & Zins, 1993). The focus of this approach is on the interaction between individuals and their social environment (Henning-Stout, 1993). This interaction is studied by understanding an organization's structure in terms of its philosophies, procedures and programs, organizational processes such as planning, communication, and decision making as well as behaviors within an administrative setting (Illback & Zins, 1993). Interventions applied within such a framework involve making structural changes to the organization to best serve clients.

Behavioral Consultation

The behavioral approach to consultation was first developed by Tharp and Wetzel (1969) and later refined by Bergan and colleagues (Bergan, 1977; Bergan & Kratochwill, 1990). The theoretical underpinnings of the model are derived from principles of behavioral and cognitive psychology (Bergan, 1995). The model is based on the tenet that behavior is learned through events and interactions that occur in the environment. Principles of classical and operant learning are applied in order to change discrete and observable problem behaviors. The model put forth by Bergan and Kratochwill (1990) also places an emphasis on cognitive problem solving as a means of changing the antecedent, sequential, and consequent conditions that shape and maintain behaviors. Behavioral consultation involves the use of behavior therapy and modification techniques drawn from a variety of theoretical approaches, including cognitive-behavioral therapy, applied behavior analysis, and social

learning theory (Kratochwill, Sheridan, & Van Someren, 1988). Although the framework developed by Bergan and Kratochwill (1990) is not the only conceptual model of behavioral consultation, it represents the most well-developed and operationalized form of behavioral consultation (Noell & Witt, 1996).

The behavioral consultation framework put forth by Bergan and Kratochwill (1990) consists of a problem-solving process between a consultant and consultee that occurs across four loosely structured stages: problem identification; problem analysis; treatment implementation; and treatment evaluation. The four stages of the model are implemented through a series of semi-structured interviews between the consultant and consultee. Suggested questions for consultants are provided by Bergan and Kratochwill (1990), and structured interview manuals have also been developed (Sheridan, Kratochwill et al., 1996).

The purpose of the problem identification phase is to specify the behavior problem to be addressed during the consultation process. There are several steps within the problem identification stage. First, the consultant and consultee define the goals of consultation. These goals must be clearly defined and well specified. Second, the consultant and consultee select measures that adequately operationalize the behaviors of interest. Examples of assessment measures include standardized tests, rating scales, work samples, and naturalistic observations. Third, data on the behaviors of interest need to be collected to establish a baseline of measurement. Together, the consultant and consultee decide which behaviors to assess, how they will be recorded (e.g., duration or frequency measures), who will observe the target behaviors, and the length of the observation period. Following data collection, the observations are usually summarized and displayed in a useful and simple format such as a line graph. Following visual presentation of the data, the consultant and consultee compare the behaviors to the performance objectives established at the beginning of the problem identification phase. In this way, a preliminary definition of the problem to be addressed during consultation is developed.

During the *Problem Identification Interview* (PII), the consultant asks the consultee a series of questions that are intended to elicit discussion of the objectives to be addressed during the consultation process (e.g., "What would be an acceptable level of this behavior at

home or school?"). The consultant and consultee also work together during the PII to establish criteria and procedures for the measurement of target behaviors. Effective communication between consultant and consultee during the problem identification phase is critical since research has shown that poorly conducted problem identification interviews jeopardize the effectiveness of the entire consultation process (Bergan & Tombari, 1976; Tombari & Bergan, 1978).

The purpose of the next meeting, the *Problem Analysis Interview* (PAI), is to identify the factors contributing to the target behaviors and develop an intervention plan. The consultant and consultee examine the data collected during the problem identification phase and attempt to identify the antecedent conditions precipitating the target behavior and the consequent conditions that may be maintaining the behavior. Sequential conditions such as situational events or environmental conditions that may be contributing to the target behavior are also examined. Once the conditions surrounding the target behavior are discussed, a treatment plan is devised. It is important that the planned intervention be viewed as effective and acceptable by the consultee. If the consultee feels that the behavioral techniques to be used in the plan are unacceptable, compliance with the treatment plan will likely be poor which will lead to diminished treatment outcome (Elliot et al., 1991; Reimers et al., 1987; Witt & Elliott, 1985).

During the treatment implementation phase, the intervention plan developed during the PAI is put into action by the consultee. The consultant is responsible for assembling any materials needed to carry out the plan and providing training if the consultee does not have the requisite skills to properly implement the plan. The intervention may last a few days or continue for several weeks.

Finally, the *Treatment Evaluation Interview* (TEI) is conducted to determine the impact of the intervention plan and decide whether the intervention should continue or be terminated. Adequate time for program implementation must be provided prior to evaluating the effectiveness of the intervention. Questions during the interview centre around whether the goals have been attained, the degree to which the plan was effective, and what the future course of action will be. It is also important to assess the extent to

which the plan was implemented as originally designed. The consultant and consultee conclude the interview by discussing the ways in which treatment effects can be maintained and generalized across other behaviors, persons, or settings.

Several literature reviews and meta-analytic studies have deemed behavioral consultation to be an effective mode of service delivery (Alpert & Yammer, 1983; Mannino & Shore, 1975; Medway & Updike, 1985; Sheridan, Welch et al., 1996). Moreover, behavioral consultation represents the most widely used and investigated model of consultation (Erchul & Martens, 1997; Sheridan, Welch et al., 1996; Zins et al., 1993). However, a number of methodological shortcomings have been identified in behavioral consultation research. For example, the lack of standardized procedures makes it difficult to evaluate program effectiveness, ensure proper training of consultants, and demonstrate the psychometric properties of behavioral consultation (Kratochwill et al., 1988). In addition, most studies have been descriptive rather than experimental in nature and do not provide sufficient information regarding process issues such as verbal interactions (Gresham & Kendall, 1987; Gutkin, 1993). To address these limitation, it has been proposed that future research use a combination of small-*n* methodologies, multivariate research designs, and case studies (Gresham & Noell, 1993; Gutkin, 1993; Kratochwill et al., 1988). There are also a number of problems limiting the use of behavioral consultation in actual practice such as inadequate training of consultants and consultees; the impact of consultant-consultee relationships on treatment outcome; proper identification of target behaviors; and understanding the effect of treatment acceptability on treatment integrity (Kratochwill et al., 1988; Kratochwill & Van Someren, 1985).

In addition to these limitations, the fundamental assumptions underlying behavioral consultation have been questioned in an effort to stimulate new avenues of research within the field (Noell & Witt, 1996). Noell and Witt propose that behavioral consultation should be compared with other forms of service delivery and that traditional means of evaluating treatment outcomes should be expanded. Although these criticisms were aptly rebutted in a in a rejoinder article (Kratochwill, Bergan, Sheridan, & Elliott, 1998), this dialogue has served to reinforce the notion that additional behavioral consultation research is needed. A

new generation of inquiry is needed that goes beyond addressing simple questions such as whether or not a particular model is effective. This line of research is aimed at a more intricate and sophisticated level of analysis to evaluate the processes and mechanisms underlying consultation as well as the application of these intervention approaches in broader contexts (Kratochwill et al., 1998). The continued success of behavioral consultation will depend, in part, on the extension and application of the model beyond the school context to include families and other childcare providers. The development of parent consultation as well as conjoint behavioral consultation represent two such approaches.

Parent behavioral consultation. The use of behavioral consultation is not restricted to educational settings; it has long been theoretically acknowledged that behavioral consultation can be a useful model for working with families (Bergan & Duley, 1981). In contrast to parent training, parent consultation exchanges breadth of information for a greater emphasis on skill development and individualized attention in order to resolve specific problems (Sheridan, 1993). However, the use of parent-only behavioral consultation has been slow to evolve and has remained limited (Brown et al., 1991; Cobb & Medway, 1978; Kratochwill et al., 1988; Sheridan, 1993). One possible explanation is that the boundaries between parent training and parent consultation procedures are often blurred, and as a result there is considerably less research that can be considered as parent-only behavioral consultation (Brown et al., 1991; Dembo et al., 1985; Sheridan, 1993; Sheridan, Kratochwill, et al., 1996).

Parent-only behavioral consultation has been used to address children's academic deficits as well as behavioral problems. For example, one study examined the impact of behavioral parent consultation and school system variables on kindergarten children's math and reading achievement (Bergan, Reddy, Feld, Sladeczek, & Schwarz, 1991). School-related variables of interest included the socioeconomic level of the school, teachers' expectancies of learning outcomes, and teachers' sense of efficacy. Consultation services in the form of telephone contacts were provided to half of the parents in the sample using the behavioral consultation model developed by Bergan and Kratochwill (1990). As part of the consultation process, parents established goals for their child's math and reading

achievement and implemented an intervention plan based on the selection of family activities from a workbook on learning opportunities. The results indicated that children whose parents had participated in consultation evidenced higher scores on reading and math measures at the end of the summer. Furthermore, consultation had a greater effect on learning than did the socioeconomic level of the school or teacher expectancies.

Two other studies have investigated the use of academic interventions implemented through parent behavioral consultation. In one study, two families whose children were experiencing homework difficulties participated in an intervention program within the context of behavioral consultation to increase homework completion and accuracy (Loitz & Kratochwill, 1995). The intervention plan consisted of providing parents with a self-help manual containing strategies for helping children with homework problems. One child demonstrated increased homework completion and greater assignment accuracy in math but did not improve in spelling. The second child's completion rate and accuracy for writing assignments did not improve, although the weak treatment effects may have been due to the brevity of the intervention phase (7-14 days). Homework was also the focus of a study that used parent behavioral consultation and parent training to improve assignment completion and accuracy (Rhoades & Kratochwill, 1998). During the intervention phase, in addition to the behavior management system developed by the consultant and parent consultees, a five-week parent training program was also provided.This program consisted of didactic teaching of skills, use of a manual, and weekly discussions with the consultant. Results revealed that homework completion and accuracy increased, and homework problems were rated by parents to be less severe following treatment.

Parent behavioral consultation has also been used to help children with behavior problems. In one study, parent behavioral consultation combined with behavioral skills training was used with four children aged 6 to 9 years who were demonstrating compliance problems (Rotto & Kratochwill, 1994). Following completion of the problem analysis interview, parents were trained in differential attending (i.e., praising appropriate behaviors and ignoring inappropriate behaviors), instruction giving, and time-out procedures. This study used multiple outcome measures to determine the effect of the intervention program

on parenting skills and a variety of child behaviors such as ignoring parent requests, talking back, arguing, tantrums, and lying. Results indicated that the intervention was effective in improving parenting skills. Independent observers noted increases in compliant behavior in both the home and clinic settings, and parents rated children as having less externalizing problems following treatment. These gains were maintained at follow-up four weeks later.

Despite the paucity of research in this area, results from the parent behavioral consultation literature suggest that parents play an important role in treating children's academic and social problems. Increasingly, educators and psychologists are recognizing that consultation with parents is an important and effective means of serving children who are at risk for social and academic failure (Cole, 1990; Fine & Gardner, 1994; Sheridan, 1997). As a result, school psychologists are increasing their skill repertoire and working more closely with families and teachers (Bartell, 1995; Christenson, 1995). One illustration of this role expansion within the behavioral consultation literature has been the development of conjoint behavioral consultation (Sheridan, 1993; Sheridan & Kratochwill, 1992; Sheridan, Kratochwill et al., 1996).

Conjoint behavioral consultation. Conjoint behavioral consultation (CBC) represents an expansion of Bergan and Kratochwill's (1990) model of behavioral consultation (Sheridan et al., 1990). CBC is defined as "a systematic, indirect form of service delivery, in which parents and teachers are joined to work together to address the academic, social, or behavioral needs of an individual for whom both parties bear some responsibility" (Sheridan & Kratochwill, 1992, p. 122). Despite the utility of the Bergan and Kratochwill model, two major limitations are inherent in the traditional behavioral consultation approach (Sheridan & Kratochwill, 1992). First, the restriction of behavioral interventions to the school setting is a short-sighted remediation strategy. Failure to examine behaviors within the family system as well as the interaction between the two settings where children spend most of their time (home and school) may seriously limit the effectiveness of any intervention attempt. Second, events occurring in the home may affect behaviors exhibited in the classroom (and vice versa). Limiting the examination of antecedent, consequent, and sequential conditions of a particular behavior to one setting, as is typically the case in

school-based behavioral consultation, distorts an accurate functional analysis of a target behavior. For example, a child's misbehavior in the classroom may have been triggered by an event occurring outside of the school, such as something that happened earlier that day at home. In order to reduce the disruptive behavior at school, it may be necessary to enlist the parent's help in changing the precipitating event.

CBC was developed in response to the growing acknowledgement of the mutual influence of both home and school on academic and social development, and the approach constitutes an attempt to bridge the distance between these settings (Sheridan et al., 1990). More recently, the conceptual framework underlying this model has been expanded to include systems beyond home and school that may be significant in a child's life such as extended family, clergy members, and legal authorities such as probation officers (Sheridan, 1997). In addition to the behavioral priniciples upon which the Bergan and Kratochwill (1990) model was founded, CBC is also derived from systems theory and ecology theory (Sheridan, 1997; Sheridan, Kratochwill, et al., 1996). Systems theory holds that pathology results from dysfunctional patterns of interaction between the elements in a system (Minuchin, 1974). Minuchin's (1974) original conceptualization of systemic interaction was limited to families, but his structural perspective has since been applied to school and other community settings (e.g., Bronfenbrenner, 1986; Fine & Holt, 1983). As its aim, ecology theory is interested in studying the interactions between individuals and systems with the environment that are known as ecosystems (Bubolz & Sontag, 1993). Bronfenbrenner has been a pioneer in applying ecology theory to human development (Bubolz & Sontag, 1993). As stated earlier, Bronfenbrenner (1986) argued that a comprehensive understanding of child development must include mesosystems such as hospital settings, daycares, and schools as well as exosystems such as parent employment, support networks, and community life.

The influence of systems and ecology theory on the traditional approach to behavioral consultation has several advantages (Sheridan & Kratochwill, 1992). In contrast to teacher-only and parent-only consultation, CBC considers the interacting systems within a child's life, namely home and school. This joint involvement of school and home forces

can be used to collect comprehensive data on behaviors occurring across various time frames and settings which in turn may result in increased generalization and maintenance of treatment effects (Sheridan, 1997; Sheridan & Kratochwill, 1992).

The same four-stage, interview-based, collaborative process used in the Bergan and Kratochwill (1990) model forms the basis of CBC. However, one important difference is that the consultant carries out joint interviews with a child's parents and teachers. During the *Conjoint Problem Identification Interview* (CPII), the consultant, parent, and teacher agree upon which behaviors to target and decide upon data collection procedures to record behaviors across settings. During the *Conjoint Problem Analysis Interview* (CPAI), the problem behavior is analyzed in terms of the antecedent, sequential, and consequent conditions across settings which are then used to plan an appropriate intervention. The treatment implementation phase involves having parents and teachers put the plan into action and continue data collection at home and school. During the *Conjoint Treatment Evaluation Interview* (CTEI), the baseline and treatment data are reviewed in order to determine whether the intervention has been successful. Parents and teachers are asked to share their ideas as to the success or failure of the plan, and decisions about continuing or terminating treatment are made.

CBC is a relatively new form of behavioral consultation, and research into the processes underlying this framework and treatment outcomes gained through this approach is beginning to accumulate (Sheridan, 1997; Sheridan, Kratochwill, et al., 1996). The majority of the research to date has focused on the effectiveness of the model in producing changes in client and consultee behavior, and there is mounting evidence that CBC is an effective means through which to address behavioral as well as academic problems in children (Sheridan, 1997; Sheridan, Kratochwill, et al., 1996). A number of case studies have illustrated the effectiveness of the CBC approach in addressing behavior problems in young children such as tantrums, aggression, and bedtime fears (e.g., Sheridan & Colton, 1994; Sheridan, Kratochwill, et al., 1996; Sladeczek, 1996). In addition, two recent large scale studies employing quasi-experimental and experimental research designs have documented the effectiveness of CBC (Kratochwill et al., 1990; Sheridan, Colton, Eagle,

Cowan, & Richard, 1999).

The earliest quasi-experimental study of CBC was carried out with socially withdrawn children (Sheridan et al., 1990). In this study, CBC was compared to teacher-only consultation as a means of implementing strategies to increase the social interactions of four withdrawn children. Two children participated in a conjoint consultation condition where parents and teachers served as joint consultees, and two children were assigned to the teacher-only consultation condition. A social skills treatment package was used to foster social interactions with peers, and the intervention plan in both conditions was identical except that parents were not actively promoting prosocial behaviors in the teacher-only condition. The findings of the study supported the prediction that CBC would result in a generalization of treatment effects at home and school. Although the number of social initiations in the classroom increased across both treatment conditions, there was a differential effect for prosocial behaviors in the home. The two children in the CBC condition were observed to engage in more initiation behaviors than children in the teacher-only condition.

The Sheridan et al., (1990) study served to demonstrate the utlitity of the behavioral consultation approach for withdrawn children, an area that has received little empirical attention. The study also expanded the use of behavioral consultation from a teacher-only or parent-only focus to include joint consultees in different settings. However, methodological shortcomings of the study limited the extent to which results were generalizable due to the lack of matching for age, gender, or target behaviors across groups and the difficulty in getting parents to carry out the treatment plan properly.

CBC has also been used to deliver behavioral interventions for children with Attention Deficit Hyperactivity Disorder (ADHD). In one study, parents and teachers of four children (2 boys, 2 girls) between the ages of 7-13 years diagnosed with ADHD implemented interventions through conjoint behavioral consultation to reduce noncompliance and aggression (Johnson, 1994). Teacher and parent reports of behavior as well as independent observations indicated positive changes in target behaviors. However, this study was limited by its small sample size and the lack of a control group. A more

sophisticated research design was used in a study of CBC as a means of enhancing peer relationships for three boys with ADHD (Colton & Sheridan, 1998). With the assistance of a consultant, parents and teachers implemented a social skills training program using such strategies as coaching, role play, home-school communication notes, and positive reinforcement. Direct observation, teacher and parent ratings of behavior, and self-monitoring strategies were used to document behavior change, and all treatment outcome measures indicated increased cooperative interactions with peers. One strength of this sudy was its use of a multiple baseline design which is a more powerful means of detecting treatment effects than other research designs (Barlow, Hayes, & Nelson, 1984).

CBC has also been used to address academic problems in children and adolescents. In one study, the use of home notes between parents and teachers to improve math homework completion was facilitated through CBC (Galloway & Sheridan, 1994). In this study, six children in grades 1 and 2 who were experiencing difficulty completing math assignments were assigned either to a home note-only condition or to a condition where the home note was used within the context of CBC. Home notes are written messages between parents and teachers about a child's school behavior. Children in the CBC condition demonstrated greater gains in the accuracy of assignment completion as compared to children in the home note-only condition. In a study involving junior high school students, CBC was used to introduce a structured homework completion program to improve math homework completion and accuracy (Weiner, Sheridan, & Jenson, 1998). A multiple baseline design involving five students, their parents, and teachers was used to implement an intervention program consisting of self-monitoring procedures, rules for homework completion, and reinforcement strategies. Following treatment, four of the five students demonstrated an improvement in homework completion and accuracy rates increased. Three of the five students maintained these gains one month later.

In a series of studies, Sheridan and her colleagues have examined CBC as a way to facilitate inclusion practices for children and adolescents with disabilities in the regular education classroom (Sheridan, Colton, Fenstermacher, & Lasecki, 1996; Sheridan et al., 1999). In this project, children previously classified as having a specific disability such as

intellectual handicaps, behavior disorders, ADHD, learning disabilities, or considered at-risk for academic failure were targeted. Through consultation with parents and teachers, specific academic and social behaviors to be changed were identified such as work completion, assignment accuracy, off-task behavior, aggression, noncompliance, peer interactions, and tantrums. Behavioral interventions were used such as self-monitoring, home-notes, and token economies that were introduced and monitored by consultees. Results from preliminary analyses of 53 cases indicated significant changes in target behaviors across settings (Sheridan et al., 1999).

In another study investigating ways in which to support inclusion practices in regular education classrooms, CBC was compared with teacher-only and parent-only consultation as a means of remediating academic problems among students with learning disabilities (Colton & Sheridan, 1999). Six elementary school students, their parents, and teachers participated in an academic intervention program consisting of individual tutoring sessions to improve basic math and reading skills as well as rewards for positive effort and achievement. Students in all three groups showed improvements in their reading and math achievement following treatment, and gains persisted at a 2- and 4-week follow up.

The largest and only truly experimental investigation to date of CBC as an effective mode of service delivery was a five-year study of children with internalizing and externalizing behavior problems (Kratochwill et al., 1999). A sample of 123 preschool children who attended Head Start programs were randomly assigned to either an experimental or control condition. A CBC framework was used to introduce an intervention program carried out over two phases. During the first two years of the project (Phase 1), parents and teacher consultees implemented behavioral strategies (e.g., ignoring, timeout) through a manual-based approach. In the third, fourth, and fifth years of the study (Phase 2), parents and teachers implemented strategies based on Webster-Stratton's (1982b; 1992b) videotape training program. Pretest and posttest parent and teacher ratings on standardized measures revealed no statistically significant differences when large scale, between-groups analyses were carried out. However, use of small-*n* statistics such as effect sizes and reliability of change indices indicated stronger behavior change in the manual-

based group than the videotape or control group. The videotape group demonstrated only slight improvement when compared with the control group.

Summary and Critique

The research evidence presented in this section demonstrates the utility of parent education approaches to address children's behavior problems. Although parent consultation and parent training are perhaps best treated conceptually as separate models of parent education, in practice both of these approaches are often combined in intervention programs (Dembo et al., 1985; Sheridan, 1993; Sheridan, Kratochwill, et al., 1996). There is ample evidence that behavioral parent training and consultation are effective ways in which to deliver interventions to children. However, in the past, the primary aim of parent education research has been to demonstrate the overall effectiveness of training programs, and in so doing, process issues have largely been ignored (Sheridan, 1997; Sheridan, Kratochwill, et al., 1996). For example, the impact of verbal communication patterns, consultee characteristics, training and expertise, as well as treatment acceptability have largely been ignored within the CBC literature (Sheridan, Kratochwill et al., 1996). The issue of treatment acceptability is one of practical and ethical importance for researchers and clinicians and has become a hallmark feature of behavioral intervention research (Elliott, 1988a, 1988b; Schwartz & Baer, 1991). However, when treatment acceptability has been considered within the context of consultation framework, researchers have done little other than to report whether an intervention was rated as fair and acceptable. Increasingly, researchers are interested in exploring ways in which to enhance treatment outcomes and investigate the impact of treatment acceptability in relation to parent training and consultation (Kramer, 1990; Sheridan, Kratochwill, et al., 1996; Webster-Stratton, 1989). The remainder of this chapter will therefore focus on the significance of treatment acceptability and consumer satisfaction in parent education research.

## Social Validity and Parent Education

An important consideration in all clinical research is the extent to which the interventions being tested impact on participants' lives (Kazdin, 1977; Wolf, 1978). Wolf (1978) coined the term "social validity" to refer to judgments concerning the social

importance of intervention programs on three related levels. First, the goals of the treatment must be socially significant, indicating the extent to which the behaviors targeted for change are socially important and relevant. Second, treatment procedures must be evaluated as socially appropriate. Third, the effects of the treatment must be socially important, or in other words, be of meaningful clinical significance. Wolf's (1978) treatise was originally directed at the field of applied behavior analysis, but it has become an important consideration in the mental health and school psychology literatures as well (Lebow, 1982; Shapiro, 1987). For example, the acceptability of treatment procedures has become a prominent feature of reseach into developmental disabilities, early childhood special education, and consultation (Gresham & Lopez, 1996; Miltenberger, 1990; Paget, 1991; Rasnake, 1993). In a recent meta-analysis of consultation research conducted between 1985 and 1995, 37% of the studies reviewed included social validation procedures and 67% of the behavioral consultation studies assessed social validity (Sheridan, Welch, et al., 1996). Despite the importance attributed to all three aspects of social validity, the focus of social validation research has centered on the appropriateness of treatment procedures and to a large extent has eclipsed considerations regarding the goals and effects of treatments (Gresham & Lopez, 1996; Rasnake, 1993).

Social validation of an intervention program requires a comprehensive assessment involving the primary recipients of the intervention, the indirect consumers affected by the program, and members in the community (Schwartz & Baer, 1991). The implication for parent education is that perceptions regarding a program's relevance, acceptability, and effectiveness must be assessed by all participants which may include parents and teachers as well as children themselves. In the parent education literature, there has been an emphasis on exploring the appropriateness of treatment procedures as well as the social importance of treatment outcomes which are referred to in the literature as treatment acceptability and consumer satisfaction (Kramer, 1990).

Treatment Acceptability and Consumer Satisfaction

Treatment acceptability and consumer satisfaction are related concepts subsumed under the rubric of social validity (Calvert & Johnston, 1990). Treatment acceptability is

defined as "judgments by laypersons, clients, and others of whether treatment procedures are appropriate, fair, and reasonable for the problem or client" (Kazdin, 1981, p. 493). The acceptability of a proposed intervention is important for a number of reasons. Of primary consideration is the ethical dimension embedded within the idea of treatment acceptability. From an ethical and legal standpoint, participants in intervention programs have the right to exercise their option to consent to treatment and express their opinions as to whether procedures are fair and acceptable (Paget, 1991; Wolf, 1978). Second, treatment acceptability is also related to the integrity with which treatments are implemented which ultimately has an impact on the effectiveness of an intervention (Witt & Elliott, 1985; Wolf, 1978). Participants who do not like the treatment may drop out completely or may modify the program to suit their personal preferences. If a treatment is not implemented as intended or is abandoned in its entirety, the potential benefit of the treatment becomes questionable.

Two models of treatment acceptability have been proposed. The first model, developed by Witt and Elliott (1985), emphasizes the reciprocal relationships between four elements: (a) treatment acceptability; (b) treatment use; (c) treatment integrity, and (d) treatment effectiveness. This model holds that treatment selection is guided by initial judgments about acceptability which impact on the use of a treatment which in turn affects the extent to which procedures are implemented as intended, ultimately playing a role in detemining the effectiveness of a treatment. Moreover, if the intervention is judged to be effective, it is hypothesized that initial impressions of acceptability will be enhanced. Reimers et al., (1987) expanded this model and maintained that initial impressions of acceptability are mediated by the level of knowledge and understanding one has about a proposed treatment prior to its implementation. Therefore, if a proposed treatment is not well understood, compliance with the program and its effectiveness will be compromised. Although the validity of both models remains largely untested, they serve as a useful heuristic for guiding research on treatment acceptability (Calvert & Johnston, 1990; Elliott, 1988a). Research into treatment acceptability has focused on a diverse range of topics, including the influence of child and teacher variables on treatment acceptability ratings, the relationship between pre and posttreatment ratings of acceptability and effectiveness, as well

as the measurement of the construct of treatment acceptability itself (Elliott et al., 1991).

Treatment acceptability is typically measured by asking participants to rate statements as to the fairness and expected effectiveness of procedures on a Likert-type scale (Elliott, 1988a; Gresham & Lopez, 1996). The first treatment acceptability measure was developed by Kazdin (1980b) based on a pilot study involving college students, but a number of treatment acceptability instruments have since been devised and used with specific populations such as teachers and parents (e.g., Elliott & Von Brock Treuting, 1991; Tarnowski & Simonian, 1992; Witt & Martens, 1983). One measure, the *Children's Intervention Rating Profile* (Witt & Elliott, 1985) was specifically developed to assess children's perceptions, although treatment acceptability from a child's perspective has been largely ignored in the literature (Elliott, 1988a; Elliott & Busse, 1993).

The traditional approach to investigating treatment acceptability involves large sample, quasi-experimental studies employing analogue methodology (Calvert & Johnston, 1990; Eckert & Shapiro, 1999; Elliott, 1988a, 1988b). This research paradigm was pioneered by Kazdin who began sampling university undergraduates and asking them to rate the acceptability of hypothetical treatment recommendations for fictitious case studies (e.g., Kazdin, 1980a, 1980b). There are several advantages cited in favor of the analogue approach: it allows for more experimental control over extraneous variables; permits manipulation of variables of interest; and may be more cost and time effective (Miltenberger, 1990). However, a major disadvantage of the analogue method is its questionable ecological validity (Calvert & Johnston, 1990; Miltenberger, 1990; Reimers, Wacker, Cooper, & De Raad, 1992a). On this point, critics have questioned the applicability of hypothetical case studies to actual practice and the extent to which acceptability ratings from college students generalize to other populations (Calvert & Johnston, 1990; Miltenberger, 1990; Reimers et al., 1992a). By virtue of being simulated cases with a restricted number of treatment options, analogue methods have been decried as limiting the extent to which such information is applicable to naturalistic settings (Eckert & Shapiro, 1999).

However, there is little research evidence available to evaluate such a claim. Reimers

and colleagues (1992a) have conducted the only study to date directly comparing analogue and naturalistic treatment accepability ratings provided by a sample of 40 parents seeking treatment for children's acting out behaviors. Prior to beginning treatment, parents were asked to rate the acceptability of three interventions (positive reinforcement, time out, medication) after reading a hypothetical vignette of a child with either a mild or severe behavior problem (noncompliance). In-depth assessments of the actual child seeking services were then conducted, followed by a presentation of treatment recommendations (praise, differential reinforcement, token econony). Parents then rated the acceptability of these interventions for their own child. The results revealed similar levels of acceptability for both the analogue and naturalistic recommendations.

In a related vein, the extent to which findings from samples of college students generalize to other populations has also been questioned. For example, the *Treatment Evaluation Inventory* (TEI; Kazdin, 1980a) was the first treatment acceptability instrument to be developed. This measure was piloted using university students, causing some researchers to criticize the TEI as being too difficult for other populations to complete, such as parents of low socioeconomic status or with limited educational background (Kelley, Heffer, Gresham, & Elliott, 1989; Reimers et al., 1992a). The research evidence to date on this point has been mixed, making it difficult to determine whether such a claim is valid (Calvert & Johnston, 1990; Miltenberger, 1990; Rasnake, 1993). For example, although there have been studies documenting acceptability ratings that vary as a function of the rater (e.g., Calvert & Johnston, 1988 as cited in Calvert & Johnston, 1990; Kazdin, French, & Sherick, 1981; Kazdin, 1986), other findings have not revealed inter-rater differences (e.g., Elliott, Turco, & Gresham, 1987; Kazdin, 1984; Waas & Anderson, 1991). In recent years, there has been an increased focus on studying treatment acceptability among teachers and parents although the use of analogue methodology remains standard practice in the field (Miltenberger, 1990; Reimers et al., 1992a).

The basic rationale driving research on treatment acceptability is the premise that choice of treatment, compliance with treatment, and treatment outcomes are affected by judgments as to the suitability and fairness of an intervention (Calvert & Johnston, 1990). In

addition to examining the acceptability of treatment procedures, Wolf (1978) also argued that the effects of a particular treatment also need to be socially valid. Consumer satisfaction is the term used to refer to participants' perceptions regarding treatment outcome as well as satisfaction with treatment procedures (McMahon & Forehand, 1983). In the parent training literature, consumer satisfaction is often assessed following treatment (Calvert & Johnston, 1990; Calvert & McMahon, 1987). Similar to the acceptability literature, rating scales are commonly used to assess consumer satisfaction (Lebow, 1982; McMahon & Forehand, 1983).

However, an important distinction between measurement practices in the acceptability and satisfaction literatures is the emphasis placed on the empirical validation of treatment acceptability measures. Researchers have made concerted efforts to demonstrate the reliability and validity of various treatment acceptability instruments (e.g., Kazdin, 1980a, 1980b; Elliott & Von Brock Treuting, 1991; Tarnowski & Simonian, 1992; Witt & Martens, 1983). In contrast, satisfaction questionnaires typically used in parent training research appear to have been developed and used based on face validity, with a seeming disregard for the psychometric properties of these instruments (McMahon & Forehand, 1983). For example, a commonly used consumer satisfaction measure is the *Parent's Consumer Satisfaction Questionnaire* (PCSQ), an instrument developed by Forehand and McMahon (1981) to assess the acceptability and effectiveness of their behavioral parent training program. This rating scale assesses four aspects of satisfaction: (a) overall satisfaction with the program; (b) the extent to which the teaching program was useful and easy to implement; (c) the difficulty and usefulness associated with specific aspects of the program; and (d) satisfaction with the therapist. This rating scale has been used to evaluate parent training programs in several studies, including other parent training programs (e.g., Calvert & McMahon, 1987; Furey & Basili, 1988; McMahon, Tiedemann, Forehand, & Griest, 1984; Webster-Stratton, 1985a, 1989; Webster-Stratton et al., 1988, 1989). A similar approach was followed in the development of instruments to assess satisfaction with consultation such as the *Consultation Services Questionnaire* (CSQ; Zins, 1984) and the *Consultant Evaluation Form* (CEF; Erchul, 1987). These instruments have been widely

used in consultation research (e.g., Colton & Sheridan, 1999; Sheridan et al., 1999; Sheridan, Colton, et al., 1996). In other consultation studies, the PCSQ and CSQ have been combined and used to assess parent satisfaction with consultation services (e.g., Kratochwill et al., 1999; Rotto & Kratochwill, 1994).

Although satisfaction with services provided through parent training or parent consultation is commonly included in research documenting the effectiveness of these approaches (Calvert & Johnston, 1990; Sheridan, Welch, et al., 1996), little systematic investigation of the factors influencing post-treatment acceptability has been carried out (Webster-Stratton, 1989). In this regard, more attention has been paid to the factors influencing the acceptability of school and classroom-based interventions as typically evaluated by teachers or college students. In the next section of this chapter, the teacher and parent-based literature into treatment acceptability and consumer satisfaction are reviewed.

Factors influencing teacher treatment acceptability. Much of the treatment acceptability research has focused on identifying the factors that affect judgments about the fairness and appropriateness of behavioral interventions (Elliott, 1988a, 1988b; Miltenberger, 1990; Rasnake, 1993). Moreover, the majority of these studies have focused on the acceptability of classroom behavioral interventions as rated by college undergraduates or teachers (Calvert & Johnston, 1990; Elliott, 1988b; Elliott & Busse, 1993). In a review of the school-based intervention literature, a number of variables that influence teacher evaluations of treatment acceptability were identified such as psychologist characteristics, teacher characteristics, child characteristics, and treatment issues (Elliott, 1988b).

In terms of psychologist characteristics, studies have indicated that teachers are more likely to rate interventions favorably when psychologists have involved teachers in the consultation process and have not played an expert role. For example, in one study, collaborative interactions between teacher and psychologist were rated as the preferred mode of communication (Babcock & Pryzwansky, 1983). Similarly, teachers who watched a collaborative problem-solving interview identifying a child's problems rated this scenario as more acceptable than a vignette where the psychologist told the teacher what to do

(Rhoades & Kratochwill, 1992). When developing actual treatment recommendations, teachers are more likely to endorse interventions that are developed collaboratively with psychologists (Kutsick, Gutkin, & Witt, 1991). In this study, teachers were presented with case studies and told that the cases had been prepared in one of three ways: (a) collaboratively between psychologist and teacher; (b) alone by a psychologist; or (c) alone by the child's teacher. Treatment recommendations developed through collaborative means were rated as more acceptable.

The terminology used by psychologists also plays a role in teacher ratings of behavioral interventions (Elliott & Busse, 1993). For example, treatment recommendations that were labeled as "pragmatic" were judged to be more acceptable to teachers than identical sets of recommendations that were labeled "behavioral" or "humanistic" (Witt, Moe, Gutkin, & Andrews, 1984). However, these preferences appear to be mediated by teachers' theoretical orientation and familiarity with the techniques. In a study of teachers who used behavioral modification strategies in the classroom, behavioral interventions were rated as more acceptable than those labeled humanistic or pragmatic (Hall & Wahrman, 1988). In addition, teachers prefer technical terminology over everyday language when discussing behavioral interventions (Rhoades & Kratochwill, 1992). In this study, consultants interviewed teachers about a child's behavior problems and used either technical terms (e.g., reinforcement, extinction) or ordinary language (e.g., praise, stopping behaviors). Teachers in the technical language condition rated the proposed interventions as more acceptable, and during debriefing the teachers indicated that the use of nontechnical language by the psychologist was perceived as patronizing and assumed a lack of knowledge about behavior modification on the teacher's part.

Other studies have also demonstrated the relationship between teacher characteristics such as knowledge about behavior modification and general teaching experience and perceptions of treatment acceptability (Calvert & Johnston, 1990; Elliott, 1988b). For example, in a study carried out by McKee (1984 as cited in Elliott, 1988b), elementary school teachers with varying amounts of knowledge about social learning principles were asked to rate the acceptability of four interventions. Teachers with a greater

understanding of social learning theory as measured on a pretest measure rated all interventions as more acceptable than teachers in the low knowledge group. Similarly, Clark and Elliott (1988) found a significant relationship between teachers' knowledge of behavioral principles and acceptability ratings in their comparison of two social skills training programs. However, there appears to be an inverse relationship between years of teaching experience and the acceptability of a proposed treatment (Witt, Moe, et al., 1984; Witt & Robbins, 1985). In both of these studies, teachers with more years of teaching experience were more harsh in their ratings of behavioral interventions than newly trained teachers. These findings may be explained by cohort effects reflecting training differences as well as differing amounts of exposure working with behavior problem children (Calvert & Johnston, 1990; Elliott, 1988b).

Child-related characteristics such as type of behavior problem and severity have also been cited as important factors influencing acceptability judgments. Numerous studies have demonstrated a positive relationship between problem severity and acceptability; the more problem severity increases, the more acceptability ratings of a treatment increase (Calvert & Johnston, 1990; Elliott, 1988b; Reimers et al., 1987). Although Elliott's (1988b) review indicated that teacher ratings vary as function of the type of symptoms displayed by a child, most of the research has focused on comparing different aspects of similar acting-out behaviors such as aggression and obscene language. In fact, little attention has been paid to comparing the acceptability of interventions for internalizing versus externalizing problems (Calvert & Johnston, 1990). To a lesser extent, there is also evidence to suggest that other child characteristics are important such as gender or personality variables. In one study, teachers were asked to read one of six vignettes that varied by ADHD symptomatology (i.e., inattentive type, hyperactive-impulsive type, combined type) and student's gender. They were then asked to assess the acceptability of various interventions (e.g., daily report card, response cost, medication, classroom lottery) using both quantitative and qualitative methods (Pisecco, Huzinec, Curtis, & Mathews, 1999a; Pisecco, Huzinec, Curtis, & Mathews, 1999b). Results revealed an interaction effect between the type of intervention and gender; medication and response cost techniques were rated to be equally acceptable

for males while response cost was rated as more acceptable than medication for females. In another study of teachers asked to rate the acceptability of interventions proposed for a child with behavior problems, interventions were rated as more acceptable when used with a child of average as opposed to below average intelligence (Martens & Meller, 1989). In this investigation, there was also an interaction effect between a child's intelligence and popularity rating; teachers rated interventions as less acceptable for popular children with below average intelligence.

Treatment issues have also been shown to have an impact on acceptability such as the type of intervention proposed, expectations surrounding treatment effectiveness, and the time required to implement an intervention (Elliott, 1988b, Reimers et al., 1987). Numerous studies have consistently documented that interventions considered to be positive in nature (e.g., praise, token economies, differential reinforcement) are rated as more acceptable than reductive procedures (e.g., time out, spanking, electric shock) (Elliott, 1988b; Reimers et al., 1987). Treatments that are perceived to be effective are also rated as more acceptable (Clark & Elliott, 1988; Kazdin, 1981). In a study by Kazdin (1981), vignettes describing a child's misbehavior and proposed solutions were accompanied by descriptions of the treatment's demonstrated efficacy. Although this knowledge did not influence acceptability ratings, treatments reported to have more adverse side effects were rated to be less acceptable than those with fewer side effects. Interestingly, however, knowledge of a treatment's effectiveness may have the greatest impact on acceptability when the behavior problem is mild in nature. In a study of special education teachers asked to rate the acceptability of three interventions, effectiveness information had more of an impact on treatment acceptability when the problem was described as mild rather than as severe (Von Brock & Elliott, 1987). The authors speculated that teachers may be more willing to learn about and experiment with validated techniques when problems are mild. When problems are severe they may rely more on past experiences and personal judgments as to which treatments will be effective.

Time also has an effect on acceptability since the more time it takes for a teacher to implement treatment, the less likely it is to be perceived as acceptable (Elliott, 1988b;

Reimers et al., 1987). However, time-related factors also interact with the issue of problem severity (Witt, Martens & Elliott, 1984). In the study by Witt and colleagues, teachers rated treatments that varied as a function of the time required for implementation (e.g., ranging from less than 30 minutes to 1 hour per day), problem severity (low, medium, high), and type of intervention (positive versus reductive). The results indicated that, in general, teachers prefered more time-efficient interventions; however, when faced with a severe behavior problem, interventions that required more time to implement were considered more acceptable.

Other variables may also affect treatment acceptability ratings such as the rater evaluating the treatment (Calvert & Johnston, 1990; Miltenberger, 1990). However, rater effects have not been consistently documented in the literature. For example, researchers comparing parent and child perceptions of psychotherapy and behavioral interventions reported no differences among raters (Kazdin, 1984a). Similarly, in another study, comparison between the acceptability ratings of fifth-grade children, teachers, and school psychologists yielded no between-group differences (Elliott et al., 1987). Yet there is other evidence to indicate that the person evaluating the intervention is important to consider. For example, Calvert and Johnston (1988 as cited in Calvert & Johnston, 1990) studied mothers' and university students' acceptability ratings and found that students were more conservative in their evaluation of proposed behavioral interventions than mothers. In two studies of hospitalized children aged 7-13 years, their parents, and hospital staff, children's acceptability ratings were lower than those of parents and hospital personnel (Kazdin et al., 1981; Kazdin, 1986). Another anologue study compared teacher and parent evaluations of a variety of interventions to reduce children's behavior problems such as reinforcement, time out, and contractual agreements (Norton, Austen, Allen, & Hilton, 1983). The results indicated that teachers rated all proposed treatments as more acceptable. In a more recent study (Waas & Anderson, 1991), college freshmen and two groups of elementary school students (i.e., second and fifth grade) were asked to rate the acceptability and perceived effectiveness of three interventions for a child described as having behavior problems at school. The proposed treatments were a token economy system in the classroom,

counseling, and placement in a special education class. The university students and fifth graders were more negative in their evaluations than were the second graders. In response to such evidence, the need to study treatment acceptability among groups other than teachers, such as psychologists, children, and parents has been acknowledged (Elliott & Busse, 1993; Miltenberger, 1990).

Factors influencing parent acceptability and satisfaction. In contrast to the abundance of literature on the acceptability of school-based interventions, there has been considerably less investigation into the factors influencing parent ratings of treatment acceptability. However, to facilitate comparison with the preceding section of this literature review, Elliott's (1988b) conceptual framework for classifying treatment acceptability research into such categories as psychologist characteristics, parent characteristics, child characteristics and treatment issues will be used. The bulk of the parent treatment acceptability literature has focused on parent and child characteristics as well as treatment issues. There has been virtually no research conducted on the effect of psychologist or other consultant variables on parent ratings of acceptability such as the amount of involvement or the type of jargon used by psychologists.

Investigations into the relationship between treatment acceptability and parent characteristics have largely focused on demographic variables such as socioeconomic status (SES), race, gender, and marital status. Two studies examined the impact of SES on acceptability ratings (Heffer & Kelley, 1987; Tarnowski, Simonian, Park, & Bekeny, 1992). In the Heffer and Kelly study, low and middle income mothers of young children with conduct problems were asked to rate the acceptability of positive reinforcement, response cost, time out, spanking, and medication. The results revealed an interaction effect between income level and acceptability; low income mothers rated response cost and positive reinforcement to be more acceptable than did middle income mothers. SES was also a variable of interest in the study by Tarnowski and colleagues (1992) where mothers of children with behavior problems rated the acceptability of a variety of interventions (token economy, time out, and medication as well as combinations of these treatments). However, SES was not found to have an impact on treatment acceptability ratings.

Two studies by Tarnowski and colleagues (Tarnowski, Simonian, Bekeny, & Park, 1992; Tarnowski, Simonian, Park, et al., 1992) examined the influence of race on treatment acceptability. Both studies compared African American and Caucasian mothers' acceptability ratings for interventions proposed for a child exhibiting either acting-out problems (Tarnowski, Simonian, Park, et al., 1992) or depressive symptoms (Tarnowski, Simonian, Bekeny, et al., 1992). Acceptability ratings varied as a function of race in the study using the profile of the depressed child; African American mothers rated all interventions strategies as less acceptable than Caucasian mothers (Tarnowski, Simonian, Bekeny, et al., 1992). However, race was not found to be significant in a methodologically similar study for an acting-out child (Tarnowski, Simonian, Park, et al., 1992).

Parent gender and marital adjustment have also been examined in relation to treatment acceptability. In one study, 69 parents were asked to evaluate several treatment options (e.g., positive reinforcement, time out, response cost, spanking, medication) for a boy described as having behavior problems (Miller & Kelley, 1992). Forty-one of the couples were classified as maritally distressed, while 28 couples reported no marital problems. Results indicated no main effects for either marital status or gender although fathers rated spanking and medication as more acceptable than mothers. Compared to the non-distressed group, maritally distressed parents rated positive reinforcement to be less acceptable but found time out to be more acceptable. This suggests that distressed parents favor interventions that remove the child from the environment, perhaps because marital disagreements may also occur in response to or as a precursor to a child's acting-out behavior. Similar results regarding the effect of parent gender have also been reported (Phares, Ehrbar, & Lum, 1996). In this analogue study of 200 parents, fathers rated the use of discipline strategies such as behavioral contingencies as more acceptable than mothers, who preferred individual and family therapy as treatment options.

Other than limited demographic research, there has been little investigation of treatment acceptability in relation to parent characteristics. A recent study by Reimers, Wacker, Cooper, and DeRaad (1995) examined the effect of parental attributions on acceptability ratings. Fifty-eight parents about to begin treatment at an outpatient clinic for

their child's behavior problems were asked to complete an attribution scale measuring the extent to which they viewed their child's difficulties to be the result of physical factors (e.g., health problems, genetic predisposition, personality traits) or environmental factors (e.g., stressful life events, the child's friends, home environment). The child was then assessed by the clinic staff, and behavioral recommendations were presented to parents. Prior to beginning treatment parents rated the acceptability of the interventions, and results revealed that parents who viewed their child's difficulties to be the result of environmental factors rated the treatment proposal to be more acceptable than parents who attributed their child's problems to more internal factors.

There is also some indirect evidence to suggest that parent personality characteristics may be related to treatment acceptability. In the consultation literature, Stenger, Tollefson, and Fine (1992) found a relationship between teacher perceptions of problem-solving ability and willingness to participate in school-based consultation. Two hundred and sixty-five teachers completed a problem-solving inventory and a questionnaire that probed years of teaching experience, frequency of contact with school psychologists, perceptions about training differences between psychologists and teachers, and whether or not they had participated in consultation over the last school year. Perceptions of high problem-solving ability were found to reliably predict teacher requests for consultation services. Problem-solving ability has been associated with parenting skills. Spaccarelli, Cotler, and Penman (1992) tested the effects of problem-solving training used as an adjunct to behavioral parent training for parents of children with conduct problems. After completing Webster-Stratton's (1992b) videotape training program, parents in the experimental group received problem-solving instruction while parents in the control condition participated in extra discussion sessions. Compared to the control group, parents in the experimental group demonstrated more improvement in their attitudes about their child's behavior and reported a greater reduction of their child's problems.

Problem-solving has also been studied in relation to parent discipline issues (Shorkey, McRoy, & Armendariz, 1985). In their study of 40 mothers, scores on a self-report problem-solving questionnaire were associated with attitudes about punishment

procedures. Mothers who perceived themselves to be less proficient problem-solvers indicated that they were more likely to use more intense punishment procedures than mothers who felt they were better problem solvers. These studies suggest that parents' beliefs about their problem-solving skills may play an important role in their participation in and satisfaction with parent training and consultation services.

Beliefs about one's parenting skills may also influence acceptability ratings. Parental self-efficacy, defined as perceptions about one's sense of competence as a parent, has been associated with parent-child interactions. Parents with low levels of self-efficacy have been shown to cope less effectively with children's behavior problems than parents with a higher degree of parenting competence (Gibaud-Wallston & Wandersman, 1978 as cited in Johnston & Mash, 1989; Mash & Johnston, 1983). Self-efficacy has also been demonstrated to play a role in the extent to which parents become involved in their child's learning (Hoover-Dempsey, Bassler, & Brissie, 1992). For example, Hoover-Dempsey and associates asked parents of young children to complete a self-efficacy measure and provide information about their level of involvement in school-related activities. Modest correlations were reported between level of parent self-efficacy and the number of hours spent volunteering at school, the number of hours spent participating in educational activities with their children, and the number of telephone contacts with teachers. Taken together, these results suggest that the extent to which parents feel confident and satisfied with their parenting role may have an effect on their participation in collaborative intervention endeavors involving teachers.

A number of child-related characteristics have received considerable attention in the parent treatment acceptability literature. Although the evidence from the teacher literature indicates that acceptability of behavioral treatments increases with problem severity, results from parent studies are more ambiguous. Some studies have indicated that problem severity is not related to parent treatment acceptability (Hobbs, Walle, & Hammersley, 1990; Tarnowski, Simonian, Bekeny, & Park et al., 1992; Tarnowski, Simonian, Park, et al., 1992). In one study, treatment options presented for a child described as having a severe behavior problem were rated more favorably than for the child with milder symptoms

(Frentz & Kelley, 1986). In other research, parents of children with severe behavioral difficulties proposed interventions as less acceptable when compared to parents of children exhibiting milder problems (Reimers et al., 1992a, Reimers, Wacker, Cooper, & DeRaad,1992b). Although severity per se was not investigated in a study comparing parents of children with behavior problems to those without any conduct problems, there were differences both groups' ratings (Miller & Kelley, 1992). For instance, parents of the children with behavior problems rated medication more favorably than parents of children with no such difficulties. Results such as these suggest that past ideas about problem severity which were based largely on analogue evidence may not be applicable to clinical, in vivo situations. Problem severity may play a very different role in influencing treatment acceptability among parents of children with actual problem behaviors.

Similar to the teacher-based literature, there is evidence that the type of behavior problem displayed by a child affects parent ratings of acceptability. Although one study failed to report differences in acceptability ratings in relation to problem type, all of the profiles depicted acting-out behaviors such as tantrums, noncompliance, aggression and hyperactivity (Miltenberger, Parrish, Rickert, & Kohr, 1989). Thus, it is not surprising that no effect of problem type was found since all of the behaviors were consistent with externalizing symptomatology and were not indicative of substantially different behavior problems. Discrepant acceptability ratings from two studies evaluating interventions for a child with depression (Tarnowski, Simonian, Bekeny, et al., 1992) versus a child with disruptive behaviors (Tarnowski, Simonian, Park, et al., 1992) also suggest that acceptability varies as a function of symptomatology. In another study, parents were specifically asked to rate interventions proposed for a child with either an internalizing or externalizing behavior problem. For the externalizing case, parents endorsed behavioral strategies while family or individual therapy and medication were rated as more acceptable for the internalizing case (Phares et al., 1996). However, it is interesting to note that in the Phares study, parents also perceived internalizing problems to be more severe than the externalizing symptoms, which suggests that problem type is confounded with issues related to problem severity.

Research comparing various disabilities also suggests that parents rate interventions differently, depending on the type of difficulty their child exhibits. In one study, parents of children with autism, parents of children with other disabilities, and parents of nondisabled children were asked to rate the acceptability of treatments for self-injurious behavior. The results indicated that ratings differed as a function of the child's problem (Pickering & Morgan, 1985). Reinforcement was rated as the most acceptable among parents of children with autism, while parents of children with other disabilities rated timeout as more acceptable. Similar results were obtained when parents of children with cancer and parents of healthy children were asked to rate interventions to treat noncompliance issues in cancer cases (Miller, Manne, & Palevsky, 1998). Parents of the children with cancer rated punitive strategies (e.g., response cost, time out) to be less acceptable than the other group of parents.

Age and gender variables revealed to the child being treated may also be relevant to the discussion at hand. In a study of parents and teachers asked to rate the acceptability of interventions for disruptive behaviors of two children aged 5 and 10, all of the behavioral procedures proposed for the younger child were rated as being more acceptable (Norton et al., 1983). In a similar study, parents were asked to rate the interventions proposed for a 6 and 15 year-old child with behavior problems (Phares et al., 1996). Behavioral strategies were rated as more acceptable for the younger child, while other approaches such as medication and psychotherapy were rated as more acceptable for the adolescent. Both of these studies also investigated the effect of gender on treatment acceptability ratings, although researchers found few differences in relation to the child's gender. However, it is important to keep in mind the prevalance statistics indicating males outnumber females with respect to externalizing problems while the opposite is true for more internalizing behaviors (Beitchman et al., 1992a, 1992b; Sholevar & Sholevar, 1995).

Treatment isssues have been investigated with respect to parent treatment acceptability. As in the teacher-based literature, parents generally perceive positive procedures such as reinforcement to be more acceptable than reductive procedures such as punishment (Calvert & McMahon, 1987; Heffer & Kelley, 1987; Jones, Eyberg, Adams, &

Boggs, 1998; Miller & Kelley, 1992; Miltenberger et al., 1989). Moreover, behavioral strategies are preferred over other types of interventions such as medication (Tarnowski, Simonian, Park, et al., 1992; Tarnowski, Simonian, Bekeny, et al., 1992). Another potentially significant factor is whether differences in treatment format affect parental perceptions of acceptability. Calvert and McMahon (1987) asked mothers of children with conduct problems to evaluate a behavioral parent training package presented in one of three ways. The amount of information provided to parent was manipululated such that one third of the sample received a description of the program with a rationale as to why a particular procedure was useful, one third received only an outline of the program with no rationale, and the final third received the description and rationale as well as an example of a parent explaining the rationale to a child. The mothers who received the description and the rationale provided the highest acceptability ratings for the parent training program. Results such as these support Reimers and colleagues' (1987) argument that a complete understanding of the proposed intervention is an important consideration when assessing treatment acceptability since the additional information about the treatment provided in the Calvert and McMahon (1987) study enhanced the acceptability of the intervention.

Two studies have examined the relationship between perceived treatment effectiveness and acceptability by asking parents of children with behavior problems to rate the acceptability of an intervention (Hobbs et al,.1990; Reimers & Wacker, 1988). In the study by Hobbs and colleagues, mothers were asked to rate the acceptability of a brief, 1-hour training session on how to administer one of three treatments (praise, time out, and praise) to their children. Results indicated that maternal ratings were higher for treatments presented as being more effective and having fewer adverse side effects. In the Reimers and Wacker study, parents seeking services for their child's behavior problems were asked to rate the acceptability of proposed interventions immediately after they were explained to parents and one month following the clinic visit. Although effectiveness was not significantly correlated with acceptability ratings prior to treatment, upon follow-up a significant positive correlation was reported between effectiveness and acceptability. This study underscores the importance of continuing to assess treatment acceptability once an

intervention has been implemented (Reimers & Wacker, 1988).

In the parent training literature, there has been limited investigation of the factors influencing satisfaction ratings following treatment. Webster-Stratton's (1989) comparison of three versions of her videotape training series program failed to detect any effect of SES or family income on satisfaction ratings. This is in contrast to results from other studies where parents of lower SES rated parent training to be less acceptable (Furey & Basili, 1988; Webster-Stratton, 1985a). However, the methodology in the Furey and Basili study was somewhat unorthodox in that they considered changes in child behavior as indicators of parent satisfaction, and it is questionable whether behavior change alone should be considered as a measure of satisfaction. Webster-Stratton (1985b) investigated the effects of father involvement on parent training outcomes and compared participants of a behavioral parent training program where half of the sample included fathers who were involved in the training. Not only did father involvement result in greater treatment gains, but satisfaction ratings at one year follow-up were higher for the father-involved sample. Only two studies have examined the impact of problem severity on satisfaction, both of which found that parents who rated their children as having less severe behavior problems also indicated greater satisfaction at 1- and 6-month follow-up (Reimers et al., 1992a; 1992b).

There is evidence that treatment issues are germane to the study of parent treatment acceptability. A number of studies, both analogue and naturalistic investigations, have indicated that intervention format is an important consideration. For example, parents completing a parent training program based on social learning principles as well as behavioral techniques were more satisfied than parents taught only about behavioral techniques (McMahon et al., 1984). These differences in satisfaction were still maintained at 2-month follow-up. In other studies, the issue of individual versus group formats has been investigated. For example, in a study comparing individual versus group parent training, parents in an individualized program were more satisfied than parents who participated in a group (Eyberg & Matarazzo, 1981, as cited in McMahon & Forehand, 1983). However, other findings suggest that parents prefer group formats that permit discussion and feedback

over self-administered programs. In two separate studies, Webster-Stratton (1989; Webster-Stratton et al., 1988) compared the effectiveness and acceptability of three formats of her videotape parent training series: individual administration; group discussion with videotherapy; and group discussion only. Mothers perceived the group discussion and videomodeling format to be more satisfying, useful, and less difficult to use than those in the other conditions. These group differences in satisfaction were still evident at one year later. Parents commented that the self-administered program was limited by a lack of personal contact and feedback from the therapist. In a subsequent study, Webster-Stratton (1990) incorporated a consultation component into the individual format. She compared the standard self-administered program with a self-administered program that permitted parents to call a therapist whenever they wished and meet with the therapist once during the program and at the end to discuss any questions or concerns. The results indicated no differences in satisfaction ratings although there were differences related to effectiveness issues. Less posttreatment deviance in parent-child interactions were reported for participants in the self-administered plus consultation group than in the self-administered-only group or control group.

Results from survey research indicates that different models of service delivery are evaluated differently with respect to treatment acceptability. In a study by Sheridan & Steck (1995), over 450 school psychologists in the United States were asked to rate the acceptability of four types of service delivery (direct service, teacher-only consultation, parent-only consultation, and conjoint behavioral consultation). Results revealed that conjoint behavioral consultation was rated as the most acceptable model of service delivery. These findings were replicated in a similar study of over 300 Canadian school psychologists who were asked to rate the acceptability of these approaches (Illsley et al., 1999). Parents and teachers have also been polled as to their perceptions of these four models of service delivery, with both of these groups rating conjoint behavioral consultation as the most acceptable means through which to address student problems (Freer & Watson, 1999).

Summary and Critique

Social validity is an important component of intervention research, and considerable

attention has been paid to the constructs of treatment acceptability and consumer satisfaction. Models of treatment acceptability hold that initial judgments of acceptability play a role in the selection of treatment procedures and affect the eventual outcome of an intervention (Reimers et al., 1987; Witt & Elliott, 1985). However, the treatment acceptabilty literature has been constrained by its focus on analogue methodology and the measurement of treatment acceptability by teachers or university students. The relationship between treatment acceptability and treatment outcome is also not well understood. Although the importance of ongoing assessment of treatment acceptability prior to, during, and following treatment has been stressed (e.g., Reimers & Wacker, 1988; Schwartz & Baer, 1991), there has been little research documenting the acceptability of interventions throughout the course of treatment. Also, few studies have investigated the the factors that influence treatment acceptability in clinical intervention research. For example, parental perceptions of treatment acceptability and satisfaction are not well understood. Previous research suggests that parent characteristics such as SES, marital adjustment, race, and beliefs about self-efficacy and problem-solving skills may influence pre and posttreatment acceptability ratings. Child issues such as the severity of a behavior and the type of problem may also have an effect on parent acceptability ratings. Finally, treatment issues such as the type of intervention used and the format through which treatments are delivered to parents may also influence acceptability ratings. However, given the questionable ecological validity of these findings due to the analogue methodology upon which these studies were based, more naturalistic investigation into the factors that influence parental perceptions of acceptability is needed.

Research Questions and Hypotheses of the Present Study

This study is part of a larger research project investigating the effectiveness of home and school consultation in the treatment of young children with mild to moderate behavior problems. The consultation approaches tested in this study exist along a continuum of indirect service delivery with varying degrees of collaboration between a consultant and parent and teacher consultees. Three indirect models of service delivery were compared: (a) a highly individualized behavioral consultation model (BC); (b) group videotape therapy

with minimal consultation (GVT); and (c) a self-administered videotape therapy program (VT).

The present study represents a preliminary and exploratory analysis of the effectiveness and acceptability of these intervention approaches as rated by parents. One of the primary goals of this study was to examine the impact of treatment methods on children's behaviors at home and at school. A second goal of this investigation was to document the acceptability of treatment procedures prior to, during, and following treatment. A final aim of this study was to explore some of the factors affecting treatment acceptability and consumer satisfaction judgments made by parents participating in the study. In order to address each of these goals, the following hypotheses were explored:

Prediction #1: *It was predicted that children in all three intervention conditions would demonstrate positive improvements in the behaviors targeted for change.*

One aim of this study was to provide further empirical evidence supporting the use of videotape parent training and conjoint behavioral consultation in the treatment of children's behavior problems. Previous investigations have demonstrated the efficacy of self-administered videotape training programs for parents of children with behavior problems (Webster-Stratton, 1990, 1992a; Webster-Stratton et al., 1988, 1989). Other research indicates that conjoint behavioral consultation is also effective for children with behavior problems (e.g., Johnson, 1994; Kratochwill et al., 1999; Sheridan et al., 1990; Sheridan, Kratochwill, et al., 1996). Based on this research, it was expected that all of the children participating in the study would demonstrate significant behavioral improvements.

Prediction #2: *It was predicted that children in the GVT condition would evidence greater positive changes in behavior than children in either the BC or VT groups.*

The design of the present study allowed for a direct comparison of intervention approaches based on varying degrees of consultation. Other than the study by Kratochwill and colleagues (1999), there is little research comparing different levels of consultation. It is reasonable to expect that the three intervention approaches used in this investigation will

vary with respect to their effectiveness in reducing problem behaviors and increasing social behaviors. The videotape therapy condition combined with group discussion may result in the greatest degree of change because parents and teachers are able to learn skills modeled in videotaped vignettes and discuss these strategies with a behavioral consultant as well as other parents, allowing for more learning and feedback opportunities.

Prediction #3: *It was hypothesized that a positive relationship exists between treatment outcome and parental perceptions of acceptability and satisfaction.*

Models of treatment acceptability (Reimers et al., 1987; Witt & Elliott, 1985) posit a link between treatment effectiveness and acceptability. However, due to the almost exclusive reliance on the analogue method in treatment acceptability research, there has been little investigation of the relationship between these two variables in clinical research and practice. Research conducted by Reimers and his colleagues (1992a; 1992b, 1995) has offered preliminary evidence as to the association between treatment effectiveness and acceptability ratings which provided a rationale for the expectation that positive treatment outcomes would be correlated with greater posttreatment acceptability and satisfaction ratings.

Prediction #4: *It was hypothesized that intervention condition has an impact on parent ratings of treatment acceptability and satisfaction.*

Within the treatment acceptability literature, it has been commmon practice to evaluate the acceptability of different behavioral intervention strategies such as time out, positive reinforcement, and medication (Calvert & Johnston, 1990; Elliott, 1988; Reimers et al., 1987). Notwithstanding findings from survey research, the ways in which such treatments are delivered have not been examined with respect to their acceptability. Each of the three interventions used in this study employed similar behavior management techniques such as time out, ignoring, and praise but differed in the manner in which they were presented to and implemented with parents and teachers. In essence, three levels of consultation services were compared: the traditional conjoint behavioral consultation model;

minimal consultation involving group discussion and videotape therapy; and no consultation since parents and teachers self-administered the videotape training package. In addition to exploring which approach yielded the largest treatment gains (Prediction #2), it was also important to investigate which condition parents considered to be the most socially valid. However, it is difficult to predict which intervention approach will garner the greatest acceptability and satisfaction ratings since there is conflicting evidence in the parent training literature as to whether parents prefer self-administered versus group-based intervention programs (e.g., Webster-Stratton, 1989; Webster-Stratton et al., 1988; McMahon & Forehand, 1983).

Prediction #5: *It was hypothesized that a positive relationship exists between parental perceptions of parenting competence and problem-solving abilities and parent treatment acceptability ratings.*

Previous research suggests that beliefs about one's parenting skills and satisfaction with the parenting role are important considerations in any collaborative endeavor between home and school. Parents' perceptions regarding parenting competence and self-efficacy have been demonstrated to be influential in a parent's ability to cope with their child's behavior problems (Gibaud-Wallston & Wandersman, 1978 as cited in Johnston & Mash, 1989; Mash & Johnston, 1983) as well as in predicting the level of parent involvement in school-related activities (Hoover-Dempsey et al., 1992). Perceived problem-solving ability has also been shown to be an important factor in determining teacher participation in the consultation process (Stenger et al., 1992), and other research evidence indicates that parental perceptions of problem-solving ability are associated with parenting skills (Shorkey et al., 1985; Spaccarelli et al., 1992). In keeping with these results, it was expected that higher ratings of parenting competence and problem-solving ability would be associated with greater treatment acceptability ratings.

# CHAPTER 3

## Method

### Research Design

A quasi-experimental research design involving both group and single-subject methodology was used in this study. Given the individualized nature of consultation, large-*n*, between-group designs commonly used in psychological research are difficult to implement and are not considered to be the favored means of documenting treatment outcomes (Gresham & Noell, 1993; Gutkin, 1993). To gain a deeper understanding of consultation processes, interactions and outcomes, the use of a small-*n* or single subject research design is recommended (Gutkin, 1993; Busse, Kratochwill, & Elliott, 1995). Small-*n* methodology is considered a powerful means through which to document treatment outcomes since the client being studied serves as his own control (Peterson & Bell-Dolan, 1995). By comparing behavioral observations collected prior to an intervention (referred to as the baseline phase) with observations occuring during the intervention phase, changes in behavior serve as indicators of a treatment's effectiveness (Barlow et al., 1984).

This reliance on pre and posttreatment comparisons is referred to as time-series methodology (Barlow et al., 1984). Time-series methodology involves repeated behavioral measurement over time, and one powerful time-series design is the combined-series multiple baseline (Barlow et al., 1984). A multiple baseline consists of a coordinated series of treatment phase changes that take place at different points in time (Barlow et al., 1984). In this way, experimental subjects serve as their own controls which strengthens the power of this research design to detect treatment effects. Despite attempts to implement multiple baseline procedures in this study by staggering the start of the intervention phase across participants, use of this design was not possible due to logistical reasons. Rather, another form of time-series design was used, the A-B design. The A-B design is the most basic of time-series designs with A representing a baseline period and B representing the intervention phase. While such a design is an adequate means of controlling for threats to internal validity (i.e., the extent to which the intervention is responsible for producing an effect), this type of design does not address threats to external validity, (i.e., the extent to

which results can be generalized across subjects or settings) (Gutkin, 1993). However, external validity with this design can be enhanced by replicating treatment effects across subjects or environments (Barlow & Hersen, 1984). In the present study, a single-subject A-B repeated measures design across multiple subjects and settings was used to examine the impact of conjoint behavioral consultation and videotape therapy on children's behaviors.

Qualitative methodology was used to supplement the quantitative findings regarding treatment acceptability. Although not standard practice in child clinical psychology research, qualititative methodology is viewed as a means of complementing quantitative approaches (Krahn, Hohn, & Kime, 1995). The qualitative approach emphasizes a phenomenological perspective, meaning that the goal underlying this research paradigm is to describe and understand the phenomenon or event being studied (Bogdan & Biklen, 1998; Lincoln & Guba, 1985). This method of inquiry involves the use of a variety of research tools and techniques (e.g., interviews, observations, field notes) to gather data. Intepretation is then carried out through an inductive means of analysis from which prominent themes or ideas emerge (Glaser & Strauss, 1967; Lincoln & Guba, 1985). Although qualitative techniques have not been commonly used in treatment acceptability research, this methodology has the potential for providing additional insight into the variables that affect the acceptability of interventions (e.g., Pisecco et al., 1999b). In the present study, open-ended interviews were used to obtain treatment acceptability information from parents.

## Participants

### Children

Participants in this study included children with externalizing behavior problems, parents, teachers, and behavioral consultants. Children with suspected behavioral difficulties and their families were recruited from English-speaking, Montreal-area preschools and elementary schools. A total of 36 male children between the ages of 3 and 10 years old demonstrating significant externalizing behavior problems (e.g., noncompliance, off-task behavior, aggression) were eligible for participation. Identification of behavioral difficulties was accomplished through the use of standardized rating scales completed by parents and teachers. In order to participate in the study, at least one score on the *Child Behavior*

*Checklist* (CBCL; Achenbach, 1991a), *Teacher's Report Form* (TRF; Achenbach, 1991b), or *Social Skills Rating System* (SSRS; Gresham & Elliott, 1990) had to be significant. Thus, one of the following criteria was necessary: (a) a standard score at least 1 standard devation above the mean on the Problem Behaviors scale of the SSRS; (b) a standard score at least 1 standard deviation below the mean on the Social Skills scale of the SSRS; or (c) a *T*-score in the Clinical range on the Externalizing or Total Problem scales of the CBCL or TRF. These screening measures are fully described in the next section of this chapter.

Of the 36 boys and their families who were eligible for the study, in four of the cases parents declined to participate and treatment services were conducted with teachers only. In two additional cases, parents and teachers withdrew from the program, and services were discontinued. Thus, the final sample of participants analyzed in this study consisted of 30 children, their parents, and their teachers.

Demographic information about the child sample was obtained from screening instruments (e.g, TRF, CBCL, SSRS) as well from a history questionnaire created for this study. The history questionnaire asked parents about family composition, major events that had occurred over the last year, previous medical or psychiatric diagnoses, as well as interventions and medications that children had received. In four of the cases, demographic information was not obtained. Data for the remaining 26 children are presented in Table 1. The mean age of the children prior to treatment was 5.96 years. Six of the children had been previously diagnosed with a medical or psychiatric condition or disorder, and of these, three were taking Ritalin on a daily basis at the time of treatment. Three 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 in the present study.

Table 1

Child Demographic Data

| Item | Number | Percentage of Sample |
|---|---|---|
| *Average Age (in months)* | | |
| Prior to treatment | 71.6 (*SD* = 20.9) | |
| Following treatment | 77.2 (*SD* = 20.9) | |
| *Previous Comorbid Diagnoses* | | |
| Allergies | 1 | 3.8% |
| Attention Deficit Hyperactivity Disorder | 1 | 3.8% |
| Fine/Gross Motor Delay | 1 | 3.8% |
| Global Developmental Delay | 1 | 3.8% |
| Seizures | 1 | 3.8% |
| Speech and Language Delay/Impairment | 2 | 7.7% |
| *Previous Professional Involvement* | | |
| Social Worker | 1 | 3.8% |
| Psychiatrist | 2 | 7.7% |

Parents

All of the parents of the children eligible for the study were invited to participate. In all, 37 parents completed the program. Within the BC group, 17 mothers and 3 fathers acted as consultees. Within the GVT condition, 6 mothers, 2 fathers, and 1 grandmother (who had legally adopted the child) acted as consultees. Six mothers and 2 fathers participated in the VT group. The majority of participating parents were married mothers with one or two children. This demographic information is presented in Table 2.

Table 2

Parent Demographic Data

| Item | Number | Percentage of Sample |
|---|---|---|
| *Participant* | | |
| Mother | 29 | 78.4% |
| Father | 7 | 18.9% |
| Grandmother | 1 | 2.7% |
| *Marital Status* | | |
| Married | 18* | 69% |
| Divorced | 7 | 7% |
| Separated | 1 | 3.8% |
| *Number of Children* | | |
| 1 | 6 | 23% |
| 2 | 15 | 57.7% |
| 3 | 4 | 15.3% |
| 4 | 1 | 3.8% |

*In two cases, the child's biological parents had divorced and the custodial parent had subsequently remarried.

Some of the parents reported major life events they believed to have had an impact on their child. Two of the children in the sample were adopted, one of whom was sick at birth and adopted from a foreign country. Two of the married parents reported a history of marital problems. In one family, there was history of maternal depression, and in another case two recent deaths in the child's extended family had occurred.

Teachers

Teachers of the children identified with behavior problems were also active participants in the study. All of the teachers were female and taught in regular education classrooms. Within the BC and GVT conditions, 17 and 6 teachers acted as consultees, respectively. Within the VT group, 7 teachers participated.

Consultants

Eight female graduate students from the Behavioral Consultation Laboratory at McGill University served as consultants. Consultants were specifically trained in the use of consultation and videotape therapy through a variety of approaches, including: (a) completing graduate level coursework in school consultation; (b) independent reading of relevant consultation and parent training research; (c) attending workshops reviewing theoretical and applied aspects of the treatment procedures; (d) conducting mock interviews until a proficiency level of 85% was reached; and (e) actual case experience conducting consultation with parents and teachers. All interviews were audiotaped and reviewed by the director of the research project, Dr. Ingrid Sladeczek, to ensure the integrity of the interview process.

## Measures

This study employed a variety of assessment instruments and procedures. Multiple forms of assessment (e.g., behavior rating scales, self-report questionnaires, and interviews) were carried out across multiple raters (e.g., parents and teachers) at different phases of the study (e.g., screening, pre-intervention, intervention). A summary of the assessment procedures used throughout the study is presented in Table 3. Table 4 indicates the measures or techniques completed by participants. Detailed descriptions for each of these measures are in the sections that follow.

Table 3

Assessment Methods and Tools Used in Each Phase of the Study

| Screening | Preintervention | Intervention | Postintervention |
|---|---|---|---|
| CBCL/TRF | BIRS | DOB | CBCL/TRF |
| SSRS | PSI | TAP | SSRS |
| | CPII | | BIRS |
| | CPAI* | | PTCSQ |
| | PSOC | | CTEI* |
| | HQ | | |
| | DOB | | |

* For BC and GVT conditions only.

BIRS = *Behavior Intervention Rating Scale*; CBCL = *Child Behavior Checklist*; CPII = *Conjoint Problem Identification Interview*; CPAI = *Conjoint Problem Analysis Interview*; CTEI = *Conjoint Treatment Evaluation Interview*; DOB = Direct Observations; HQ = History Questionnaire; PSI = *Problem Solving Inventory*; PSOC = *Parenting Sense of Competence Scale*; PTCSQ = *Parent/Teacher Consultation Services Questionnaire*; SSRS = *Social Skills Rating System*; TAP = *Treatment Acceptability Probe*; TRF = *Teacher's Report Form*.

Table 4

Participants Responsible for Completing Assessment Methods and Tools

| Measure | Parent | Teacher | Consultant |
|---|---|---|---|
| *Behavior Intervention Rating Scale* | X | X | |
| *Child Behavior Checklist* | X | | |
| *Conjoint Problem Identification Interview* | X | X | X |
| *Conjoint Problem Analysis Interview* | X | X | X |
| *Conjoint Treatment Evaluation Interview* | X | X | X |
| Direct Observations | X | X | |
| History Questionnaire | X | | |
| *Parent Teacher Consultation Services Questionnaire* | X | X | |
| *Parenting Sense of Competence Scale* | X | | |
| *Problem Solving Inventory* | X | | |
| *Social Skills Rating System* | X | X | |
| *Teacher's Report Form* | | X | |
| *Treatment Acceptability Probe* | X | | X |

*Child Behavior Checklist*

The *Child Behavior Checklist* (CBCL/4-18; Achenbach, 1991a) is a paper and pencil rating scale assessing the competencies as well as the behavioral and emotional problems of children between 4 and 18 years as rated by parents or guardians. Competence items on the CBCL/4-18 consist of a series of questions evaluating a child's involvement in leisure activities, peer interactions, and academic performance (e.g., "Please list the sports

your child most likes to take part in", "How many close friends does your child have?, "Has your child repeated a grade?").

The behavioral and emotional portion of the CBCL/4-18 consists of 113 items comprising eight syndrome scales: Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior. Parents are asked to rate their child's behavior over the last six months on a 3-point Likert scale ranging from 0 (Not True) to 2 (Very or Often True). Sample items include "Gets in many fights", "Refuses to talk" and "Day dreams or gets lost in his/her thoughts." Scale scores are grouped together into Externalizing and Internalizing clusters, with Delinquent and Aggressive Behavior scales comprising the Externalizing grouping. Scores on the Withdrawn, Somatic Complaints, and Anxious/Depressed scales comprise the Internalizing cluster.

The CBCL/4-18 yields percentile ranks and *T*-scores based on a mean of 50 and standard deviation of 10. On the Competence scale, a *T*-score one standard deviation below the mean ($T = 40$) signals academic and adaptive functioning within the borderline range. Scores below 37 are considered to be in the Clinical range. Total Problem scores as well as Externalizing and Internalizing scores between 60 and 63 are in the borderline range. A score above 63 is considered in the Clinical range. On the eight scales, *T*-scores ranging between 67-70 are in the Borderline range; scores above 70 are in the Clinical range.

The psychometric properties of the CBCL/4-18 indicate good reliability and validity (Achenbach, 1991a). Normed separately for males and females of two different age groups (4-11 years and 12-18 years), the CBCL/4-18 was standardized on over 2300 children and adolescents. One week test-retest reliability across all samples was .89. Inter-rater reliability by comparing parent and interviewer ratings ranged from .93 to .96. Inter-parent (mothers and fathers) agreement was lower, ranging from .44 to .91. With respect to content validity, the CBCL/4-18 has been successfully used to discriminate clinical from nonreferred child samples. Construct validity was demonstrated by comparing the CBCL/4-18 with other standardized behavior scales with correlations ranging between .52 and .88.

A downward extension of the CBCL/4-18 was developed to assess the behavior

problems of children between the ages of 2-3, known as the Child Behavior Checklist/2-3 (CBCL/2-3; Achenbach, 1992). This instrument consists of 99 emotional and behavioral items that comprise six syndrome scales: Withdrawn, Somatic Complaints, Anxious/Depressed, Sleep Problems, Destructive Behavior, and Aggression. Scale scores are grouped together into Externalizing and Internalizing cluster scores and also yield a Total Problems score, all of which are expressed in T-scores and percentiles. The cut-off scores for the CBCL/2-3 are similar to those for the CBCL/4-18. The psychometric properties of the CBCL/2-3 have been adequately demonstrated (Achenbach, 1992). Scale scores were derived from principal components analyses on parent ratings of 546 children, and the instrument was standardized on 368 nonreferred children and their families. One week test-retest reliability for the entire sample was .91. Inter-parent reliability was .60 for the 3-year-old sample and .67 for the 2-year-old sample.

*Teacher's Report Form*

The *Teacher's Report Form* (TRF; Achenbach, 1991b) is an adaptation of the CBCL for use with teachers and school personnel. The TRF assesses the competencies and behavioral and emotional problems of school-aged children. Competence items pertain to a child's academic achievement and adaptive functioning at school. For example, teachers rate items related to the child's school performance, how hard the child is working, how well the child is behaving, and how much the child is learning compared to same-age peers.

As with the CBCL, the 113 behavioral items on the TRF are grouped into eight syndrome scales: Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior. Teachers are asked to rate the student's behavior within the last two months on a 3-point Likert scale (0 = Not True, 1 = Somewhat or Sometimes True, 2 = Very or Often True). Sample items include asking whether the pupil is "Unhappy, sad, or depressed", "Not liked by other pupils", and "Hears sounds or voices that aren't there." Scores on the Depression and Aggressive scales comprise the Externalizing cluster, while scores on the Withdrawn, Somatic Complaints, and Anxious/Depressed scales comprise the Internalizing cluster. Cut-off scores and interpretation of the TRF are identical to those for the CBCL.

The psychometric properties of the TRF indicate good reliability and validity (Achenbach, 1991b). The TRF was standardized on over 1300 children and adolescents and normed separately for males and females. Two week test-retest reliability coefficients ranged between .82 and .99. Inter-rater reliability among teachers ranged from .24 to .81. With respect to content validity, the TRF has been successfully used to discriminate clinical populations from nonreferred child samples. The construct validity of this instrument has been demonstrated through comparisons with other teacher rating scales, yielding correlation coefficients between .63 and .83 (Achenbach, 1991b). Blind classroom observer ratings were also significantly correlated with scores on an earlier version of the TRF (Achenbach, 1991b).

*Social Skills Rating System*

The *Social Skills Rating System* (SSRS; Gresham & Elliott, 1990) consists of norm-referenced rating scales designed to assess the social competence and adaptive functioning of children in home and school settings. The SSRS uses multiple raters to evaluate the frequency and perceived importance of social behaviors across three developmental levels: preschool (ages 3 to 5), elementary (grades K to 6), and secondary (grades 7 to 12). Parent and teacher forms exist at each level, and a student self-report scale is also available for children at the elementary and secondary levels. In the current study, only the parent (SSRS-P) and teacher (SSRS-T) versions of the preschool and elementary forms were used.

The SSRS-P consists of 49 items at the preschool level and 55 items at the elementary level which comprise two main scales: Social Skills and Problem Behaviors. The Social Skills scale is comprised of four subscales: Cooperation, Assertion, Self-Control, and Responsibility. Parents are asked to rate their child's behaviors across each of these domains on a 3-point Likert scale with respect to frequency (1 = Never, 2 = Sometimes, 3 = Very Often) and perceived importance (1 = Not Important, 2 = Important, 3 = Critical). Sample items on the Social Skills scale include: "Waits turn in games or other activities" and "Attempts household tasks before asking for help." At the elementary level, the Problem Behaviors Scale consists of two subscales: Internalizing and Externalizing problems while an additional Hyperactivity subscale is included in the Problem Behaviors

scale on the preschool version. Items on the Problem Behaviors scale are rated with respect to their frequency (1 = Never, 2 = Sometimes, 3 = Very Often) and include such statements as "Acts sad or depressed" or "Has temper tantrums."

The SSRS-T is intended for teachers and school personel who have had the opportunity to observe a child's classroom behavior for at least two months. The teacher version consists of 40 items at the preschool level and 57 items at the elementary level. The SSRS-T is comprised of three scales: Social Skills, Problem Behaviors, and Academic Competence. The Social Skills scale consists of three subscales: Cooperation, Assertion, and Self-Control. The Problem Behaviors scale consists of Internalizing and Externalizing problems at the preschool and elementary levels with an added Hyperactivity Scale on the preschool form. Item format and content on the SSRS-T are similar to the parent form in that the frequency and perceived importance of behaviors are rated. However, the Academic Competence scale is unique to the teacher version in that a child's school performance (e.g., "In mathematics, how does this child compare with other students?") is rated on a 5-point Likert scale (e.g., 1 = Lowest 10%, 5 = Highest 10%).

Ratings on the SSRS are reported in percentile ranks and standard scores with a mean of 100 and standard deviation of 15. Scores related to the frequencies of behavior on the Social Skills and Problem Behaviors scales are also categorized in terms of levels designated as Fewer, Average, and More. For example, a child whose score on the Social Skills scale falls one standard deviation below that of the standardization sample is said to have more social skills deficits in comparison to the normative group, while a child whose score is more than one standard deviation above that of the standardization sample is said to exhibit fewer social skills deficits than the normative group. Similarly, ratings on the Academic Competence scale can be described in terms of Below Average, Average, and Above Average by comparing an individual's score to that of the standardization sample.

Due to its strong psychometric properties, the SSRS is considered one of the most comprehensive social skills assessment instruments (DeMaray, Ruffalo, Carlson, Busse, Olson, McManus, & Leventhal, 1995). The SSRS manual (Gresham & Elliott, 1990) reports internal consistency reliability coefficients between .73 and .95. Four-week test-

retest correlations ranged between .65 and .93. Although inter-rater reliability among parents, teachers, and students is low (between .24 and .32 on the Social Skills scales), according to the authors the SSRS was intentionally developed to ensure differential ratings across raters and settings (Gresham & Elliott, 1990). Evidence as to the construct and content validity of the SSRS is substantial (DeMaray et al., 1995). High correlation coefficients between this measure and the CBCL also demonstrate the criterion validity of the SSRS (Gresham & Elliott, 1990).

Semi-structured Interviews

Behavioral interviews. As previously described, conjoint behavioral consultation occurs through a series of semi-structured interviews conducted between consultants and parent and teacher consultees (Sheridan & Kratochwill, 1992). In the present study, behavioral interviews were conducted with parents and teachers using the conjoint behavioral consultation interview questions and guidelines that have been developed (Sheridan, Kratochwill et al., 1996). Consultants and consultees completed the *Conjoint Problem Identification Interview* (CPII) and the *Conjoint Problem Analysis Interview* (CPAI) to specify target behaviors, determine treatment objectives, and identify environmental conditions to be altered. A third interview, the *Conjoint Treatment Evaluation Interview* (CTEI) was conducted following the treatment phase to discuss the overall effectiveness of the intervention plan and improve maintenance and generalization of treatment effects.

*Treatment Acceptability Probe.* Interviews provide important descriptive data regarding participants' perceptions of phenomena and events (Bogdan & Biklen, 1998). For this reason, a brief interview was developed to assess parents' acceptability judgments throughout the intervention phase of the study. The *Treatment Acceptability Probe* (TAP) consists of two open-ended questions: "Do you like the intervention procedures you are being asked to implement with your child?" and "Do you think the intervention is a good way to handle your child's behavior problems?" The interview questions were designed to solicit information regarding treatment acceptability from parents and are based on items featured in empirically validated treatment acceptability measures such as the *Treatment*

*Evaluation Inventory* (Kazdin, 1980a), the *Intervention Rating Profile - 15* (Martens, Witt, Elliott, & Darveaux, 1985), and the *Behavior Intervention Rating Scale* (Von Brock & Elliott, 1987). On a weekly basis during the intervention phase of the study, consultants contacted parents via telephone or in person to complete the TAP. Consultants orally asked parents both questions and recorded their responses verbatim. A copy of the TAP interview protocol is provided in Appendix A.

Direct Observations

Direct behavioral observations of the children participating in the study were collected by teachers and parents as prescribed by the behavioral consultation process (Bergan & Kratochwill, 1990). During the PII, consultants and consultees specified the behaviors to be targeted for change (e.g., aggressive outbursts) and consultees were then asked to collect data (e.g., number of aggressive outbursts per day) during the pre-intervention and intervention phases of the study. These behavioral observations served as outcome measures documenting the effectiveness of the intervention.

*Behavior Intervention Rating Scale*

The *Behavior Intervention Rating Scale* (BIRS; Von Brock & Elliott, 1987) is a 24-item questionnaire measuring the acceptability of treatment procedures. Fifteen of the items on the BIRS are derived from the IRP-15 (Martens et al., 1985), a treatment acceptability measure originally developed for teachers. Statements are rated on a 6-point Likert-scale ("1" = Strongly disagree to "6" = Strongly agree) and all of the items are summed to yield an overall treatment acceptability score. The range of possible scores is between 24 and 144 wherein higher scores are indicative of greater treatment acceptability.

Factor analysis results suggest that the BIRS is comprised of three factors: Acceptability, Effectiveness, and Time to Effectiveness (Elliott & Von Brock Treuting, 1991). The Acceptability factor consists of fifteen items that address the extent to which treatment procedures are considered fair and appropriate (e.g., "This would be an acceptable intervention for the child's problem" and "I like the procedures used in the intervention"). The Effectiveness factor consists of seven items pertaining to the expected level of change as well as the maintenance and generalization of these effects (e.g., "Overall,

the intervention would be beneficial to the child" and "Other behaviors related to the problem behavior are also likely to be improved by the intervention"). The Time to Effectiveness factor consists of two items relating to the rate at which an intervention results in change (i.e., "The intervention would quickly improve the child's behavior " and "Soon after using the intervention, the teacher would notice a positive change in the problem behavior ").

There is psychometric support for the reliabilty and validity of the BIRS. The internal consistency of the measure has been demonstrated with alpha coefficients ranging between .87 for the Time to Effectiveness factor and .97 for the entire scale (Von Brock & Elliott, 1987; Elliott & Von Brock Treuting, 1991). In the literature, it is common practice to validate treatment acceptability measures using the *Semantic Differential* (SD; Osgood, Suci, & Tannenbaum, 1957), a personality measure with demonstrated reliability and validity (e.g., Kazdin, 1980a, 1980b; Martens et al., 1985; Witt & Martens, 1983). A comparison between the BIRS and the SD yielded a coefficient of .78 for the Acceptability factor; .76 for the Effectiveness factor; and .52 for the Time to Effectiveness factor (Elliott & Von Brock Treuting, 1991). With respect to construct validity, results from factor analysis revealed that the three factors accounted for over 73% of the variance (Elliott & Von Brock Treuting, 1991).

The BIRS was originally devised to assess the acceptability of classroom behavioral interventions, and this measure has been used in several studies with teachers (e.g., Colton & Sheridan, 1999; Clark & Elliott, 1988; Elliott & Von Brock Treuting, 1991; Von Brock & Elliott, 1987). However, the BIRS has also been adapted and used with parents engaged in the consultation process by making minor wording changes (e.g., replacing the word student with child). For example, the BIRS has been used with parents to document the acceptability of interventions delivered through conjoint behavioral consultation (e.g., Colton & Sheridan, 1998; Galloway & Sheridan, 1994; Sheridan, Colton et al. 1996; Weiner et al., 1998). The BIRS has also been adapted and used to evaluate Canadian and American school psychologists' acceptability of different service delivery models such as conjoint behavioral consultation, parent-only consultation, teacher-only consultation, and

direct services such as social skills training (Illsley et al., 1999; Sheridan & Steck, 1995). A copy of the BIRS used in the current study is included in Appendix B.

*Parent Teacher Consultation Services Questionnaire*

The *Parent/Teacher Consultation Services Questionnaire* (PTCSQ) assesses parent and teacher perceptions of the consultation process following treatment implementation. The PTCSQ consists of four sections. The first part asks respondents to evaluate the overall treatment program by rating 11 statements on a 7-point Likert scale. The descriptive anchor points for each item varies according to the type of question. For example, the anchor points for the statement "At this time, I believe the treatment will continue to have a positive outcome" range from Strongly Disagree (1) to Strongly Agree (7). Possible responses for another item, "Would you recommend the program to a friend or relative?", range from Strongly Not Recommended (1) to Strongly Recommended (7).

The second section of the instrument asks respondents to complete five questions pertaining to the difficulty and usefulness of the instructional strategies and materials used in the intervention (e.g., instructions, homework assignments). Difficulty items are rated on a 7-point Likert scale (1 = Extremely Difficult, 7 = Extremely Easy) as are usefulness items (1 = Extremely Not Useful, 7 = Extremely Useful).

The third section of the PTCSQ is comprised of 6 questions assessing the benefits of the intervention program. For example, this section consists of such statements as "I am able to see the problem situation in great depth" and "I am able to interact more effectively with my child" that are rated on an 8-point Likert scale ranging from 0 (Don't Know/Not Applicable) to 7 (Strongly Agree). The fourth section assesses the qualities of the consultant believed to be important to the consultation process such as knowledge about behavior principles and children, supportiveness, flexibility, and helpfulness. Respondents are asked to rate 14 items about the consultant (e.g., "Is a good listener", "Easy to work with") on an 8-point Likert scale (0 = Don't Know/Not Applicable, 7 = Strongly Agree). Total scores on the PTCSQ may range between 21 and 287, with higher scores reflecting greater satisfaction.

The PTCSQ is an amalgamation of two questionnaires that were developed to

assess satisfaction with psychological services. The first two sections of the PTCSQ pertain to overall program and teaching format and were adapted from the *Parent Consumer Satisfaction Questionnaire* (PCSQ; Forehand & McMahon, 1981). The PCSQ was designed to evaluate parent training programs, and it has been used in several studies to assess satisfaction with behaviorally-based training programs (e.g., Calvert & McMahon, 1987; Furey & Basili, 1988; McMahon et al., 1984; Webster-Stratton, 1985a, 1989; Webster-Stratton et al., 1988, 1989). The remaining sections of the PTCSQ were derived from a measure developed by Zins (1984) to assess satisfaction with consultation services provided by school psychologists. The PTCSQ has been used in previous research to assess parent satisfaction with consultation services (e.g., Kratochwill et al, 1999; Rotto & Kratochwill, 1994). A copy of this instrument is provided in Appendix C.

The psychometric properties of the PTCSQ have yet to be determined. However, this instrument has been successfully used to evaluate parental satisfaction with behavioral consultation in at least two separate studies (Kratochwill et al., 1999; Rotto & Kratochwill, 1994). Furthermore, since the PCSQ, one of the predecessors of this measure, is considered to have adequate face validity (McMahon & Forehand, 1983), an argument can also be made as to the validity of the PTCSQ.

*Parenting Sense of Competence Scale*

The *Parenting Sense of Competence Scale* (PSOC; Gibaud-Wallston & Wandersman, 1978) is a 16-item measure designed to assess parenting self-efficacy. Although originally devised for parents of infant children, the language of the PSOC has been modified for use with parents of older children (Johnston & Mash, 1989). Self-perceptions regarding parenting skills are rated on a 6-point Likert scale ranging from 1 (Strongly Agree) to 6 (Strongly Disagree).

The PSOC yields a total scale score calculated by summing the 16 items. The possible range of total scores is between 16 and 96 with higher scores being indicative of a greater sense of perceived parenting competence. The PSOC also yields two subscale scores which Gibaud-Wallston and Wandersman (1978) refer to as Skill-Knowledge and Value-Comforting and which Johnston and Mash (1989) have renamed Efficacy and

Satisfaction. The Efficacy subscale reflects the extent to which parents feel they have the necessary skills for effective parenting. This subscale consists of seven items that includes such statements as "Considering how long I have been a father or a mother, I feel thoroughly familiar with this role" and "I meet my own personal expectations for expertise in caring for my child." The Satisfaction subscale taps a parent's level of comfort in the parenting role. This scale consists of nine items that includes such statements as "A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one" and "Being a parent makes me tense and anxious." Scores on the Efficacy subscale range from 7 to 42 while scores on the Satisfaction subscale range from 9 to 54.

The reliability and validity of the PSOC have been empirically substantiated. The internal consistency of this measure has been demonstrated with an alpha coefficient of .79 reported for the total scale (Johnston & Mash, 1989). Alpha coefficients for each of the scales ranged from .75 to .82 on the Satisfaction scale and from .70 to .76 on the Efficacy scale (Johnston & Mash, 1989). Six-week test-retest reliability coefficients for the total scale and the subscales varied between .46 and .82 (Gibaud-Wallston & Wandersman, 1978). With respect to concurrent validity, significant correlations between the PSOC and other self-esteem measures have been reported (Johnston & Mash, 1989; Gibaud-Wallston & Wandersman, 1978). Construct validity of the PSOC has been demonstrated through the use of factor analysis to confirm the two Efficacy and Satisfaction dimensions of parenting self-esteem measured on this instrument (Johnston & Mash, 1989). A copy of this instrument is provided in Appendix D.

*Problem Solving Inventory*

The *Problem Solving Inventory* (PSI; Heppner, 1988) is a paper and pencil measure of perceived problem-solving ability. The PSI consists of 35 statements rated on a 6-point Likert scale (1 = Strongly Agree, 6 = Strongly Disagree). A total score of perceived general problem-solving ability is derived from summing all items, and the possible range of scores on the scale is between 32 and 192. Low scores are indicative of perceptions of effective problem-solving skills.

In addition to a general problem-solving scale, this instrument is comprised of three

scales: Problem-Solving Confidence, Approach-Avoidance Style, and Personal Control. The Problem-Solving Confidence scale consists of 11 items assessing feelings of self-assurance (e.g., "I trust my ability to solve new and difficult problems"). Scores on this subscale range between 11 and 66. The Approach-Avoidance Style scale consists of 16 statements pertaining to attitudinal and behavioral reactions (e.g., "I have a systematic method for comparing alternatives and making decisions"). Possible scores on this subscale range between 16 and 96. The Personal Control scale consists of five items relating to a sense of feeling in emotional and behavioral control when faced with a problem-solving task (e.g., "Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems"). Possible scores on this subscale range between 5 and 30.

Psychometric data suggest that the PSI is a reliable and valid measure of self-perceived problem-solving ability (Heppner, 1988). Alpha coefficients for the total scale and the three subscales ranged from .72 to .91 for a sample of university undergraduates (Heppner, 1988) and from .70 to .82 among elementary school teachers (Stenger et al., 1992). Test-retest coefficients for the total scale and the three subscales ranged between .83 and .89 after two weeks and from .44 to .65 after two years (Heppner, 1988). The validity of this measure has been demonstrated by comparing PSI scores to other reports of self-perceived problem-solving skill (Heppner, 1988).

## Procedure

This study consisted of four phases: Screening, Preintervention, Intervention, and Postintervention. The screening phase was the same for all participants regardless of treatment condition although procedures for the preintervention, intervention, and postintervention phases varied by condition. Each of these phases is described in the sections that follow.

### Screening Phase

Schools who had agreed to participate in the study were randomly assigned to one of three intervention conditions: Behavioral consultation (BC), self-administered videotape training (VT) or group videotape training (GVT). Each school was then provided written information regarding the intervention services to be offered in that setting. Occasionally,

further verbal explanations were provided at teacher and parent committee meetings to explain the nature of the project.

Initial referrals of children with suspected behavior problems were obtained from teachers and principals within each of the schools, and parents were sent a screening package consisting of the CBCL, the SSRS-P, and a consent form. Following the return of the parent screening consent form and questionnaires, teachers were asked to sign a consent form and complete the TRF and SSRS-T (see Appendix E for examples of the consent forms). In accordance with the selection criteria outlined in the previous section, children whose behavior was rated to be in the clinically significant range by either a parent or teacher were eligible for the study. For ethical reasons, intervention services were offered to all children selected for inclusion in the study. Once children were identified as having a significant behavior problem, written consent for services was obtained from parents and teachers.

Preintervention Phase

Parents were asked to complete the PSI and the PSOC in order to assess parental beliefs about their problem-solving and parenting abilities. The CPII with the parent, teacher(s), and behavioral consultant was then held to identify the problem to be targeted for change and establish data collection procedures for home and school observations. During the pre-intervention phase, parents and teachers were asked to record a baseline of the behavior to be targeted during the intervention. To ensure reliable statistical analyses, a minimum of five data points during the baseline was collected.

Approximately one week after the CPII, participants in the BC condition completed a second interview, the CPAI, to review baseline data, analyze factors that may be precipitating or maintaining the behavior, and devise a treatment plan for the child. Parents and teachers were also instructed to continue collecting observational data. Participants in the VT and GVT groups did not complete a second interview but continued to collect observational data. Prior to entering the intervention phase, parents in all three conditions were asked to complete the BIRS in order to assess pretreatment acceptability. At this time, parents were also asked to complete the history questionnaire to provide additional

demographic information about themselves and their child (see Appendix F for a copy of this instrument).

Intervention Phase

The length of the intervention phase for the three conditions (BC, VT, GVT) ranged between 8 and 10 weeks. Throughout the intervention phase, parents were asked to continue collecting observational data. Consultants contacted parents on a weekly basis via telephone or in person to monitor treatment progress. During these contacts, observational data, and responses on the TAP were obtained from parents. All information reported to consultants was recorded verbatim and kept in a confidential notebook.

Videotape therapy. Webster-Stratton's videotape therapy program (1982b, 1992b) consists of nine videotapes and a parent manual. Each videotape contains a series of brief, unrehearsed vignettes depicting parent-child interactions. These interactions illustrate how to implement behavioral strategies properly and effectively (alluded to as "Doing it right" vignettes) and demonstrate the incorrect use of these techniques (referred to as "Doing it wrong" vignettes).

The series is comprised of four programs: (a) *Play*; (b) *Praise and Rewards*; (c) *Effective Limit Setting*; and (d) *Handling Misbehavior*. The *Play* program consists of two videotapes, and the first tape contains 25 vignettes instructing parents how to play with their child. Topics include recognizing children's abilities and needs, encouraging creative play, fostering self-esteem, and handling boredom. The second videotape contains 22 vignettes teaching parents how to help their children learn. Material in this video builds on the content covered in the previous tape and relates to teaching children how to solve problems, deal with frustration, and foster language development.

The *Praise and Rewards* program consists of two videotapes. Part 1 teaches parents how to praise their children effectively through 26 vignettes that focus on improving the impact of praise, learning how to deal with children who reject praise, and understanding the effects of rewards. Part 2 contains 15 vignettes designed to teach parents about tangible rewards such as stickers and point systems that can be used to reinforce a variety of behaviors.

The third program, *Effective Limiting Setting*, consists of three videotapes. The first tape teaches how to set limits through 34 vignettes that instruct parents to identify important rules, issue reminders about rules, and avoid unnecessary or unclear demands. The second tape addresses helping children to accept limits and consists of 19 vignettes on how to increase compliance and respond to children who test the rules and ignore inappropriate responses. The last videotape instructs parents how to deal with noncompliance through the use of time-out and ignoring strategies.

The fourth program, *Handling Misbehavior*, consists of three parts contained in two videotapes. The first tape reviews ignoring and limit setting and strategies for dealing with tantrums, hitting, and swearing are presented. The second videotape teaches parents about penalties, punishments, and preventive approaches. Thirty-one vignettes illustrate how to explain time out to children and how to decide on punishment strategies such as losing privileges or natural consequences. Seven vignettes relate to encouraging sharing and cooperative behaviors, using props such as puppets to teach prosocial behaviors, and promoting assertive language in children.

The self-administered version of this program involves individual viewing of all nine videotapes, reading and answering discussion questions immediately after viewing the tape, and receiving homework assignments (Webster-Stratton et al., 1988). The order of presentation outlined in Webster-Stratton's studies (e.g., Webster-Stratton et al., 1988, 1989) was followed in the present study. Parents began by watching the *Play* tapes, followed by the *Praise and Rewards*, *Effective Limit Setting* and *Handling Misbehavior* programs. Parents were given a new videotape to watch each week and were provided with handouts and homework assignments that accompanied the tape.

Behavioral consultation. This condition involved the implementation of an individualized intervention program developed and agreed upon by the consultant and consultees through a series of interviews. In the current study, treatment manuals created and used in the study by Kratochwill and associates (1999) were used to design the individual treatment plans that were discussed during the CPAI.

The treatment manual for externalizing problems consists of three sections: Skill

Selection and Goal Setting Activities, Peer Activities, and 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 (Tell-Explain-Show-Do) as well provides guidelines for practicing these skills. The Peer Activities section is designed to encourage children to interact positively with peers both at home and at school. The third section of the manual reviews child management techniques such as differential attending such as rewarding positive behavior, ignoring misbehavior, instruction giving, and time-out procedures. Similarly, the manual for internalizing problems consists of three parts: Skill Selection and Goal-Setting Activities, Peer Activities, and Positive Reinforcement designed to increase social behaviors using the same Tell-Explain-Show-Do procedures. Home and school versions of these manuals have been developed and successfully used in other behavioral consultation research (e.g., Rotto & Kratochwill, 1994; Kratochwill et al., 1999).

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

Group videotape therapy. This condition consisted of two components: a group viewing and discussion of the Webster-Stratton (1982b; 1992b) videotape series as well as access to a behavioral consultant for specific assistance regarding their child. Each week, small groups (3 to 6 parents) gathered at their child's school to watch a video and participate in a discussion led by the consultant who functioned as a group facilitator. Consultants led discussions by providing questions and topics outlined in the guide accompanying the Webster-Stratton series. Consultants were also available to answer any questions or concerns parents had regarding their child.

Postintervention Phase

During this phase of the study, treatment outcome and acceptability data were obtained from all parent and teacher participants. Specifically, treatment outcome was assessed via the CBCL, TRF, and SSRS. Treatment acceptability was measured using the

BIRS and satisfaction was assessed via the PTCSQ. Additionally, the consultants and consultees in the BC and GVT conditions participated in the CTEI to evaluate the effectiveness of the intervention.

# CHAPTER 4

## Results

### Data Analysis

As discussed in previous chapters, consultation research is best served through the use of several evaluation criteria (Busse et al., 1995; Gresham & Kendall, 1987; Gresham & Noell, 1993). Consequently, a number of evaluative methods were used in the present study to document treatment effectiveness and acceptability. In addition, this study employed both a group design and a small-*n* design, two typical research designs in consultation research (Grehsam & Noell, 1993). Accordingly, the methods used to analyze treatment outcome and acceptability reflect both of these approaches.

Data analysis occurred on three levels. First, parametric and nonparametric statistics traditionally employed in group designs were used. The premise underlying this approach is the detection of differences between groups, and these methods were applied to compare the three interventions tested in this study. However, since the focus of behavioral consultation research is on documenting individual behavior change, statistical methods typically applied to larger, between-groups samples are not suitable for small-*n* research designs (Busse et al., 1995; Gresham & Lopez, 1996; Kazdin, 1984b). For example, analyzing the differences between and within groups is considered inappropriate due to a violation of the assumptions that underlie analysis of variance techniques (Kazdin, 1984b). Moreover, while these methods are adequate for addressing the statistical significance of treatment effects, they do not necessarily represent clinically meaningful changes in behavior (Busse et al., 1995; Gresham & Noell, 1993). For these reasons, statistical approaches considered appropriate in single-*n* research such as effect sizes and reliable change indices were used to examine behavioral changes occurring as a result of the intervention program.

Finally, qualitative analyses were carried out using information provided by 18 of the families participating in the study. Four parents in the VT condition, nine parents in the BC condition, and five parents in the GVT condition provided additional treatment acceptability data obtained from verbal responses to questions on the TAP and written responses to an open-ended question on the PTCSQ (i.e., "How could the program be improved to help you

more?"). Data were analyzed using the constant comparative method developed by Glaser and Strauss (1967), a technique ideally suited for analyzing multiple sources of data (Bogdan & Biklen, 1998). The constant comparative method is a recursive data analysis procedure that allows for categories to emerge through a continuous process of examining and classifiying data with similar themes. First, unitization of the data was accomplished through identifying units of meaning contained within parent responses. Units of meaning represent a single construct or idea and may vary in length from a few words to an entire paragraph (Lincoln & Guba, 1985). Second, these units were then read by the author and an independent researcher experienced in qualitative research methods and sorted according to their content. As recommended by Strauss (1987), coding procedures were used to develop core categories and subcategories of results.

## Treatment Outcome

### Prediction #1

It was predicted that children in all three conditions (e.g., BC, VT, GVT) would demonstrate positive changes in the behaviors targeted for intervention. Effect size statistics and reliable change indices were used to test the prediction that consultation is an effective framework through which to address children's externalizing behavior problems.

The effect size (ES) statistic is a quantifiable means of evaluating treatment effectiveness in consultation research (Busse et al., 1995; Gresham & Noell, 1993). Effect sizes are calculated for single-subject data by subtracting the average number of target behaviors observed during the baseline phase from the average number of target behaviors observed during the treatment phase divided by a measure of variance, usually the standard deviation of the baseline phase (Busk & Serlin, 1992). This is expressed in the following formula:

$$ES = \frac{\bar{X}_{treatment} - \bar{X}_{baseline}}{SD_{baseline}} \quad (1)$$

However, in circumstances where the standard deviation for baseline data cannot be

computed due to a lack of variance during this phase, an aggregate measure of the standard deviation is recommended by pooling the data from the baseline and treatment phases (Busk & Serlin, 1992). Thus, the ES calculated in this situation is expressed as:

$$ES = \frac{\bar{X}_{treatment} - \bar{X}_{baseline}}{SD_{pooled}} \quad (2)$$

The effect size statistic may be interpreted in standard deviation units as expressed in a *z*-score distribution. Effect sizes may range from zero (signaling no observable effect) to one or greater. Positive effect sizes result when there are higher incidences of behavior observed during the treatment phase then during the baseline phase. Conversely, negative effect sizes are generated when there are higher incidences of behaviors reported during the baseline phase than during the treatment phase. Thus, effect sizes greater than +1 (or less than -1) indicate a change of one standard deviation from pretest to posttest. Conventionally, effect sizes of $\pm$ .40 are considered to be significant (Forness, Kavale, Blum, & Lloyd, 1997).

In the present study, effect sizes documenting changes in target behaviors were computed for individual participants across home and school settings. Case description data (e.g., age of the child, target behaviors, intervention condition) and effect sizes are presented in Table 5.

Table 5

Summary of Consultation Case Descriptions, Effect Sizes, and Reliable Change Indices for the CBCL and TRF Total and Externalizing Scales

| Case | Age* | Target Behavior | Intervention | ES Home | ES School | RCI CBCL Total Mother | RCI CBCL External Mother | RCI CBCL Total Father | RCI CBCL External Father | RCI TRF Total | RCI TRF External |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 43 | Noncompliance | BC | -.30 | .04 | -3.76 | -1.34 | NA | NA | 1.61 | 1.61 |
| 2 | 86 | Aggression | BC | -.02 | -1.10 | -1.45 | -2.14 | NA | NA | NA | NA |
| 3 | 88 | Noncompliance | VT | -1.21 | NA | -3.76 | -2.67 | NA | NA | NA | NA |
| 4 | 57 | Noncompliance | BC | -.04 | NA | -.29 | -1.07 | NA | NA | NA | NA |
| 5 | 110 | Noncompliance | VT | -.24 | 1.32 | -.29 | -.80 | NA | NA | NA | NA |
| 6 | 67 | Prosocial Skills | BC | .45 | -.06 | -2.89 | -2.68 | -4.34 | -3.48 | .54 | .80 |
| 7 | 71 | Aggression | GVT | -.78 | NA | -.87 | -.80 | NA | NA | NA | NA |
| 8 | 71 | Noncompliance | GVT | .01 | NA | NA | NA | NA | NA | NA | NA |
| 9 | 64 | Aggression | GVT | -1.16 | NA | NA | 4.82 | 6.65 | 4.82 | NA | NA |
| 10 | 74 | Tantrumming | VT | -.58 | -1.06 | -2.02 | -1.61 | NA | NA | .54 | -.27 |
| 11 | 69 | Tantrumming | VT | -.46 | NA | -2.02 | -1.34 | NA | NA | -4.28 | -4.28 |
| 12 | 42 | Noncompliance | BC | -.73 | -1.75 | -8.10 | -6.42 | NA | NA | -4.28 | -4.01 |
| 13 | 35 | Noncompliance | BC | -.56 | -1.98 | -1.73 | -.54 | NA | NA | NA | NA |
| 14 | 76 | Noncompliance | BC | -.84 | -5.15 | NA | NA | NA | NA | NA | NA |
| 15 | 67 | Noncompliance | GVT | -.13 | -.13 | -2.60 | -2.68 | NA | NA | NA | NA |

| Case | Age* | Target Behavior | Intervention | ES Home | ES School | RCI CBCL Total Mother | RCI CBCL External Mother | RCI CBCL Total Father | RCI CBCL External Father | RCI TRF Total | RCI TRF External |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 88 | Noncompliance | VT | -.45 | NA | NA | NA | 1.45 | -3.21 | -.27 | .50 |
| 17 | 67 | Aggression | BC | -.56 | -.19 | -4.92 | -3.75 | -4.63 | -3.75 | 1.07 | .54 |
| 18 | 43 | Noncompliance | BC | -2.10 | -.18 | -1.16 | -1.61 | NA | NA | NA | NA |
| 19 | 63 | Tantrumming | BC | 1.77 | 1.16 | NA | NA | NA | NA | -2.94 | -2.68 |
| 20 | 74 | Socially Inappropriate | BC | -5.31 | -1.97 | -.29 | -1.61 | NA | NA | -4.82 | -5.35 |
| 21 | 78 | Socially Inappropriate | BC | -.12 | -.40 | 2.60 | 2.14 | NA | NA | NA | NA |
| 22 | 66 | Noncompliance | BC | -.51 | -1.24 | -2.60 | 0 | NA | NA | NA | NA |
| 23 | 36 | Aggression | BC | -.68 | -.66 | -3.47 | -3.74 | NA | NA | NA | NA |
| 24 | 117 | Off-task | BC | -.24 | -.53 | .29 | -.27 | NA | NA | NA | NA |
| 25 | 70 | Aggression | BC | -.10 | -.80 | -2.02 | -1.87 | NA | NA | NA | NA |
| 26 | 96 | Impulsivity | BC | -.39 | -.52 | -.29 | 1.34 | NA | NA | NA | NA |
| 27 | 55 | Noncompliance | VT | -.10 | -1.46 | -1.16 | .53 | NA | NA | .27 | .75 |
| 28 | 109 | Noncompliance | GVT | -3.27 | -.03 | .29 | -.27 | NA | NA | NA | NA |
| 29 | 72 | Aggression | GVT | 2.85 | NA | -.29 | -.53 | NA | NA | NA | NA |
| 30 | 93 | Aggression | VT | -1.04 | NA | -2.31 | -.53 | NA | NA | NA | NA |

* Pretreatment age expressed in months. BC = Behavioral Consultation; CBCL = *Child Behavior Checklist*, Externalizing scale and Total scale; ES = Effect size; GVT = Group Videotape Therapy; NA = Scores Not Available, RCI = Reliable Change Index; TRF = *Teacher's Report Form*, Externalizing scale; VT = Videotape Therapy.

As reflected in Table 5, the majority of the effect sizes were negative, reflecting decreases in behavior from baseline to treatment. These results are in the expected direction since the goal of the intervention in all but one case was to reduce or eliminate problem behaviors such as aggression or noncompliance. In the home setting, improvements were reported in 86% of cases, with 46% of the parent sample reporting behavioral changes equal to or greater than half of a standard deviation. At school, improvements in target behaviors were reported in 86% of cases, with 57% of the teacher sample reporting changes equal to or greater than half of a standard deviation. Across all intervention conditions, effect sizes for home behaviors ranged from -5.31 to 2.85, with a mean ES of -.59 (*SD* = 1.34). Across all intervention conditions, effect sizes for school behaviors ranged from -5.15 to 1.32 with a mean of -.94 (*SD* = 1.27).

Notwithstanding the utility of effect sizes in documenting statistically significant changes in target behaviors, critics have argued that effect sizes do not address the extent to which these changes are clinically significant (Jacobson, Follette, & Revenstorf, 1984; Jacobson & Truax, 1991; Nunnally & Kotsche, 1983). In other words, has there been meaningful change as a result of the intervention? This criticism led to the development of a statistic known as the reliable change index (RCI; Christenson & Mendoza, 1986; Jacobson et al., 1984) which speaks to both the clinical and statistical significance of behavioral change.The RCI is computed by dividing the difference between the means of the baseline and treatment phases by a standard error of difference which is expressed as:

$$RCI = \frac{x_2 - x_1}{S_{diff}} \tag{3}$$

where $x_1$ = a participant's pretest score, $x_2$ = that participant's posttest score and $S_{diff}$ is the standard error of difference between the two test scores expressed as:

$$S_{diff} = \sqrt{2(S_E)^2} \tag{4}$$

The standard error of measurement ($S_E$) is calculated using the standard deviation and the reliability of the measure. This formula is written as:

$$S_E = s_1\sqrt{1 - r_{xx}} \quad (5)$$

where $s_1$ = standard deviation of the data during the baseline phase and r = reliability of the observation scores.

In this way, the degree of significant behavioral change can be determined for each participant. An RCI greater than $\pm$ 1.96 is considered unlikely to occur without actual change ($p < .05$), and this cutoff score can be used as a critical value to indicate that a reliable degree of change resulted from a particular intervention (Jacobson & Truax, 1991). Originally stemming from applications in the psychotherapy literature, the RCI has been shown to be a valid means of identifying clients who make reliable improvements in therapy (Lunnen & Ogles, 1998). The RCI has also been proposed and used as a measure of treatment outcome in consultation research (e.g., Gresham & Lopez, 1996; Gresham & Noell, 1993; Kratochwill et al., 1999).

In the present study, RC indices for each participant were calculated to determine changes in problem behaviors as rated by parents and teachers on the CBCL and TRF from pretest to posttest. These results are presented in Table 5. In 27 of the 30 children or 90% of the sample, significant RC indices (RC $\geq$ 1.96) were indicated. Thus, in the majority of cases, a reliable degree of change was reported in children's behaviors from pretest to posttest.

The majority of the RC indices were negative, reflecting decreases in problem behaviors from baseline to treatment. Across all intervention conditions, the RCI for behavior problems as rated by mothers ranged from -8.10 to 2.60, with a mean of -1.90 (*SD* = 2.07). For fathers, the RCI for behavior problems ranged from -4.63 to 6.65 with a mean of -.22 (*SD* = 5.37). The RCI for maternal ratings of externalizing behavior problems ranged from -6.42 to 4.82, with a mean of -1.13 (*SD* = 2.09). Paternal externalizing problem ratings varied from -3.75 to 4.82 with a mean of -1.40 (*SD* = 4.15). The RCI for teacher ratings of overall problems ranged from -4.82 to 1.61 with a mean of -1.31 (*SD* =

2.49). With respect to externalizing problems, the RCI for teacher ratings ranged from -5.35 to 1.61 with a mean of -1.24 (*SD* = 2.57).

RC indices for each participant were also computed to determine changes in social skills and problem behaviors as rated by parents and teachers on the Social Skills (SS) and Problem Behaviors (PB) subscales of the SSRS. These results are displayed in Table 6. Significant RC indices were reported with respect to changes in social skills or problem behaviors in 28 of 30 cases or 93% of the sample. Thus, in the majority of cases, children made significant gains as indicated by changes in parent and teacher ratings of social skills and problem behaviors from pretest to posttest.

As reflected in Table 6, the majority of the RCI scores for the Problem Behaviors scale of the SSRS were negative and reflect decreases in externalizing behaviors (e.g., aggression) from baseline to treatment. The maternal RCI ranged from -3.58 to 2.79, with a mean of -.65 (*SD* = 1.41). The RCI for paternal ratings ranged from -.80 to 2.15 with a mean of .14 (*SD* = 1.19). The teacher RCI ranged from -3.18 to 1.04 with a mean of -.99 (*SD* = 1.24).

In contrast, RCI scores for the Social Skills (SS) scale of the SSRS were generally positive in nature, reflecting gains in prosocial behaviors (e.g., cooperation, self-control). Across all conditions, the RCI for the SS scale score on the SSRS as rated by mothers ranged from -3.66 to 9.15, with a mean RCI of 1.46 (*SD* = 2.47). For fathers, the RCI on this scale ranged from -.65 to 4.18 with a mean of 1.36 (*SD* = 2.15). For teachers, the RCI on the SS scale ranged from -.78 to 5.10 with a mean of 1.61 (*SD* = 1.92).

Table 6

Summary of Consultation Case Descriptions and Reliable Change Indices for the SSRS Social Skills scale and Problem Behaviors scale

| Case | Age* | Target Behavior | Intervention | RCI SSRS SS Mother | RCI SSRS PB Mother | RCI SSRS SS Father | RCI SSRS PB Father | RCI SSRS SS Teacher | RCI SSRS PB Teacher |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 43 | Noncompliance | BC | -.39 | -1.04 | NA | NA | -.78 | -.32 |
| 2 | 86 | Aggression | BC | NA | NA | NA | NA | .97 | -2.24 |
| 3 | 88 | Noncompliance | VT | 3.27 | -.64 | NA | NA | NA | NA |
| 4 | 57 | Noncompliance | BC | .92 | -2.87 | NA | NA | NA | NA |
| 5 | 110 | Noncompliance | VT | -.65 | -.40 | NA | NA | NA | NA |
| 6 | 67 | Prosocial Skills | BC | 3.27 | 0 | 3.14 | -.80 | -.26 | -.08 |
| 7 | 71 | Aggression | GVT | 3.14 | -.48 | NA | NA | NA | NA |
| 8 | 71 | Noncompliance | GVT | 0 | -.64 | 0 | -.64 | NA | NA |
| 9 | 64 | Aggression | GVT | 4.18 | 2.15 | 4.18 | 2.15 | NA | NA |
| 10 | 74 | Tantrumming | VT | -.26 | -.88 | NA | NA | 1.05 | .08 |
| 11 | 69 | Tantrumming | VT | 3.01 | -1.43 | NA | NA | 4.57 | -2.15 |
| 12 | 42 | Noncompliance | BC | 4.44 | -2.79 | NA | NA | 1.18 | 1.04 |
| 13 | 35 | Noncompliance | BC | 1.31 | 0 | NA | NA | NA | NA |
| 14 | 76 | Noncompliance | BC | NA | NA | NA | NA | -.61 | -1.53 |
| 15 | 67 | Noncompliance | GVT | .39 | -1.20 | NA | NA | NA | NA |

| Case | Age* | Target Behavior | Intervention | RCI SSRS SS Mother | RCI SSRS PB Mother | RCI SSRS SS Father | RCI SSRS PB Father | RCI SSRS SS Teacher | RCI SSRS PB Teacher |
|---|---|---|---|---|---|---|---|---|---|
| 16 | 88 | Noncompliance | VT | 1.31 | -.80 | -.65 | .24 | .49 | -2.83 |
| 17 | 67 | Aggression | BC | -.26 | -.24 | .13 | -.24 | -.13 | .32 |
| 18 | 43 | Noncompliance | BC | .13 | -1.67 | NA | NA | 1.83 | -.56 |
| 19 | 63 | Tantrumming | BC | NA | NA | NA | NA | 5.10 | -.64 |
| 20 | 74 | Socially Inappropriate | BC | -3.66 | -.64 | NA | NA | 2.74 | -1.83 |
| 21 | 78 | Socially Inappropriate | BC | -2.35 | 1.67 | NA | NA | 1.05 | -.96 |
| 22 | 66 | Noncompliance | BC | 1.17 | -2.47 | NA | NA | NA | NA |
| 23 | 36 | Aggression | BC | 3.26 | -1.28 | NA | NA | 4.63 | -3.18 |
| 24 | 117 | Off-task | BC | .78 | -.23 | NA | NA | NA | NA |
| 25 | 70 | Aggression | BC | 2.35 | -.56 | NA | NA | NA | NA |
| 26 | 96 | Impulsivity | BC | 1.83 | .72 | NA | NA | NA | NA |
| 27 | 55 | Noncompliance | VT | 3.01 | 2.79 | NA | NA | 2.44 | 0 |
| 28 | 109 | Noncompliance | GVT | -.39 | -.80 | NA | NA | NA | NA |
| 29 | 72 | Aggression | GVT | .39 | -.32 | NA | NA | NA | NA |
| 30 | 93 | Aggression | VT | 9.15 | -3.58 | NA | NA | NA | NA |

* Pretreatment age expressed in months. BC = Behavioral Consultation; CBCL = *Child Behavior Checklist*, Externalizing scale and Total scale; ES = Effect Size; GVT = Group Videotape Therapy; RCI = Reliable Change Index; SSRS SS = *Social Skills Rating System*, Social Skills scale; SSRS PB = *Social Skills Rating System*, Problem Behaviors scale; VT = Videotape Therapy.

Prediction #2

It was predicted that children in the GVT condition would demonstrate greater positive changes in behavior than children in either the BC or VT groups. In addition to documenting treatment effects for single participants, effect sizes can also be aggregated across individual cases into an overall effect size for group comparisons (Busse et al., 1995).

In the present study, a mean effect size for each intervention condition was calculated across home and school, and these results are presented in Table 7. In the BC condition, home effect sizes ranged from -5.31 to 1.77 ($M$ = -.66, $SD$ = 1.40). School effect sizes for this condition ranged from -5.15 to .04 ($M$ = -1.10, $SD$ = 1.26). In the VT condition, home effect sizes ranged from -3.27 to -.10 ($M$ = -.90, $SD$ = 1.10). School effect sizes for this condition ranged from -1.46 to 1.32 ($M$ = -.31, $SD$ = 1.24). In the GVT condition, home effect sizes ranged from -1.16 to 2.85 ($M$ = .03, $SD$ = 1.49).

Table 7

Mean Effect Sizes Across Settings and Intervention Conditions

| | BC | | VT | | GVT | |
|---|---|---|---|---|---|---|
| | n | M (SD) | n | M (SD) | n | M (SD) |
| Home Effect Size | 17 | -.65(1.40) | 7 | -.90(1.10) | 6 | .03(1.49) |
| School Effect Size | 16 | -1.10(1.26) | 4 | -.31(1.24) | NA | |

BC = Behavioral Consultation; GVT = Group Videotape Therapy; VT = Videotape Therapy.

Similarly, mean RC indices were calculated for each intervention condition using parent and teacher ratings on the CBCL/4-18, TRF, and SSRS. There is evidence of reported behavioral improvement among children in all three groups. On at least one of the scales, significant behavioral changes were reported by parents and teachers in all three intervention conditions. For example, in the BC condition, a significant RCI was reported for overall behavior problems ($M$ = -2.30, $SD$ = 2.49) and externalizing difficulties ($M$ = -1.81, $SD$ = 2.09). In the VT group, a significant RCI indicated changes in social skills as reported by teachers ($M$ = 2.14, $SD$ = 1.82). In the GVT condition, a significant RCI reflecting changes in parental ratings of their child's social skills was reported ($M$ = 2.68, $SD$ = 3.19). The mean RC indices for each condition are presented in Table 8.

Between-groups comparisons were conducted using nonparametric statistics to test for differences between intervention conditions on each of the dependent variables. Nonparametric tests were selected over parametric tests based on their recommended use when sample sizes are small as well as established practice in consultation research (Busse et al., 1995; Schill, Kratochwill, & Elliott, 1998). The Kruskal-Wallis test comparing home and school effect sizes for the three intervention groups did not reach significance at the .05 level. Similarly, results from a three-sample Kruskal-Wallis test comparing RC indices for improvements in social skills and problem behaviors were not significant at the .05 level.

Table 8

Mean Reliable Change Indices Across Rating Scales, Raters, and Intervention Conditions

| | BC | | VT | | GVT | |
|---|---|---|---|---|---|---|
| Variable | n | M (SD) | n | M (SD) | n | M (SD) |
| Home | | | | | | |
| CBCL (T) | 17 | -2.30 (2.49) | 7 | -1.07(1.73) | 6 | -.40(4.01) |
| CBCL (E) | 17 | -1.81(2.09) | 7 | -.42(1.89) | 6 | .85(3.17) |
| SSRS (PB) | 16 | -.77 (1.23) | 8 | -.24(1.31) | 8 | -.32(1.84) |
| SSRS (SS) | 16 | 1.00(2.12) | 8 | 1.08(1.78) | 8 | 2 .68(3.19) |
| School | | | | | | |
| TRF (T) | 6 | -1.47(2.87) | 4 | -1.07(2.17) | NA | |
| TRF (E) | 6 | -1.52(2.88) | 4 | -.82(2.34) | NA | |
| SSRS (PB) | 11 | -.91(1.21) | 4 | -1.22(1.49) | NA | |
| SSRS (SS) | 11 | 1.43(2.01) | 4 | 2.14(1.82) | NA | |

*Note.* BC = Behavioral Consultation; CBCL (E) = *Child Behavior Checklist*, Externalizing scale; CBCL (T) = *Child Behavior Checklist*, Total scale; GVT = Group Videotape Therapy; SSRS (PB) = *Social Skills Rating System*, Problem Behaviors scale; SSRS (SS) = *Social Skills Rating System*, Social Skills scale; VT = Videotape Therapy.

## Treatment Acceptability and Satisfaction

### Prediction #3

It was hypothesized that a positive relationship existed between treatment outcome and parental perceptions of acceptability and satisfaction. Two sets of analyses were carried out to test this prediction. The first set of analyses was conducted to assess parents' acceptability and satisfaction ratings as measured on the BIRS and the PTCSQ. Total mean

scores, standard deviations, and the range of scores for the entire sample are presented in Table 9. Pretest as well as posttest mean scores indicate that parents rated intervention procedures as acceptable and were satisfied with the intervention program. The pretest mean item score on the BIRS was 4.26 while the posttest mean item score was 4.12 out of a possible 6. On the PTCSQ, the mean item score was 5.99 out of a possible 7.

Table 9

Mean Acceptability and Satisfaction Ratings by Parents

| Variable | n | M | SD | Range |
|---|---|---|---|---|
| BIRS (pretest) | 15 | 102.40[a] | 12.66 | 61 to 118 |
| BIRS (posttest) | 26 | 99.08[a] | 13.40 | 66 to 122 |
| PTCSQ | 26 | 236.69[b] | 27.56 | 162 to 271 |

*Note.* BIRS = *Behavior Intervention Rating Scale*; PTCSQ = *Parent/Teacher Consultation Services Questionnaire*.

[a] Possible total scores on the BIRS range between 24 and 144.

[b] Possible total scores on the PTCSQ range between 21 and 287.

The second set of analyses examined the relationships between treatment effectiveness, acceptability, and satisfaction. To identify the relationships between treatment outcome and treatment acceptability, Pearson correlation coefficients were computed using home and school effect sizes, reliable change indices, and posttreatment ratings on the BIRS and PTCSQ. The correlation coefficients for home treatment outcomes and parent ratings are displayed in Table 10.

Table 10

Pearson Correlations Between Treatment Outcome, Acceptability, and Satisfaction Variables for Parents

| Variable | HES | SSRS (SS)RCI | SSRS (PB)RCI | CBCL (T) RCI | CBCL (E) RCI | BIRS (Pretest) | BIRS (Posttest) | PTCSQ |
|---|---|---|---|---|---|---|---|---|
| HES | - | | | | | | | |
| SSRS (SS)RCI | .16 | - | | | | | | |
| SSRS (PB) RCI | .06 | -.16 | - | | | | | |
| CBCL (T) RCI | -.17 | -.20 | .52** | - | | | | |
| CBCL (E) RCI | .004 | -.01 | .60** | .90** | - | | | |
| BIRS (Pretest) | -.19 | -.23 | -.89** | -.17 | -.21 | - | | |
| BIRS (Posttest) | -.24 | .12 | -.36 | -.26 | -.28 | .82** | - | |
| PTCSQ | .08 | -.32 | .01 | -.14 | -.36 | .46 | .54** | - |

*Note.* BIRS = *Behavior Intervention Rating Scale*; CBCL (T) RCI = *Child Behavior Checklist*, Total Scale Reliable Change Index; CBCL (E) RCI = *Child Behavior Checklist*, Externalizing Scale Reliable Change Index; HES = Home Effect Size; PTCSQ = *Parent Teacher Consultation Services Questionnaire*; SSRS (PB) RCI = *Social Skills Rating System*, Problem Behaviors Scale Reliable Change Index; SSRS (SS) RCI = *Social Skills Rating System*, Social Skills Scale Reliable Change Index.

*$p < .05$

**$p < .01$

Results indicate significant positive relationships between treatment outcome variables such as the degree of change in problem behaviors reported using the SSRS and CBCL ($r = .52, p < .01$; $r = .60, p < .01$). Similarly, changes in problem behaviors reported on the two scales of the CBCL were highly correlated ($r = .90, p < .01$). As reflected in Table 10, there were significant associations between acceptability and satisfaction ratings. A significant positive correlation was found between pretest and posttest ratings of

treatment acceptability ($r = .82, p < .01$). There was also a significant positive relationship between ratings of posttest treatment acceptability and satisfaction ($r = .54, p < .01$). Finally, a significant correlation was found between pretest acceptability ratings and the degree of behavioral change reported on the SSRS ($r = -.89, p < .01$). This negative association is due to the inverse relationship between the two variables since negative RCI scores are indicative of greater behavioral improvement. No other treatment outcome measures were significantly related to acceptability or satisfaction ratings.

Correlations were also computed between school treatment outcome variables and parent reports of acceptability and satisfaction. These correlation coefficients are presented in Table 11. Similar to findings in the home environment, there were significant associations between treatment outcome variables in the school setting. Improvements in specific behaviors targeted for change were significantly correlated with the degree of behavioral change reported by teachers on standardized rating scales ($r = .85, p < .01$; $r = .81, p < .05$). Results also indicated significant positive relationships between treatment outcome variables such as the degree of change in problem behaviors reported using SSRS and the TRF ($r = .73, p < .05$; $r = .69, p < .05$). Similarly, changes in problem behaviors reported on the two scales of the TRF were highly correlated ($r = .97, p < .01$). However, there were no significant associations between school treatment outcome variables and parent acceptability and satisfaction ratings.

Table 11

Pearson Correlations Between School Treatment Outcome Measures, Parent Acceptability, and Satisfaction Variables

| Variable | SES | SSRS (SS)RCI | SSRS (PB)RCI | TRF (T) RCI | TRF (E) RCI | BIRS (Pretest) | BIRS (Posttest) | PTCSQ |
|---|---|---|---|---|---|---|---|---|
| SES | - | | | | | | | |
| SSRS (SS)RCI | .08 | - | | | | | | |
| SSRS(PB) RCI | .20 | -.36 | - | | | | | |
| TRF(T) RCI | .85** | -.73* | .28 | - | | | | |
| TRF (E) RCI | .81* | -.69* | .24 | .97** | - | | | |
| BIRS (Pretest) | .13 | -.22 | -.24 | -.29 | -.41 | - | | |
| BIRS (Posttest) | -.006 | -.16 | -.04 | -.48 | -.58 | .82** | - | |
| PTCSQ | .04 | .11 | .02 | -.34 | -.50 | .46 | .54** | - |

*Note.* BIRS = *Behavior Intervention Rating Scale*; SES = School Effect Size; PTCSQ = *Parent Teacher Consultation Services Questionnaire*; SES = School Effect Size; SSRS (PB) RCI = *Social Skills Rating System*, Problem Behaviors Scale Reliable Change Index; SSRS (SS) RCI = *Social Skills Rating System*, Social Skills Scale Reliable Change Index, TRF(E) = *Teacher's Report Form*, Externalizing Scale; TRF(T) = *Teacher's Report Form*, Total Scale.

*$p < .05$

**$p < .01$

Prediction #4

Both quantitative and qualitative analyses were used to examine the impact of intervention condition on parent ratings of treatment acceptability and satisfaction. Quantitative ratings of acceptability and satisfaction as measured on the BIRS and PTCSQ across the three intervention conditions (i.e., BC, VT, GVT) are presented in Table 12. Although statistical comparisons could not be carried out due to the limited size of the

sample, there appear to be few differences between the groups with respect to treatment acceptability and satisfaction.

Table 12

Mean Acceptability and Satisfaction Ratings Across Intervention Conditions

| | BC | | VT | | GVT | |
|---|---|---|---|---|---|---|
| | n | M (SD) | n | M (SD) | n | M (SD) |
| Pretest Acceptability (BIRS) | 10 | 105.4 (6.5) | 5 | 96.4 (19.9) | NA | |
| Posttest Acceptability (BIRS) | 15 | 98.8 (13.0) | 8 | 98.5 (16.4) | 3 | 102 (10.3) |
| Satisfaction (PTCSQ) | 16 | 244.6 (18.5) | 8 | 232.1 (31.1) | 2 | 191 (41.0) |

*Note.* BIRS = *Behavior Intervention Rating Scale*; BC = Behavioral Consultation; GVT = Group Videotape Therapy; PTCSQ = *Parent/Teacher Consultation Services Questionnaire*; VT = Videotape Therapy.

[a] Possible total scores on the BIRS range between 24 and 144.

[b] Possible total scores on the PTCSQ range between 21 and 287.

Qualitative methods were used to further analyze parent perceptions of acceptability and satisfaction in relation to the three intervention conditions. Using the constant comparative method (Glaser & Strauss, 1967), two core categories emerged from the data reflecting either positive or negative features of the intervention programs. Within each of these core categories, a variety of related themes were evident. These themes were then examined in relation to the three intervention conditions in order to detect similarities and differences between the groups.

During the weekly contact with parents in which consultants asked about the acceptability of the intervention procedures, there was considerable variability among respondents as to the quantity and type of feedback they provided. Some parents, when

asked whether they liked the procedures and if they were working simply said "yes". Other parents elaborated on their responses and provided constructive criticism about the intervention programs. Overall, the majority of the remarks made by parents were positive in nature and were consistently positive from week to week. Even the parents who reported some negative experiences with the program also commented on positive features of the intervention.

Positive Features of Interventions. All of the parents who were asked weekly about the acceptability of the procedures during the intervention phase of the study made at least one or more positive statements regarding the program. Their comments centered around the following themes or ideas: (a) general satisfaction with the program and materials; (b) reinforcement of existing knowledge and use of behavioral strategies; (c) increased awareness and skill acqusition of new strategies; (d) positive effects attributed to the intervention; and (e) generalized use of strategies. Each of these themes will be elaborated on and discussed in relation to the type of intervention program the parents followed.

Feelings of general satisfaction with the program were commonly reported among parents in two of the intervention conditions. Although none of the participants in the GVT condition made explicit reference to any of the materials used in the program, six of the parents in the VT and BC groups made reference to feelings of satisfaction that were related to the ways in which strategies were presented to them. Even as early as the second week of treatment, the six parents reported enjoying the program and found it easy to follow. For example, in the BC condition, one mother liked the program because implementing the strategies was not disruptive to her family's schedule, and she appreciated that she was able to use the strategies in a subtle way. When asked if the intervention procedures were working, she replied,

> *I think so. He doesn't really know what we are doing. I don't want him to think we are doing this because he is a bad kid. I like that there are no great changes in the routine* (Week 2).

Another mother also commented on the ease with which she was able to implement the intervention with her son. She attributed this to the assistance provided by the consultant which she perceived as a valuable source of support. At the end of the program she

reported,

> *I found the program easy to follow, thanks to my consultant. [The consultant] guided us each week so that I never felt lost. Also, the support was immeasurable.*

Another parent in the BC condition also cited the consultant as an important aspect of the intervention. This mother appreciated the individualized nature of the consultation process. When asked how the program could be improved, she remarked, "I don't think there is more to do. I appreciated [the consultant's] help. I also think the personal touch was very helpful." Three parents in the VT condition also commented on the ease with which they able to use the videotape series. One mother appreciated the self-administered aspect of the videotape therapy program because she was able to stop the cassette and rewind it at her leisure. Another mother stated that videos were "simple and easy to use." One father in this condition also remarked, "Yes, it's not difficult to do, but it is something that everybody appreciates and you get a better response. It showed me things I was doing wrong."

Parents also perceived the intervention program as having a reinforcing effect on the behavior management skills already in their repertoire. Since similar behavior management strategies were presented in the three groups, it was not surprising that all of the parents reported liking the program because it was based on techniques they were using or had used prior to the start of the intervention. In this way, some of the parents felt the program was a good way to review or remind them how to respond to their child's behavior. For example, as one father in the GVT group commented, "Most of it I already do. I use these strategies but watching the tapes brings back something I had forgotten" (Week 3). Five of the parents made specific mention of a particular technique with which they were already familiar. These parents cited instruction giving, praising, applying consequences, and ignoring as strategies they were already using with their child.

In addition to serving as a review, eight parents reported that they became more aware of their parenting practices over the course of the program. In some cases this increased awareness led them to be more critical of their own behavior toward their children, particularly among those participating in the VT and GVT conditions. For example, after the fifth week of treatment a mother in the VT group stated, "The tape has shown me what I have been doing wrong and has allowed me to use more precise and

simple commands which are more effective". A father participating in the GVT group remarked, "After watching the tape about praise and how you need to be careful not to take it away by criticizing, it made me think. I realize I do that and I have to be careful"(Week 3).

Other parents reported that in addition to heightening their awareness about their own behavior, their participation in the program also taught them new skills. For example, one mother in the GVT group reported that the program gave her "new ideas", and another parent in this group said "I am learning things I didn't know." Some parents were very explicit in how the program had improved their knowledge and their ability to implement a particular skill. For example, a mother in the VT condition changed her perceptions regarding time out after watching videotaped demonstrations and discussing the use of this technique. She shared that prior to the program she had thought that time out was "child abuse, but now I see how it works. I would never have thought of doing that [time out]" (Week 4). A mother in the GVT group also commented,"I was already using time out but now I know what to do when he refuses to go to the time-out chair" (Week 6). As parents became more aware of their own behavior and learned new skills, they perceived changes in the way they thought about their child's difficulties and reported that they had begun to modify their interaction patterns with their children. For example, one mother in the GVT group said that the program "makes me stop to look at what I am doing rather than always focusing on what [my son] is doing" (Week 2). By the end of the fourth week of treatment, when asked if she felt the intervention was effective, this mother spoke of her children in the following way,

> *Yes, what I like is that I take more time to praise them, kiss them, and hug them. I am more conscious of the good things they do rather than always focusing on the negative* (Week 4).

A father in the VT group also shared that he had changed his parenting practices and that he and his son had both "toned down" their behavior. One mother in the GVT condition felt a sense of sense of empowerment and greater confidence in her parenting skills soon after beginning the program. For example, as this parent reported, "I started giving him consequences myself instead of waiting for his father to get home" (Week 1).

Another positive feature cited by parents was the perceived positive impact of the program. All of the parents in the three intervention groups reported seeing improvements in their child's behavior which they attributed to their participation in the program. Decreases in such behaviors as hitting, noncompliance, shaking, and toileting accidents were reported by parents as they progressed through the intervention phase. One parent remarked that others had noticed changes in her child. Two other parents reported that their relationship with their child had improved since beginning the program. As one parent in the GVT remarked, "There's less friction."

Some of the parent responses indicated that they felt the use of a specific technique had resulted in positive behavioral changes with their child. For example, six of the parents across all three groups stated that the use of reinforcers such as praise, stickers, points, and coupons had produced changes in their child's behavior. When asked whether the intervention procedures were working, a mother in the BC condition responded, "Without question. I believe that the praising is very efficient, and it is the reason why he's improving" (Week 7). Another mother felt that reinforcing appropriate behaviors was effective: "Yes, I think attention and rewarding works. [He] gets happy when I tell [him] he was a good boy. He cuddles me when I tell [him] he's good "(Week 4). Parents in each of the three groups also reported that ignoring was effective with their son, and another three parents remarked that time out was a useful strategy. As one mother in the GVT condition related,

> *It was difficult to do tim eout, but he stayed quiet for the last 30 seconds and when he came out he said "I don't want to go to time out again", so I guess it is a good punisher since he really doesn't like it* (Week 4).

In fact, some of these strategies were perceived to be so effective that parents did not feel they needed to use other measures. For example, one mother in the GVT condition prefered to reinforce her son's positive behavior by awarding her son time to play videogames rather than focusing on negative behavior. She stated,

> *I didn't need to use time out this week. I really enjoy using the coupons - the teacher gives coupons to being home for good behvavior at the end of the week. It is exchanged for an extra 30 minutes of Sega* (Week 6).

Similarly, a mother in BC group commented that her son "listened to my commands. He needed no time away" (Week 7). Such statements suggest that punitive methods may not be viewed as acceptable as more positive strategies and were used only as a last resort.

Another indicator of the positive nature of parents' acceptability ratings was their willingness to use the strategies with other children. Four of the parents indicated that the strategies worked so well with the child targeted for intervention that they were going to apply these to the child's siblings as well. For example, a mother in the GVT group and a father in the VT condition reported that they were already using sticker charts with their other children as a way of reinforcing positive behavior. Another mother in the GVT condition reported that she was using ignoring with her older son because of the positive effects she had seen with her younger son. A mother in the VT group was now using some of the strategies shown in the videotapes with her 2-year-old daughter. In the words of one parent six weeks after beginning the BC program, "Things are better with [my son]. I think it works with [my son] better now. I think it works with any childrens [*sic*]."

Negative or Ambiguous Features of Interventions. Thirteen of the parents who were asked questions about the acceptability of the intervention procedures made at least one negative reference to aspects of the program. These comments centered around the following themes: (a) lack of time for implementation; (b) questionable effectiveness; (c) difficulty implementing the program; (d) inappropriate materials; and (e) the need for additional services. Each of these themes will be discussed in relation to the type of intervention program used.

One of the negative themes to emerge was related to the timing and length of the intervention phase. Time also represented an important difference between the three intervention groups. In the VT and GVT conditions, no parents made any comments related to the issue of time, but four of the parents in the BC condition cited a lack of time as a limitation of the program. For example, one parent felt that the program was initiated too late in the school year. Another parent stated that it was difficult to determine whether the procedures were working because "it takes time to change his behavior." Comments such as these suggest that changes in behavior were not immediate, and one implication from these

remarks is that the intervention phase was not long enough for parents to see improvements in their child's behavior. Because the study was conducted during the school year, in some cases the length of the intervention phase may have been constrained by such events as the end of the academic year. For example, when asked how the program could be improved, one mother replied,

> *I felt our particular project was far too rushed to really get the results and long term results we were hoping for. I would have appreciated a longer amount of time to implement each skill and it would have been more effective for both myself and my child.*

Closely tied to this theme was the issue of efficacy and whether parents perceived the intervention program as resulting in positive changes in their child's behavior. At least one parent in all three conditions expressed concern as to whether the intervention was having the desired effect. For example, when asked whether she liked the procedures she was asked to implement with her son, a mother in the GVT group replied, "I don't know. It seems that when I ignore things get worse. He just won't stop whining" (Week 5). Another parent in this group responded to this question by saying "Sometimes it works, sometimes it doesn't." A similar comment was made by a parent in the BC condition who, after the second week of treatment said "I don't know if it [rewarding] really made a difference." Another negative aspect reported by parents was the extent to which they were able to implement the procedures appropriately and consistently. In the BC and GVT conditions, three parents found it difficult to use some of the intervention strategies. In particular, these parents encountered difficulty with the ignoring technique although for different reasons. One mother in the GVT group was opposed to using this strategy and stated that "ignoring is not what I like to do because then you encourage them to ignore you when you talk to them." A mother in the BC condition initially had trouble using ignoring with her son because it did not seem to work. After Week 2, she reported, "I find it hard to ignore. I couldn't get through to him. He persists and persists - he doesn't get the relationship." Positive reinforcement was also difficult for this mother to use, and she found it hard to praise and reward her son. At the end of Week 2, she also stated,

> *I find it very difficult to be positive, I'm always negative with him. It's hard to compliment. I feel like "Why do I have to compliment?" He is never positive or*

*never compliments others.*

For this mother, it was difficult for her to discern which behaviors were deserving of attention. This is reflected in her statement three weeks later, "I find it hard to know when to reinforce, when to ignore. I do feel as though I am learning" (Week 5). Another parent in the GVT condition also expressed concern that she was not using ignoring appropriately.

For other parents, their difficulties were not with a particular technique or strategy but in applying procedures in a consistent fashion. Three parents reported it was hard for them to use the interventions consistently. As one mother in the BC condition stated on two separate occasions,

> *It's very hard because, due to the weather, I can't be consistent. I'm doing too much at once, making dinner and supervising the two children* (Week 7). *I think it [intervention] would be effective, but it's summertime and I find it much harder. I can't keep as close an eye on him when he's outside* (Week 9).

A parent in the VT group, when asked if the program was an acceptable way to deal with her son's difficulties said, "Yes, but he's been sick, and I've been busy. I'm trying my best to implement them, but it is hard to be consistent" (Week 4). In both of these examples, busy schedules and a lack of time were cited as reasons why they were unable to implement strategies consistently.

A fourth negative theme focused on the appropriateness of the intervention materials used by parents. The reader will recall that participants in the VT and GVT groups watched the Webster-Stratton series while parents in the BC condition read and followed a manual-based program. The content of the materials in all three groups was similar in that they relied on commonly used behavior management strategies but differed in their mode of presentation. In two conditions that relied on videotapes (i.e., VT and GVT), four of the parents criticized the videotapes. For example, both the mother and father of a 7-year-old boy questioned whether the videotape therapy program was appropriate for their son since the vignettes in the videos featured young preschool children. Another parent in this condition was more ambivalent in her comments about the videotape series. While she positively referred to the information contained in the tapes, she was more critical of the way in which the material was presented. When asked if she liked the intervention procedures she was being asked to use, she replied, "Yes, but it's boring, all the time the

same people in the tapes. But what they say is very good, but the kids are cute." Another criticism raised by a parent in the GVT group was that the videos did not portray realistic situations. None of the parents in the BC group commented negatively about the treatment manuals used in the study.

The last set of negative statements centered around the need for additional services. Two parents in the BC condition expressed a desire for more support and services from the consultant. In one case, a parent felt the program could be improved by providing more explanations and examples about the skills presented in the treatment manuals. In the other case, after the first week of treatment the parent was unsure whether the program could adequately meet her son's needs. She stated, "Well, he seems to like the attention, but he needs more than this. I think it is a good start." At the end of the treatment phase several weeks later, this mother was asked how the program could be improved. She responded by saying that the program could be strengthened by having more contact with the consultant, either through additional interviews or being asked more questions. This parent also felt that it was important to have a better understanding of how well the program was being followed at school.

A similar sentiment was echoed by another parent in the GVT group who said that the existing program was not a sufficient solution to her son's problems. When asked if the intervention was a good way to deal with her son's difficulties she stated, "Yes, but I don't think it is enough to work with the parents. I think the children should have a group where they are taught social skills." As reflected in the above statement, this mother was not so much criticisizing the existing program but felt it could have been supplemented with a more direct mode of service delivery such as a social skills group where the children were taught prosocial behaviors.

Prediction #5

The degree to which parent perceptions of parenting competence and problem-solving abilities were associated with ratings of treatment acceptability and satisfaction were examined using Pearson correlations. Correlation coefficients for these variables are

presented in Table 13. No significant associations were found between parent characteristics such as perceived competence and problem-solving skills and social validity measures such as acceptability and satisfaction ratings.

Table 13

Pearson Correlations Between Acceptability Ratings, Satisfaction Ratings, Perceived Parenting Competence, and Problem-solving Skills

| Variable | BIRS (pretest) | BIRS (posttest) | PTCSQ | PSOC | PSI |
|---|---|---|---|---|---|
| BIRS (pretest) | - | | | | |
| BIRS (postest) | .82** | - | | | |
| PTCSQ | .46 | .54** | - | | |
| PSOC | .11 | .09 | .12 | - | |
| PSI | -.46 | -.06 | .12 | .10 | - |

*Note.* BIRS = *Behavior Intervention Rating Scale*; PSI = *Problem Solving Inventory*; PSOC = *Parenting Sense of Competence Scale*; PTCSQ = *Parent Teacher Consultation Services Questionnaire*.

**$p < .01$

# CHAPTER 5

## Discussion

This study is an exploratory investigation of the efficacy of a parent-teacher mediated intervention program for young children experiencing externalizing behavior problems. More specifically, this study examined the effectiveness and acceptability of three consultation approaches in reducing children's inappropriate behavior and increasing positive behavior across home and school settings. Both quantitative and qualitative methods were used to examine: (a) changes in specific behaviors targeted for intervention; (b) behavioral change in relation to varying levels of consultation; (c) the relationship between treatment outcome and parent treatment acceptability; (d) parent treatment acceptability and satisfaction in relation to varying levels of consultation; and (e) factors influencing parent treatment acceptability ratings such as perceptions of parenting competence and problem-solving abilities. This chapter is organized according to the results pertaining to each of the major predictions of the study. As well, the implications and original contributions to knowledge stemming from this investigation are discussed. Finally, the limitations of the current study and future directions for research are presented.

### Changes in Behaviors Targeted for Intervention

In the present study, a behavioral consultation framework was used to target and remediate children's inappropriate behaviors across home and school environments. Observational and self-report data from parents and teachers supported the prediction that children's behaviors would improve from the baseline to the intervention phase across both settings. Effect sizes calculated for the observational data revealed that parents and teachers reported improvements for the specific behaviors targeted for change in over 85% of the cases. Compared to baseline behaviors recorded prior to implementation of the intervention plan, children displayed fewer externalizing problems such as noncompliance, aggression, and off-task behavior during the intervention phase. In approximately half of these cases, a moderate to large effect size was reported, indicating a significant degree of behavior change across home and school settings.

The use of standardized behavior rating scales supplemented observational data and indicated the extent to which behavioral changes were viewed as clinically significant and meaningful. Reliable change indices calculated for the behavior ratings provided by parents and teachers also supported the prediction that children's behaviors would improve from pretest to posttest. The results indicated that in 90% of the cases, a meaningful and clinically significant degree of behavior change was reported in at least one domain (i.e., problem behaviors or social skills) by at least one rater (i.e., parent or teacher).

These findings are consistent with previous literature reviews indicating that behavioral consultation is an effective mode of service delivery (Alpert & Yammer, 1983; Mannino & Shore, 1975; Medway & Updike, 1985; Sheridan, Welch, et al., 1996). In particular, the results of this study add to a growing literature supporting the use of behavioral consultation with parents and teachers to enhance children's social and academic development. The positive treatment outcomes reported in the current investigation were comparable to other studies that have examined the efficacy of conjoint behavioral consultation in addressing children's behavior problems (e.g., Colton & Sheridan, 1998; Kratochwill et al., 1999; Robertson, 1996; Sheridan et al., 1990; Sheridan et al., 1999; Sladeczek, 1996).

One interesting finding in the present study was that overall, teacher effect sizes were larger than parent effect sizes, suggesting a greater degree of behavioral change in the school environment compared to the home setting. It is possible that there were significant differences between parents' and teachers' skill levels and previous experience using behavior modification techniques. By virtue of their training and experience in working with large groups of children, it may be that teachers are more familiar with the behavioral strategies used in this study than parents. This added experience and knowledge may have resulted in more positive treatment gains at school than at home.

It is also noteworthy that the aggregated Reliable Change Indices calculated for teachers and parents in this study failed to reach the critical value of 1.96. Although the magnitude of behavior change was in the predicted direction and reflects decreases in problem behaviors and increases in social skills, statistical significance was not obtained.

Two factors must be kept in mind when considering this finding. First, standardized rating scales assess a variety of behaviors that are represented by total subscale scores. It is possible that these measures were not sensitive enough to detect small albeit important changes in one or two critical behaviors. The children in this study may have demonstrated improvements in the behavior targeted for intervention without exhibiting a significant degree of change with respect to overall social-emotional adjustment. Second, the small sample size may have also contributed to this finding. For example, in the study by Kratochwill et al. (1999), the RC indices across treatment groups and raters were higher; however their sample was also larger than the one used in the present study. Finally, the importance of examining the degree of behavior change reported for individual children must also be reiterated. Reliance on descriptive statistics such as group means obscures the effect of an intervention for a particular client (Gresham & Noell, 1993). From this perspective, it is significant that marked improvements were reported for almost every child in this study in at least one behavioral domain.

In examining the effect size and RCI data reported for each case, it is evident that some children demonstrated tremendous improvements in target behaviors while other children's behaviors deteriorated over the course of the intervention. The large standard deviations reported for the effect size and RCI means across raters and behavioral domains also speak to the issue of individual differences which are obscured within a group design. Although it is not clear as to why some children improved and others deteriorated, the results reinforce the individualized and personalized nature of the consultation process. The focus of consultation research has primarily centered on documenting the efficacy of interventions, and considerably less attention has been paid to the interpersonal and relational aspects of the consultation process (Kratochwill et al., 1988; Sheridan, Kratochwill et al., 1996). Personality characteristics of consultants and consultees as well as their interpersonal interactions are considered to be important variables that are believed to influence consultation outcomes (Kratochwill & Van Someren, 1985). For example, Kratochwill and colleagues (1988) suggest that a number of factors may affect the relationship between the consultant and consultees such as the level of congruence among

participants' theoretical orientations, the consultant's previous training and experience, expected outcomes, and personality styles of the participants. Therefore, in the present study, one could speculate that these relational processes may have affected treatment outcomes in specific cases. Such an interpretation highlights the need for consultation research to go beyond outcome data and explore the underlying relational processes and interactions within consultation that may affect overall outcomes in individual cases (Sheridan, Kratochwill, et al., 1996).

In addition to supporting existing research regarding the effectiveness of conjoint behavioral consultation, this study also extends the literature in this area. The majority of behavioral consultation research has employed case study and small-*n* methodologies (Gresham & Noell, 1993). Although such research methods yield valuable information about consultation, group designs that measure the efficacy of behavioral consultation on a large scale are also needed (Gresham & Noell, 1993). The conjoint behavioral consultation literature is replete with case studies and single-*n* research, and it has been suggested that future consultation research use a combination of small-*n* methodologies, multivariate research designs, and case studies (Gresham & Noell, 1993; Gutkin, 1993; Kratochwill et al., 1988). However, until very recently, there have been few large scale studies of conjoint behavioral consultation. The present study is one of only three studies to date that have examined the efficacy of conjoint behavioral consultation with large groups of children, their families, and teachers. Although the findings in this study are largely consistent with the results reported by Sheridan and her associates (1999) and Kratochwill and his colleagues (1999), there are also important differences between the three studies which are deserving of mention.

Sheridan and her colleagues (1999) are investigating the use of CBC as a means of supporting inclusion practices for children with disabilities in mainstream education classrooms in the United States. Overall, preliminary treatment outcome data are similar to the results of the current investigation in that positive changes in children's behavior were reported by parents and teachers. However, one interesting difference between the two studies is related to behavioral changes demonstrated at school versus at home. Whereas the

BC overall effect size for school behaviors was larger than the home effect size reported in this study, home effect sizes were larger than school effect sizes in the Sheridan study. Methodological differences between the two studies may account for these findings. For example, the type of children studied and the behaviors targeted for change were very different. In the Sheridan investigation, CBC was used with children demonstrating a variety of academic and social difficulties. In addition to children with behavior problems, students with learning disabilities, ADHD, or those identified as being at risk for future difficulties were also included in the study. As well, a wide range of behavior was targeted for intervention in this study such as work accuracy, reading and math skills, stealing, masturbation, tardiness, and encopresis. There may have also been differences in the severity of the problems displayed by the children in both of these studies, although severity data were not included in the results reported by Sheridan and colleagues.

Kratochwill and associates (1999) recently completed a five year study examining the use of conjoint behavioral consultation for children with internalizing and externalizing problems. Similar to the results of this investigation, children in the Kratochwill study demonstrated positive changes in behavior in both home and schools settings from pretest to posttest. However, although the behaviors targeted for change in both studies were similar (i.e., aggression, off-task behavior, noncompliance), the effect sizes reported in the Kratochwill study were not as large as those in the present investigation. Again, methodological differences between the two projects may help to explain such findings. Participants in the Kratochwill study consisted of preschool children attending Head Start programs in the United States while the current study employed a sample of primarily elementary school children attending public school in Canada. The samples also differed with respect to race and SES; more of the children in the Kratochwill study came from single parent homes, were below the poverty line, and identified themselves as being part of a visible minority (e.g, African Americans, Hispanics, Southeast Asians).

The extent to which such demographic variables affect consultation outcomes have not been extensively studied (Sheridan et al., 1999). However, there is evidence to suggest that intervention outcomes are affected by socioeconomic factors. For example, in the

Sheridan et al., (1999) study, effect sizes among families with one or more indicators of socioeconomic disadvantage (e.g., minority status, single parent status, low income level, use of languages other than English in the home, low maternal education) were smaller than for families with no disadvantage indicators. Other research also illustrates the impact of family characteristics on treatment outcomes. In a study of 59 families, Webster-Stratton (1992a) reported that although all children whose parents participated in a self-administered videotape therapy program demonstrated improvements in behavioral functioning, outcomes were poorer for those families with one or more of the following risk factors: single parent status, parental depression, low socioeconomic status, and life stress.

Behavioral Change in Relation to Varying Levels of Consultation

In addition to examining the efficacy of consultation for children with behavior problems in multiple settings, another goal of this study was to compare three indirect models of service delivery that varied with respect to the level of consultation services provided. Three intervention approaches were examined: a highly individualized behavioral consulation model (BC); minimal consultation provided through a group videotape therapy format (GVT); and a self-administered videotape therapy program (VT). The aggregated effect size and RCI data from this study indicated that in all three intervention conditions, parents and teachers reported improvements in children's behaviors from baseline to treatment. These findings are consistent with previous research documenting the success of conjoint behavioral consultation and videotape therapy for children with conduct problems (Brestan & Eyberg, 1998; Sheridan, Kratochwill, et al., 1996; Kratochwill et al., 1999; Webster-Stratton, 1992).

According to Kazdin and Kendall (1998), identification of effective psychological interventions requires both identical and conceptual replication. Identical replication studies involve the use of the same methods and procedures in an effort to reproduce previously documented results, while conceptual replication studies are guided by the same hypotheses but use different measures or methods. The present study contained elements of both types of replication. The BC condition used in this study was similar to previous studies that have used conjoint behavioral consultation as a framework for addressing a variety of children's

behavior problems. For example, the manual-based approach used in this study was similar to other consultation research that has used treatment manuals to instruct participants about behavior modification strategies (e.g., Kratochwill et al., 1999; Robertson, 1996; Rotto & Kratochwill, 1994; Sladeczek, 1996). The self-administered VT condition used in this study was based on Webster-Stratton's videotape series, a program which has been demonstrated to be an effective intervention for parents of children with conduct problems (Kratochwill et al., 1999; Webster-Stratton, 1992a; Webster-Stratton et al., 1988, 1989). Similar to the current study, this program has also been used effectively with teachers to address children's behavior problems at school (Kratochwill et al., 1999).

However, the GVT condition used in the present study was a unique approach that consisted of two components: weekly group viewing and discussion of Webster-Stratton's videotapes as well as access to a consultant to respond to consultees' questions. Although Webster-Stratton and colleagues (1988, 1989) used a group administration format with her videotape program, there was an important difference in the way services were delivered to parents in those studies and in the current investigation. In the Webster-Stratton research, groups of parents watched videotaped vignettes and then participated in a therapist-led discussion about the techniques presented in the tapes. In these studies, the therapists functioned as group facilitators. In the present study, a more individualized intervention program was embedded within the group context; the consultants conducted interviews with parents and teachers prior to the first group meeting to identify behaviors they wished to modify, charted individual behavior change, and had the opportunity to discuss issues with consultees on a weekly basis. In this way, the therapist leading the group functioned as a consultant who answered questions about the videotapes and encouraged a problem-solving process to address specific behavioral concerns.

Although it was hypothesized that children in the GVT condition would demonstrate the most behavioral change, this prediction was not supported. In examining the mean effect sizes and RCI for each intervention group, the degree of behavioral change in the GVT condition was modest at best, with the exception of reported social skills improvements. However, the small parent sample comprising the GVT condition limits the extent to which

this format can be compared to the BC and VT groups at the present time. There were too few participants per intervention group to permit parametric statistical analyses, and results from nonparametric analyses revealed that the three groups did not differ with respect to the degree of behavioral change reported by parents.

However, in examining home and school effect size data in each of the intervention conditions, one could argue that the efficacy of a particular intervention may be related to the setting in which the program is implemented. For example, in the BC condition, a larger effect size was reported for observed school behaviors than for home behaviors while in the VT condition a larger effect size was reported for observed home behaviors. This pattern of results suggests that a minimal consultation approach using videotape therapy may be more effective at home than at school. At school, it may be more advantageous to use a more highly individualized, manual-based approach with teachers. Clearly, more comparative research of this nature is needed.

This investigation is in keeping with other recent studies comparing different intervention formats used within a consultation framework (e.g., Kratochwill et al., 1999; Schill et al., 1998). This line of inquiry is particularly germane to the field of behavioral consultation since scholars in the field have acknowledged that the behavioral consultation model can be implemented in a variety of ways and should be compared to other intervention approaches (Kratochwill et al., 1998; Noell & Witt, 1996).

### Treatment Outcome and Treatment Acceptability

Social validity is an important feature of all clinical research (Kazdin, 1977; Peterson & Bell-Dolan, 1995; Wolf, 1978). The present investigation sought to examine the social significance of intervention procedures and outcomes associated with a parent-teacher mediated program for children experiencing behavior problems. The results indicated that parents perceived the intervention procedures as acceptable, effective, and of benefit to the child. The findings also revealed that parents were satisfied with the level of consultation services they received. Thus, there is considerable evidence that the interventions used in the study were considered to be acceptable and satisfactory by parents. These findings are consistent with previous research and add to the growing literature documenting the social

validity of interventions for children based on either a conjoint behavioral consultation or videotape therapy approach (e.g., Freer & Watson, 1999; Kratochwill et al., 1999; Sheridan & Steck, 1995; Sheridan et al., 1999; Webster-Stratton, 1985, 1994; Webster-Stratton et al., 1988, 1989).

Contrary to expectation, there was little direct evidence of a relationship between treatment acceptability and outcome. Although significant correlations were reported for acceptability and satisfaction ratings as well as among treatment outcome measures, only one of the indicators of behavioral change was significantly related to pretest acceptability. Namely, parental perceptions of treatment acceptability prior to the start of the intervention phase was related to changes in problem behaviors as measured on the SSRS. It is important to note that this study represents the first attempt to directly investigate the relationship between treatment outcome and acceptability. Although theoretical models of treament acceptability posit a link between treatment acceptability and outcome, there has been little investigation of this issue in clinical practice (Reimers et al., 1987; Witt & Elliott, 1985). The limited empirical support for the association between treatment outcome and acceptability has come from two analogue studies. In the study by Hobbs and colleagues (1990), mothers' acceptability ratings were higher for treatments described as more effective with fewer adverse side effects. In a study by Reimers and Wacker (1988), parents seeking treatment for their child's behavior problems rated the acceptability and effectiveness of proposed interventions made following a clinic visit with their child. Follow-up one month later revealed a significant positive correlation between effectiveness and acceptability subscale ratings on a treatment acceptability questionnaire completed by parents. However, in the Reimers and Wacker (1988) study there was no systematic intervention put in place, and parents were only asked to rate the perceived effectiveness of the recommendations made to them.

The results of the present study suggest that in clinical practice, the relationship between treatment outcome and acceptability is more complex than previously hypothesized. Although acceptability and satisfaction ratings were not significantly correlated with the majority of treatment outcome indicators, posttreatment acceptability

scores were significantly related to satisfaction ratings. The moderate correlation between posttreatment acceptability and satisfaction ratings suggests that these are related but not identical constructs. Recall that acceptability questionnaires such as the BIRS ask respondents to rate the fairness and acceptability of intervention procedures while the PTCSQ assesses consultees' level of satisfaction and perceived benefits associated with the intervention. It is reasonable to speculate that the effectiveness and overall success of a particular intervention contributes to judgments of satisfaction. If satisfaction is viewed as an indicator of treatment outcome as well as acceptability, then the results of this study provide partial support for the association between the acceptability and effectiveness of an intervention.

It is also noteworthy that there was a significant positive correlation ($r = .80$) between pretest and posttreatment acceptability ratings. This high degree of association suggests that acceptability judgments among the parents surveyed in this study changed little over the course of the intervention. Upon examination of the mean scores on the BIRS, it appears that acceptability ratings were high prior to the start of the intervention phase and did not change dramatically over the course of treatment. These results suggest that posttreatment acceptability ratings may be more affected by initial judgments of acceptability than by treatment outcome. Thus, if a parent initially considers treatment procedures to be acceptable, this perception will tend to persist even when outcome data are not entirely positive.

Reimers and colleagues (1987) argued that acceptability judgments are shaped by participants' understanding and knowlege of intervention procedures prior to their implemention. A study by Calvert and McMahon (1987) demonstrated that parents who were given more information about a particular intervention such as a description of the procedures as well as the rationale underlying the approach were more likely to rate the intervention as acceptable. Given the consultation framework used in the present study wherein parents and teachers met with consultants to discuss the development and implementation of intervention plans, parents' solid understanding of the treatment procedures may have contributed to their perceiving the interventions as acceptable prior to

actually using them. Their participation in the consultation process may have fostered a sense of ownership and responsibility that maintained their favorable impressions regarding acceptability and satisfaction issues, irrespective of treatment outcome.

Treatment Acceptability and Satisfaction in Relation to Consultation

The present research examined acceptability and satisfaction in relation to differing levels of consultation, and it was predicted that acceptability and satisfaction ratings would vary according to intervention condition. The results indicated little difference in acceptability and satisfaction scores across the three intervention conditions. All parents, regardless of group membership, rated the interventions as acceptable and were generally satisfied with the program. This finding was unexpected since previous research has indicated that the type of intervention program has an impact on parent satisfaction ratings. For example, Webster-Stratton (1989) reported greater satisfaction ratings among parents who participated in a weekly discussion group after watching her videotape series compared to parents in a self-administered or group discussion-only conditions. There is other evidence to indicate that parents prefer individual training programs over group parent training programs (McMahon & Forehand, 1983).

These contradictory results as well as the qualitative information analyzed in the present study suggest that the question of overall acceptability may not be as critical as understanding the features associated with a particular intervention deemed by parents as more or less acceptable. Although the majority of comments were favorable across all three intervention conditions, parents in each of the groups also acknowledged negative aspects of the program they had completed. For example, parents in the BC condition found the treatment format to be highly acceptable, and they appreciated the individualized nature of the services they received from their consultant. However, some of these parents also felt that the intervention was not long enough or had started too late in the school year to be of maximum benefit to them. Such criticisms were not reported by parents in the two other groups although the duration of the intervention phase was similar across all three conditions. It may be that treatment effects in the BC group were not as immediate as in the other two conditions which led BC parents to express the desire for continued intervention

services. In the VT and GVT conditions, parents appreciated the ease and simplicity of watching a videotape each week. They felt that the vignettes were useful ways to illustrate what they were doing wrong with their children and teach them how to improve their parenting skills. However, some of the parents in these two groups criticized the videotape program, questioning whether it was appropriate for older children, and commenting that the vignettes seemed somewhat artificial and unrealistic. Thus, the qualitative data indicate that all interventions were evaluated as having both positive and negative aspects.

The results of this study also reinforce the idea that although parent training and parent consultation are conceptually considered by some as different intervention approaches (e.g., Brown et al., 1991; Dembo et al., 1985; Medway, 1989), in practice it is often difficult to view them as entirely separate (Sheridan, 1993; Sheridan, Kratochwill, et al., 1996). The content presented in each of the intervention conditions in this study was similar which may explain why there were few absolute differences between the groups with respect to acceptability and satisfaction.

## Factors Influencing Parent Treatment Acceptability

As discussed in literature review on treatment acceptability, there is considerable research into the factors influencing teachers' treatment acceptability ratings in analogue situations (Elliott, 1988a, 1988b). Less is understood about the factors that affect parent acceptability ratings. In this study, it was predicted that parent characteristics such as perceptions of their problem-solving skills and parenting competence would be related to ratings of treatment acceptability. However, there were only weak associations between problem-solving skill, parenting competence, and ratings of acceptability and satisfaction. These findings may be the result of the small sample size in this study; investigating these variables with a larger sample size may have yielded different results. However, it may be that these parent characteristics are not linked with social validity judgments for consultation based interventions. Although perceived problem-solving ability has been shown to be an important factor in determining teacher participation in consultation (Stenger et al., 1992), problem-solving skills may not be an important variable for parents involved in consultation. The parents in this study generally perceived themselves as

efficient problem solvers and felt confident about their parenting competencies prior to beginning the intervention. It is possible that parents who do not view themselves as proficient problem solvers with competent parenting skills would be unlikely to participate in an intervention program that emphasizes a collaborative problem-solving process.

As indicated by the results in a study by Reimers and colleagues (1995), parental attributions into their causes of the child's behavior problems may play a critical role in affecting acceptability. Their results revealed that parents who considered their child's behavior problems to be the result of genetic rather than environmental causes rated behavioral interventions as less acceptable. Attributions were not investigated in the current study, and other parent charactistics may play a secondary role in influencing acceptability judgments. One could speculate that if parents believe that their child's difficulties were caused by internal factors rather than environmental conditions, then other factors such as the parents' beliefs about their own problem-solving and parenting skills may not be as relevant as these attributions. Another possibility is that parental characteristics as a whole play a smaller role relative to other factors in influencing acceptability such as child characteristics (e.g., severity of the problem, age, gender) and treatment issues such as the type of interventions being proposed and implemented. However, the lack of extensive research in this area makes it difficult to interpret the results of the present study.

## Original Contributions to Knowledge

This study advances the conceptual understanding of conjoint behavioral consultation and videotape training and also makes a significant contribution to issues in clinical practice. Although there has been considerable research into the use of consultation in the treatment of children's behavior problems, there is still a need for further research documenting the efficacy of conjoint behavioral consultation (Sheridan, 1997; Sheridan, Kratochwill et al., 1996). The present study represents one of the few large scale studies of conjoint behavioral consultation ever conducted. The incorporation of a small-*n* methodology within a group design also provided for a detailed exploration of consultation outcomes. Moreover, the consultation literature has been criticized for a lack of research comparing behavioral consultation to other intervention approaches (Noell & Witt, 1996).

This investigation was conceptualized as a means of comparing three intervention approaches based on a behavioral consultation approach. This study is unique in that a range of consultation services varying along a continuum of indirect services were investigated and compared.

Another significant contribution of this study was the focus on issues of social validity. There has been little systematic investigation of social validity in child clinical psychology research (Kazdin & Kendall, 1998; Peterson & Bell-Dolan, 1995). Although Wolf's (1978) and Kazdin's (1977) seminal works on the importance of social validity in clinical psychology were first presented over twenty years ago, child and adolescent intervention research has primarily centered on treatment outcome issues (Kazdin & Kendall, 1998). The present study sought to examine issues of parent treatment acceptability and satisfaction within the context of a naturalistic intervention study. This is significant because the majority of social validity research consists of analogue studies of the acceptability of school-based treatment procedures. Critics have questioned the applicability of hypothetical case studies to actual practice and the extent to which acceptability ratings collected from college students generalize to other populations (Calvert & Johnston, 1990; Eckert & Shapiro, 1999; Miltenberger, 1990; Reimers et al., 1992a). Relatively little of the treatment acceptability research has focused on parental perspectives, and the present study represents an attempt to increase the knowledge regarding parents' participation and satisfaction with consultation-based procedures.

The methodology used to investigate treatment acceptability and satisfaction also represents another original contribution to the literature. Traditionally, paper and pencil rating scales have been used to assess perceptions of acceptability at a fixed point in time, typically prior to the implementation of an intervention. This practice has been strongly criticized since it provides limited information and is removed from the context of the actual intervention (Gresham & Lopez, 1996). In the present study, attempts were made to minimize this criticism on several fronts. For example, more than one measure of acceptability and satisfaction was used. Pretreatment as well as posttreatment acceptability ratings were collected from parents in an effort to better understand the treatment

acceptability construct. An innovative means of assessing treatment acceptability was also piloted in this study through the use of the *Treatment Acceptability Probe* (TAP). Interviews have been suggested as alternative ways of eliciting treatment acceptability information (Gresham & Lopez, 1996), and the TAP was developed to assess treatment acceptability using a brief, semi-structured interview. The administration of the TAP on a weekly basis allowed for continual assessment of treatment acceptability judgments throughout the intervention phase of the study. Finally, this is the only research to date to have used qualitative methodology to explore treatment acceptability within the context of an actual intervention study. A qualitative approach is particularly relevant in studies that seek to investigate and understand the personal experiences of participants (Krahn et al., 1995). Analysis of parent responses on the TAP in the present study elicited important information about the negative and positive features of the programs parents used with their children and served to shed light on the quantitative findings regarding treatment acceptability and satisfaction.

## Implications of Findings

There are a number of theoretical and practical implications that can be drawn from this investigation. First, this study has both research and applied implications that are relevant to the treatment of children with behavioral difficulties. Given the research evidence documenting the serious and long-term outcomes associated with childhood conduct problems, there is a need to identify effective interventions for these children (Brestan & Eyberg, 1998). Trends in treatment practices increasingly emphasize early intervention efforts across multiple settings (Prinz, 1995; Tremblay et al., 1999; Webster-Stratton & Herbert, 1994). The present research targeted young boys who were identified by their teachers and parents as experiencing externalizing behavior problems. Significant decreases in children's problem behaviors and increases in prosocial behaviors were noted following the implementation of interventions aimed at helping parents and teachers change the ways in which they interacted with children displaying challenging behaviors. This research reinforces the importance of social learning theory and early intervention to address children with significant behavior problems (Tremblay et al., 1999). If interventions

of this sort can serve to quell the onset of serious emotional and behavior aldifficulties, then such programs can serve a preventative function and minimize the likelihood of later, more costly interventions such as special education services and police involvement.

The implications for consultation research and practice also deserve mention. Both outcome and process issues are important goals of conjoint behavioral consultation (Sheridan, 1997). The present study focused on treatment outcomes and an important aspect of the consultation process, treatment acceptability. This research adds to the empirical evidence documenting the efficacy and acceptability of conjoint behavioral consultation and provides further support for a collaborative and problem-solving process aimed at children experiencing behavioral difficulties. All three of the intervention programs investigated in this study can be effectively implemented by school psychologists to improve home and school collaboration. With a shifting emphasis on intervention, consultation, and family involvement within school psychology (Bartell, 1995; Christenson, 1995; Cole, 1990), practitioners in the schools need to avail themselves of effective intervention approaches that involve both parents and teachers in children's academic and social development. This issue is of particular significance in Canadian school psychology, where consultation research and practice has remained limited relative to its prominence in the United States (Sladeczek & Heath, 1997).

Sheridan has discussed the need to "streamline the consultation process" (1997, p. 131). She proposed modifying established behavioral consultation procedures such as finding ways to shorten consultation interviews or to prime consultants to think about problem behaviors prior to the first interview. The results of this study suggest that it may be feasible to modify the interview process prescribed by the behavioral consultation model. The three conditions examined in this study represented varying levels of consultation services which ranged from self-administered videotape therapy to minimal consultation in a group format to a highly individualized intervention program. Although consultees in all three groups participated in the initial *Problem Identification Interview*, problem analysis interviews were conducted only in the BC condition. Since all three of the intervention approaches were demonstrated to be effective and acceptable ways of addressing children's

behavior problems at home and at school, this suggests that it may be possible to change or streamline the consultation process without comprising treatment outcome. This has important implications for both consultees and consultants since reducing the amount of meeting and preparation time required for a particular child without jeopardizing treatment gains represents a more cost-effective intervention approach.

Another methodological implication stemming from this research is the need for multi-dimensional assessment in clinical practice, particularly with respect to social validity issues. Although it is standard practice to use multiple measures to assess treatment outcome from several perspectives (e.g., parents, teachers, and children) across different domains (e.g., behavior problems, social skills deficits) in various settings (e.g., home and school) using an assortment of methods (e.g., observations, interviews, rating scales), social validity research has suffered from a lack of such diverse measurement. Consultation research has typically relied on treatment acceptability rating scales as the only means of documenting the social validity of interventions (Gresham & Lopez, 1996). In this study, more than one approach to measuring social validity was used. Both treatment acceptability and satisfaction questionnaires were used to elicit information about parents' perceptions of the interventions they were asked to use with their children. However, such measurement practices do little to inform the clinician as to what is working as the intervention is in progress. In clinical practice and naturalistic settings, asking parents to complete a paper and pencil questionnaire every week to assess treatment acceptability is a cumbersome and time-consuming task. The use of a brief, semi-structured interview to continually assess parents' acceptability with the intervention program constitutes a more authentic and relevant assessment approach. The interview probe developed and used in this study appears to be a concise and quick means of gathering important social validity information that can be used to inform treatment decisions.

Finally, it is important to note the practical significance of the acceptability and satisfaction results presented in this study for clinicians. Interventions that are developed and perfected under controlled experimental conditions are of limited valued if they are not readily transferable to naturalistic settings. The parents in the present study perceived the

behavioral interventions they were asked to use with their children as acceptable, useful, and beneficial. In this way, the findings provide psychologists with important information that they can use in their work with educators and families.

## Limitations and Future Directions for Research

The limitations of this study are discussed within the context of proposals for future research investigating the effectiveness and acceptability of conjoint behavioral consultation and videotape therapy. The results presented in this study are the preliminary findings from a project examining the efficacy of conjoint behavioral consultation and videotape therapy for boys with externalizing problems. It must be acknowleged that the labour-intensive nature of clinical research often precludes the use of rigid experimental procedures. Although sample size is not a consideration in single-*n* research, from a group design perspective the small sample represents a limitation of this study. The types of quantitative analyses that could be conducted were constrained by the limited number of participants in each of the groups. Similarly, the use of an all male sample exhibiting acting-out behavior problems limits the extent to which these results generalize to other populations, although there has been other research documenting the efficacy of consultation and videotape therapy with girls as well as for children with internalizing behavior problems (Kratochwill et al., 1999; Sheridan et al., 1990; Webster-Stratton et al., 1988, 1989).

It is imperative that future consultation research continue to employ both group and single-*n* methodologies in order to examine efficacy and social validity issues. Although the children in this study demonstrated positive behavior changes, the extent to which these changes can be attributed solely to the interventions are limited by the lack of an experimental control group or multiple baseline design. Use of either of these methodological controls would have allowed for a stronger test of the efficacy of the intervention approaches under investigation. Although these experimental conditions were attempted, their implementation was not possible for logistical reasons. Finally, it is also not yet known whether these treatment gains will be maintained. Follow up assessment of treatment effects across home and school settings is an important component of this study, although these data are not yet available.

Clearly, there is a need for continued exploration of treatment acceptability and satisfaction in applied research. In the child psychology literature, intervention research has primarily centered around effectiveness issues as they relate to outcome data (Kazdin & Kendall, 1998). However, an important consideration in treatment outcome research is the extent to which intervention procedures are viewed by participants as acceptable and socially valid (Elliott & Busse, 1993; Kazdin & Kendall, 1998; Peterson & Bell-Dolan, 1995). This study was an initial exploration of the relationship between treatment outcome and acceptability, two of the central constructs in existing treatment acceptability models. The interventions tested in this study were deemed to be both effective and acceptable. Although this research was not intended as a direct test of treatment acceptability models, the results suggest that issues of treatment efficacy, acceptability, and integrity are critical avenues to explore. If interventions are not considered to be socially relevant or acceptable, clients will be less likely to use them, which ultimately threatens their usefulness and effectiveness (Witt & Elliott, 1985; Wolf, 1978). In order to further elucidate the relationships between these variables, investigation of treatment acceptability and satisfaction must occur within the context of actual intervention studies. Other than limited findings extrapolated from analogue studies, little is understood about the factors that influence treatment acceptability in clinical practice. This is particularly the case for parents and children whose perceptions of acceptability and satisfaction have been largely overlooked in the behavioral consultation literature (Elliott & Busse, 1993).

Best practices dictate that a combination of social validation methods be used to determine the acceptability of an intervention (Gresham & Lopez, 1996; Gresham & Noell, 1993; Kazdin, 1977). First, in order to accurately capture judgments as to the fairness and acceptability of treatment procedures, it is imperative that more authentic assessment practices be developed. Existing treatment acceptability questionnaires can be used in conjunction with other assessment approaches such as semi-structured interviews and treatment integrity evaluations (Gresham & Lopez, 1996) in order to investigate the social validity of interventions. Thus, there is a need for the development of a psychometrically sound yet relatively simple means of measuring treatment acceptability. The development

and use of the TAP in the present study represents a positive step in that direction. However, in future studies it will be necessary to validate the use of this instrument with larger samples of parents. Should this measure prove to be an expedient and useful assessment tool with parents, its use may be expanded to other populations such as teachers and children.

Modification of social validity measurement practices underscores the need for multidimensional assessment of this construct. Multidimensional assessment of treatment acceptability and satisfaction requires the integration of information obtained through multiple sources (e.g., rating scales, direct observations, interviews) from different informants (e.g., parents, teachers, children) as well as at various points in time (e.g., prior to, during, and following treatment). There has been little research directly comparing the perspectives of various participants involved in an intervention program. Given the identified need for services in Canadian systems of education (Dworet & Rathgeber, 1990, 1996), it is incumbent upon researchers to develop and test early intervention programs for children with behavior problems that represent not only effective but acceptable models of service delivery for all those involved.

References

Achenbach, T. M., & Edelbrock, C. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. *Psychological Bulletin, 85,* 1275-1301.

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

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

Achenbach, T. M. (1992). *Manual for the Child Behavior Checklist/2-3 and 1992 profile.* Burlington, VT: University of Vermont, Department of Psychiatry.

Adler, A. (1930). *The education of children.* New York: Greenberg.

Albert, J. L., & Yammer, M. D. (1983). Research in school consultation: A content analysis of selected journals. *Professional Psychology: Research and Practice, 14,* 604-612.

Babcock, N. L., & Pryzwansky, W. B. (1983). Models of consultation: Preferences of educational professionals at five stages of service. *Journal of School Psychology, 21,* 359-366.

Barlow, D. H., Hayes, S. C., & Nelson, R. O. (1984). *The scientist practitioner: Research and accountability in clinical and educational settings.* New York: Pergamon.

Barlow, D. H., & Hersen, M. (1984). *Single case experimental designs: Strategies for studying behavior change* (2nd ed.). New York: Pergamon.

Bartell, R. (1995). Changing the role of school psychologists: School-family partnerships. *Canadian Journal of School Psychology, 11,* 133-137.

Beitchman, J. H., Inglis, A., & Schachter, D. (1992a). Child psychiatry and early intervention: IV. The externalizing disorders. *Canadian Journal of Psychiatry, 37,* 245-249.

Beitchman, J. H., Inglis, A., & Schachter, D. (1992b). Child psychiatry and early intervention: II. The internalizing disorders. *Canadian Journal of Psychiatry, 37,* 234-239.

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

Bergan, J. R. (1995). Evolution of a problem-solving model of consultation. *Journal of Educational and Psychological Consultation, 6,* 111-123.

Bergan, J. R., & Duley, S. M. (1981). Behavioral consultation with families. In R.W. Henderson (Ed.), *Parent-child interactions: Theory, research, and prospects* (pp. 265-291). New York: Academic.

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

Bergan, J. R., Reddy, L. A., Feld, J. K., Sladeczek, I. E., & Schwarz, R. D. (1991). *Effects of parent consultation and school systems variables on children's school and summer learning.* Unpublished manuscript, University of Arizona.

Bergan, J. R., & Tombari, M. L. (1976). Consultant skill and efficiency and the implementation of outcomes of consultation. *Journal of School Psychology, 13,* 209-226.

Bigelow, B. J. (1989). Treating conduct-disordered children in social context: A perspective from the psychological literature. *Canada's Mental Health, 37*(4), 9-13.

Bogdan, R., & Biklen, S. (1998). *Qualitative research for education: An introduction into theory and methods* (3rd ed.). Boston: Allyn & Bacon.

Brestan, E.V., & Eyberg, S. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. *Journal of Child Clinical Psychology,* 27, 180-198.

Briener, J. L., & Forehand, R. L. (1981). An assessment of the effects of parent training on clinic-referred children's school behavior. *Behavioral Assessment, 3,* 31-42.

Briesmeister, J. M., & Shaefer, C. E. (1998). *Handbook of parent training: Parents as co-therapists for children's behavior problems.* New York: John Wiley & Sons.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22,* 723-742.

Brown, D., Pryzwansky, W. B., & Schulte, A. (1991). *Psychological consultation: Introduction to theory and practice* (2nd ed.). Boston: Allyn & Bacon.

Bubolz, M. M., & Sontag, S. (1993). Human ecology theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family*

*theories and methods: A conceptual approach* (pp. 419-448). New York: Plenum.

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). Hillsdale, NJ: Erlbaum.

Busse, R. T., Kratochwill, T. R., & Elliott, S. N. (1995). Meta-analysis for single-case consultation outcomes: Applications for research and practice. *Journal of School Psychology, 33,* 269-285.

Calvert, S. C., & Johnston, C. (1990). Acceptability of treatments for child behavior problems: Issues and implications for future research. *Journal of Clinical Child Psychology, 19,* 61-74.

Calvert, S. C., & McMahon, R. J. (1987). The treatment acceptability of a behavioral parent training program and its components. *Behavior Therapy, 2,* 165-179.

Caplan, G. (1970). *The theory and practice of mental health consultation.* New York: Basic.

Christensen, L., & Mendoza, J. (1986). A method of assessing change in a single subject: An alteration of the RC index. *Behavior Therapy, 17,* 305-308.

Christenson, S. L. (1995). Families and schools: What is the role of the school psychologist? *School Psychology Quarterly, 10,* 118-132.

Clark, L., & Elliott, S. N. (1988). The influence of treatment strength information on knowledgeable teachers' pretreatment evaluation of social skills training methods. *Professional School Psychology, 3,* 253-269.

Cobb, D. E., & Medway, F. J. (1978). Determinants of effectiveness in parent consultation. *Journal of Community Psychology, 6,* 229-240.

Cole, E. (1990). Parent-teacher mediated intervention: A growth-promoting process. In E. Cole & J. A. Siegel (Eds.), *Effective consultation in school psychology,* (pp. 101-112). Toronto: Hogrefe & Huber.

Cole, E. (1996). An integrative perspective on school psychology. *Canadian Journal of School Psychology, 12,* 115-121.

Cole, E., & Siegel, J. A. (1990). (Eds.), *Effective consultation in school*

*psychology.* Toronto: Hogrefe & Huber.

Colton, D. L., & Sheridan, S. M. (1998). Conjoint behavioral consultation and social skills training: Enhancing the play behaviors of boys with Attention Deficit Hyperactivity Disorder. *Journal of Educational and Psychological Consultation, 9,* 3-28.

Colton, D. L., & Sheridan, S. M. (1999, August). *Utilizing behavioral consultation services to support inclusion of students with learning disabilites in the general education classroom.* Poster presented at the annual meeting of the American Psychological Association, Boston.

Demaray, M. K., Ruffalo, S. L., Carlson, J., Busse, R. T., Olson, A. E., McManus, S. M., & Leventhal, A. (1995). Social skills assessment: A comparative evaluation of six published rating scales. *School Psychology Review, 24,* 648-671

Dembo, M. H., Sweitzer, M., & Lauritzen, P. (1985). An evaluation of group parent education: Behavioral, PET, and Adlerian programs. *Review of Educational Research, 55,* 155-200.

Dinkmeyer, D., & McKay, G. D. (1976). *Systematic training for effectiveness parenting.* Circle Pines, MN: American Guidance Service.

Dumas, J. E. (1989). Treating antisocial behavior in children: Child and family approaches. *Clinical Psychology Review, 9,* 197-222.

Dworet, D. H., & Rathgeber, A. J. (1990). Provincial and territorial government responses to behaviourally-disordered students in Canada - 1988. *Behavioral Disorders, 15,* 201-209.

Dworet, D. H., & Rathgeber, A. J. (1996, April). *Behaviour disorders in Canada.* Paper presented at the annual meeting for the Council for Exceptional Children, Orlando.

Eckert, T. L., & Shapiro, E. S. (1999). Methodological issues in analogue acceptability research: Are teachers' acceptability ratings of assessment methods influenced by experimental design? *School Psychology Review, 28,* 5-15.

Elliott, S. N. (1988a). Acceptability of behavioral treatments in educational settings. In J. C. Witt, S. N. Elliott, & F. M. Gresham (Eds.), *Handbook of behavior therapy in education* (pp. 121-150). New York: Plenum.

Elliott, S. N. (1988b). Acceptability of behavior altreatments: Review of variables that influence treatment selection. *Professional Psychology: Research and Practice, 19*(1), 68-80.

Elliott, S. N., & Busse, R. T. (1993). Effective treatments with behavioral consultation. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 180-203). San Francisco: Jossey-Bass.

Elliott, S. N., Turco, T. L., & Gresham, F. M. (1987). Consumers' and clients' pretreatment acceptability ratings of classroom group contingencies. *Journal of School Psychology, 25,* 145-153.

Elliott, S. N., & Von Brock Treuting, M. (1991). The *Behavior Intervention Rating Scale*: Development and validation of a pretreatment acceptability and effectiveness measure. *Journal of School Psychology, 29,* 43-51.

Elliott, S. N., Witt, J. C., & Kratochwill, T. R. (1991). Selecting, implementing, and evaluating classroom interventions. In G. Stoner, M. R. Shinn, & H. M. Walker (Eds.), *Interventions for achievement and behavior problems* (pp. 99-135). Silver Spring, MD: National Association of School Psychologists.

Erchul, W. P. (1987). A relational communication analysis of control in school consultation. *Professional School Psychology, 2,* 113-124.

Erchul, W. P., & Martens, B. K. (1997). *School consultation: Conceptual and empirical bases of practice.* New York: Plenum.

Fine, M. J. (1980). *Handbook of parent education.* New York: Academic.

Fine, M. J., & Gardner, A. (1994). Collaborative consultation with families of children with special needs: Why bother? *Journal of Educational and Psychological Consultation, 5,* 283-308.

Fine, M. J., & Holt, P. (1983). Intervening with school problems: A family systems perspective. *Psychology in the Schools, 20,* 59-66.

Forehand, R. L., & Long, N. (1988). Outpatient treatment of the acting-out child: Procedures, long-term follow-up data, and clinical problems. *Advances in Behavior*

*Research and Therapy, 10,* 129-177.

Forehand, R. L., & McMahon, R. J. (1981). *Treating the noncompliant child: A clinician's guide to helping the noncompliant child.* New York: Guilford.

Forehand, R. L., Middlebrook, J., Rogers, T., & Streffe, M. (1983). Dropping out of parent training. *Behavior Research and Therapy, 21,* 663-668.

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*(6), 4-10.

Frankel, F., & Simmons, J. Q, III. (1992). Parent behavioral training: Why and when some parents drop out. *Journal of Clinical Child Psychology, 21,* 322-330.

Freer, P., & Watson, T. S. (1999). A comparison of parent and teacher acceptability ratings of behavioral and conjoint behavioral consultation. *School Psychology Review, 28,* 672-684.

Frentz, C., & Kelley, M. L. (1986). Parents' acceptance of reductive treatment methods: the influence of problem severity and perception of child behavior. *Behavior Therapy, 17,* 75-81.

Furey, W. M., & Basili, L. A. (1988). Predicting consumer satisfaction in parent training for noncompliant children. *Behavior Therapy, 19,* 555-564.

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.

Gibaud-Wallston, J., & Wandersman, L. P. (1978, August). *Development and utility of the Parenting Sense of Competence Scale.* Paper presented at the meeting of the American Psychological Association, Toronto.

Glaser, B., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine.

Gordon, T. (1975). *PET: Parent Effectiveness Training.* New York: American Library.

Graziano, A. M., & Diament, D. M. (1992). Parent behavioral training. *Behavior*

*Modification, 16*, 3-38.

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

Gresham, F. M., & Lopez, M. F. (1996). Social validation: A unifying concept for school-based consultation research and practice. *School Psychology Quarterly, 11*, 204-227.

Gresham, F. M., & Kendell, G. K. (1987). School consultation research: Methodological critique and future research directions. School Psychology Review, 16, 306-316.

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

Gutkin, T. B. (1993). Conducting consultation research. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 227-248). San Francisco: Jossey-Bass.

Hall, C. W., & Wahrman, E. (1988). Theoretical orientations and perceived acceptability of intervention strategies applied to acting-out behavior. *Journal of School Psychology, 26*, 195-198.

Heffer, R. W., & Kelley, M. L. (1987). Mothers' acceptance of behavioral interventions for children: The influence of parent race and income. *Behavior Therapy, 2*, 153-163.

Henning-Stout, M. (1993). Theoretical and empirical bases of consultation. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 15-45). San Francisco: Jossey-Bass.

Heppner, P. P. (1988). *The Problem Solving Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Hobbs, S. A., Walle, D. L., & Hammersly, G.A. (1990). The relationship between child behavior and acceptability of contingency management procedures. *Child & Family Behavior Therapy, 12,* 95-102.

Hoover-Dempsey, K. V., Bassler, O. C., & Brissie, J. S. (1992). Explorations in parent-school relations. *Journal of Educational Research, 85,* 287-294.

Illback, R. J., & Zins, J. E. (1993). Organizational perspectives in child consultation. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 87-109). San Francisco: Jossey-Bass.

Illsley, S. D., Sladeczek, I. E., & Finn, C. A. (1999, August). *North American comparison of acceptability of conjoint behavioral consultation.* Poster presented at the annual meeting of the American Psychological Association, Boston, MA.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59,* 12-19.

Jacobson, N. S., Follette, W. C., & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. *Behavior Therapy, 15,* 336-552.

Johnson, T. L. (1994, March). *Using conjoint behavioral consultation to enhance the generalization of behavioral parent training effects to school settings for children with ADHD.* Paper presented at the meeting of the National Association of School Psychologists, Seattle, WA.

Johnston, C., & Mash, E. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology, 18,* 167-175.

Jones, M. L., Eyberg, S. M., Adams, C. D., Boggs, S. R. (1998). Treatment acceptability of behavioral interventions for children: An assessment of mothers of children with disruptive behavior disorders. *Child & Family Behavior Therapy, 20*(4), 15-26.

Kazdin, A. E. (1977). Assessing the clinical or applied importance of behavior change through social validation. *Behavior Modification, 1,* 427-452.

Kazdin, A. E. (1980a). Acceptability of alternative treatments for deviant child behavior. *Journal of Applied Behavior Analysis, 13,* 259-273.

Kazdin, A. E. (1980b). Acceptability of time out from reinforcement procedures for disruptive child behavior. *Behavior Therapy, 11,* 329-344.

Kazdin, A. E. (1981). Acceptability of child treatment techniques: The influence of treatment efficacy and adverse side effects. *Behavior Therapy, 12,* 493-506.

Kazdin, A. E. (1984a). Acceptability of aversive procedures and medication as treatment alternatives for deviant child behavior. *Journal of Abnormal Child Psychology, 12,* 289-302.

Kazdin, A. E. (1984b). Statistical analyses for single-case experimental designs. In D. H. Barlow & M. Hersen (Eds.), *Single-case experimental designs: Strategies for studying behavior change* (2nd ed.) (pp. 285-324). New York: Pergamon.

Kazdin, A. E. (1986). Acceptability of psychotherapy and hospitalization for disturbed children: Parent and child perspectives. *Journal of Clinical Child Psychology, 15,* 333-340.

Kazdin, A. E. (1987). Treatment of antisocial behavior in children: Current status and future directions. *Psychological Bulletin, 102,* 187-203.

Kazdin, A. E. (1990). Premature termination from treatment among children referred for antisocial behavior. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 31,* 415-425.

Kazdin, A. E., French, N. H., & Sherick, R. B. (1981). Acceptability of alternative treatments for children: Evaluations by inpatient children, parents, and staff. *Journal of Consulting and Clinical Psychology, 49,* 900-907.

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

Kelley, M. L., Heffer, R. W., Gresham, F. M., & Elliott, S. N. (1989). Development of a modified treatment evaluation inventory. *Journal of Psychopathology and Behavioral Assessment, 11,* 235-247.

Krahn, G. L., Hohn, M. F., & Kime, C. (1995). Incorporating qualitative approaches into clinical child psychology research. *Journal of Clinical Child Psychology, 24*, 204-213.

Kramer, J. J. (1990). Training parents as behavior change agents: Successes, failures, and suggestions for school psychologists. In T. B. Gutkin & C. R. Reynolds (Eds.), *Handbook of school psychology* (2nd ed., pp. 683-702). New York: John Wiley & Sons.

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., Loitz, P. A., Sladeczek, I. E., & Carlson, J. (1999). *Conjoint consultation using self-administered manual and videotape parent-teacher training: Effects on children's challenging behaviors.* Manuscript submitted for publication.

Kratochwill, T. R., Sheridan, S. M., & Van Someren, K. R. (1988). Research in behavioral consultation: Current status and future directions. In J. F. West (Ed.), *School consultation: Interdisciplinary perspectives on theory, research, training, and practice* (pp. 169-182). Austin, TX: University of Texas.

Kratochwill, T. R., & Van Someren, K. R. (1985). Barriers to treatment success in behavioral consultation: Current limitations and future directions. *Journal of School Psychology, 23*, 225-239.

Kutsick, K. A., Gutkin, T. B., & Witt, J. C. (1991). The impact of treatment development process, intervention type, and problem severity on treatment acceptability as judged by classroom teachers. *Psychology in the Schools, 28*, 325-331.

Lebow, J. (1982). Consumer satisfaction with mental health treatment. *Psychological Bulletin, 91*, 224-259.

Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

Loitz, P. A., & Kratochwill, T. R. (1995). Parent consultation: Evaluation of a self-help manual for children's homework problems. *School Psychology International, 16*, 389-396.

Lonigan, C. J., Elbert, J. C., & Johnson, S. B. (1998). Empirically supported psychosocial interventions for children: An overview. *Journal of Child Clinical Psychology, 27,* 138-145.

Lunnen, K. M., & Ogles, B. M. (1998). A multiperspective, multivariable evaluation of reliable change. *Journal of Consulting and Clinical Psychology, 66,* 400-410.

Mannino, F. V., & Shore, M. F. (1975). The effects of consultation: A review of empirical studies of the literature. *American Journal of Community Psychology, 3,* 1-21.

Mash, E. J., & Johnston, C. (1983). Parental perceptions of child behavior problems, parenting self-esteem, and mothers' reported stress in younger and older hyperactive and normal children. *Journal of Consulting and Clinical Psychology, 51,* 86-99.

Martens, B. K., & Meller, P. J. (1989). Influence of child and classroom characteristics on acceptability of interventions. *Journal of School Psychology, 27,* 237-245.

Martens, B. K., Witt, J. C., Elliott, S. N., & Darveaux, D. (1985). Teacher judgments concerning the acceptability of school-based interventions. *Professional Psychology: Research and Practice, 16,* 191-198.

McMahon, R. J., & Forehand, R. L. (1983). Consumer satisfaction in behavioral treatment of children: Types, issues, and recommendations. *Behavior Therapy, 14,* 209-225.

McMahon, R. J., Tiedemann, G. L., Forehand, R.L., & Griest, D. L. (1984). Parental satisfaction with parent training to modify child noncompliance. *Behavior Therapy, 15,* 295-303.

McMahon, R. J., & Wells, K. C. (1989). Conduct disorders. In E. J. Mash & R. A. Barkley (Eds.), *Treatment of child disorders* (pp. 73-132). New York: Guilford.

Medway, F. J. (1989). Measuring the effectiveness of parent education. In M. J. Fine (Ed.), *The second handbook on parent education* (pp. 237-255). New York: Academic.

Medway, F. J., & Updike, J. F. (1985). Meta-analysis of consultation outcomes

studies. *American Journal of Community Psychology, 13,* 489-505.

Miller, D. L., & Kelley, M. L. (1992). Treatment acceptability: The effects of parent gender, marital adjustment, and child behavior. *Child & Family Behavior Therapy, 14,* 11-23.

Miller, D. L., Manne, S., & Palevsky, S. (1998). Acceptance of behavioral interventions for children with cancer: Perceptions of parents, nurses, and community controls. *Journal of Pediatric Psychology, 23,* 2657-271.

Miller, D. L., & Prinz, R. J. (1990). Enhancement of social learning family interventions for childhood conduct disorder. *Psychological Bulletin, 108,* 291-307.

Miltenberger, R. G. (1990). Assessment of treatment acceptability: A review of the literature. *Topics in Early Childhood Special Education, 10,* 24-38.

Miltenberger, R. G., Parrish, J. M., Rickert, V., & Kohr, M. (1989). Assessing treatment acceptability with consumers of outpatient child behavior management services. *Child & Family Behavior Therapy, 11,* 35-44.

Ministère de l'Éducation du Québec. (1999). *Adapting our schools to the needs of all students: Policy on Special Education.* Québec: Bibliothèque nationale du Québec.

Minuchin, S. (1974). *Families and family therapy.* Cambridge, MA: Harvard University Press.

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

Norton, G. R., Austen, S., Allen, G. E., & Hilton, J. (1983). Acceptability of time out from reinforcement procedures for disruptive child behavior: A further analysis. *Child & Family Behavior Therapy, 5*(2), 31-41.

Nunally, J. C., & Kotsch, W. E. (1983). Studies of individual subjects: Logic and methods of analysis. *British Journal of Clinical Psychology, 22,* 83-93.

Offord, D. R., & Bennett, K. J. (1994). Conduct disorder: Long term outcomes and intervention effectiveness. *Journal of the American Academy of Child and Adolescent Psychiatry, 33,* 1069-1078.

Ollendick, T. H., & King, N. J. (1994). Diagnosis, assessment, and treatment of internalizing disorders: The role of longitudinal data. *Journal of Consulting and Clinical Psychology, 62,* 918-927.

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The measurement of meaning.* Urbana, IL: The University of Illinois Press.

Paget, K. D. (1991). Early intervention and treatment acceptability: Multiple perspectives for improving service delivery in home settings. *Topics in Early Childhood Special Education, 11,* 1-17.

Patterson, G. R. (1982). *Coercive family process.* Eugene, OR: Castalia.

Patterson, G. R., Reid, J. B., Jones, R. R., & Conger, R. E. (1975). *A social learning approach: I. Families with aggressive children.* Eugene, OR: Castalia.

Peed, S., Roberts, M., & Forehand, R. L. (1977). Evaluation of the effectiveness of a standardized parent training program in altering the interaction of mothers and their noncompliant children. *Behavior Modification, 1,* 323-350.

Peterson, L., & Bell-Dolan, D. (1995). Treatment outcome research in child psychology: Realistic coping with the "Ten Commandments of Methodology." *Journal of Clinical Child Psychology, 24,* 149-162.

Phares, V., Ehrbar, L. A., & Lum, J. J. (1996). Parental perceptions of the development and treatment of children's and adolescents' emotional/behavioral problems. *Child & Family Behavior Therapy, 18*(4), 19-36.

Pickering, D., & Morgan, S. B. (1985). Parental ratings of treatments of self-injurious behavior. *Journal of Autism & Developmental Disorders, 15,* 303-314.

Pisecco, D., Huzinec, C., Curtis, D. & Mathews, T. A. (1999a, August). *Teachers' acceptability of interventions for ADHD: Subtype and gender variations.* Poster presented at the annual meeting of the American Psychological Association, Boston.

Pisecco, D., Huzinec, C., Curtis, D. & Mathews, T. A. (1999b, August). *Teachers' acceptability of typical interventions for the treatment of ADHD.* Poster presented at the annual meeting of the American Psychological Association, Boston.

Prinz, R. J. (1995). Behavior therapy. In G.P. Sholevar (Ed.), *Conduct disorders in*

*children and adolescents* (pp. 251-267). Washington, DC: American Psychiatric Press.

Quay, H. C., & Hogan, A. E. (1999). (Eds.). *Handbook of disruptive behavior disorders*. New York: Klewer Academic/Plenum.

Rasnake, L. K. (1993). Treatment acceptability research: Relevance to treatment selection decisions. *Child and Adolescent Mental Health Care, 3*, 31-47.

Reimers, T. M., & Wacker, D. P. (1988). Parents' ratings of the acceptability of behavioral treatment recommendations made in an outpatient clinic: A preliminary analysis of the influence of treatment effectiveness. *Behavioral Disorders, 14*, 7-15.

Reimers, T. M., Wacker, D. P., & Cooper, L. J., & DeRaad, A. O. (1992a). Acceptability of behavior altreatments for children: Analog and naturalistic evaluations by parents. *School Psychology Review, 21*, 628-643.

Reimers, T. M., Wacker, D. P., & Cooper, L. J., & DeRaad, A. O. (1992b). Clinical evaluation of the variables associated with treatment acceptability and their relation to compliance. *Behavioral Disorders, 18*, 67-76.

Reimers, T. M., Wacker, D. P., Derby, K. M., & Cooper, L. J. (1995). Relation between parental attributions and the acceptability of behavioral treatments for their children's behavior problems. *Behavioral Disorders, 20*, 171-178.

Reimers, T. M., Wacker, D. P., & Koeppl, G. (1987). Acceptability of behavioral interventions: A review of the literature. *School Psychology Review, 16*, 212-229.

Rhoades, M. M., & Kratochwill, T. R. (1992). Teacher reactions to behavioral consultation: An analysis of language and involvement. *School Psychology Quarterly, 7*, 47-59.

Rhoades, M. M., & Kratochwill, T. R. (1998). Parent training and consultation: An analysis of a homework intervention program. *School Psychology Quarterly, 13*, 241-264.

Rogers, C. R. (1951). *Client-centered therapy*. Boston: Houghton-Mifflin.

Rotto, P. C., & Kratochwill, T. R. (1994). Behavioral consultation with parents: Using competency-based training to modify child noncompliance. *School Psychology Review, 23*, 669-693.

Schill, M. T., Kratochwill, T. R., & Elliott, S. N. (1998). Functional assessment in

behavioral consultation: A treatment utility study. *School Psychology Quarterly, 13,* 116-140.

Serketich, W. J., & Dumas, J. E. (1996). The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. *Behavior Therapy, 27,* 171-186.

Schwartz, I. S., & Baer, D. M. (1991). Social validity assessment: Is current practice state of the art? *Journal of Applied Behavior Analysis, 24,* 189-204.

Shapiro, E. S. (1987). Intervention research methodology in school psychology. *School Psychology Review, 16,* 290-305.

Sheridan, S. M. (1993). Models for working with parents. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 110-133). San Francisco: Jossey-Bass.

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

Sheridan, S. M., & Colton, D. L. (1994). Conjoint behavioral consultation: A review and case study. *Journal of Educational and Psychological Consultation, 5,* 211-228.

Sheridan, S. M., & Colton, D. L., Eagle, J. W., Cowan, R. J., & Richard, J. (1999, August). *Effects of conjoint behavioral consultation in inclusionary settings: Preliminary analysis of a four-year study.* Poster presented at the annual meeting of the American Psychological Association, Boston.

Sheridan, S. M., & Colton, D. L., Fenstermacher, K., Lasecki, K., & Wilson, K. (1996, August). *Efficacy of conjoint behavioral consultation as a vehicle for inclusion.* Poster presented at the annual meeting of the American Psychological Association, Toronto.

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 parents and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review, 19,* 33-52.

Sheridan, S. M., & Steck, M. C. (1995). Acceptability of conjoint behavioral consultation: A national survey of school psychologists. *School Psychology Review, 24,* 633-647.

Sheridan, S. M., Welch, M., & Orme, S. F. (1996). Is consultation effective: A review of outcome research. *Remedial and Special Education, 17,* 341-354.

Sholevar, G. P., & Sholevar, E. H. (1995). Overview. In G. P. Sholevar (Ed.), *Conduct disordes in children and adolescents* (pp. 3-26). Washington, DC: American Psychiatric Press.

Shorkey, C. T., McRoy, R. G., & Armendariz, J. (1985). Intensity of parental punishments and problem-solving attitudes and behaviors. *Psychological Reports, 56,* 283-286.

Sladeczek, I. E. (1996). Territorial and aggressive 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., & Heath, N. L. (1997). Consultation in Canada. *Canadian Journal of School Psychology, 13,* 1-14.

Spaccarelli, S., Cotler, S., & Penman, D. (1992). Problem-solving skills training as a supplement to behavioral parent training. *Cognitive Therapy and Research, 16,* 1-18.

Stenger, M. K., Tollefson, N., & Fine, M. J. (1992). Variables that distinguish teachers who participate in school-based consultation from those who do not. *School Psychology Quarterly, 7,* 271-284.

Stevenson, K. (1999). Family characteristics of problem kids. *Canadian Social Trends, Winter,* 2-6.

Tarnowski, K. J., & Simonian, S. J. (1992). Assessing treatment acceptance: The

abbreviated acceptability rating profile. *Journal of Behavioral Therapy and Experimental Psychiatry, 23,* 101-106.

Tarnowski, K. J., Simonian, S. J., Bekeny, P., & Park, A. (1992). Acceptability of interventions for childhood depression. *Behavior Modification, 16,* 103-117.

Tarnowski, K. J., Simonian, S. J., Park, A., & Bekeny, P. (1992). Acceptability of treatments for behavioral disturbance: Race, socioeconomic status, and multicomponent treatment effects. *Child & Behavior Family Therapy, 14,* 25-37.

Tharp, R. G., & Wetzel, R. J. (1969). *Behavior modification in the natural environment.* San Diego, CA: Academic.

Tremblay, R. E., LeMarquand, D., & Vitaro, F. (1999). The prevention of Oppositional Defiant Disorder and Conduct Disorder. In H. C. Quay & A. E. Hogan (Eds.), *Handbook of disruptive behavior disorders.* New York: Kluwer Academic/Plenum.

Tombari, M. L., & Bergan, J. R. (1978). Consultant cues and teacher verbalization, judgments, and expectations concerning children's adjustment problems. *Journal of School Psychology, 16,* 212-219.

Von Brock, M. B., & Elliott, S. N. (1987). The influence of treatment effectiveness information on the acceptability of classroom interventions. *Journal of School Psychology, 25,* 131-144.

Waas, G. A., & Anderson, G. P. (1991). Outcome expectancy and treatment acceptability; erception of school-based interventions. *Professional Psychology: Research and Practice, 22,* 149-154.

Webster-Stratton, C. (1982a). The long-term effects of a videotape modeling parent training program: Comparison of immediate and one year follow-up results. *Behavior Therapy, 13,* 702-714.

Webster-Stratton, C. (1982b). *Parent and Child Video Series: Basic programs.* Seattle, WA: Seth Enterprises.

Webster-Stratton, C. (1984). Randomized trial of two parent-training programs for families with conduct-disordered children. *American Journal of Orthopsychiatry, 55,* 59-69.

Webster-Stratton, C. (1985a). Predictors of treatment outcome in parent training for conduct-disordered children. *Behavior Therapy, 16,* 223-243.

Webster-Stratton, C. (1985b). The effects of father involvement in parent training for conduct problem children. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 26,* 801-810.

Webster-Stratton, C. (1989). Systematic comparison of consumer satisfaction of three cost-effective parent training programs for conduct-problem children. *Behavior Therapy, 20,* 103-115.

Webster-Stratton, C. (1990). Enhancing the effectiveness of self-administered videotape parent training for families with conduct-problem children. *Journal of Abnormal Child Psychology, 18,* 479-492.

Webster-Stratton, C. (1992a). Individually administered videotape parent training: "Who benefits?" *Cognitive Therapy and Research, 16,* 31-35.

Webster-Stratton, C. (1992b). *Parent and Child Video Series: Advanced Programs.* Seattle, WA: Seth Enterprises.

Webster-Stratton, C. (1993). Strategies for helping early school-aged children with oppositional defiant and conduct disorders: The importance of home-school partnerships. *School Psychology Review, 22,* 437-457.

Webster-Stratton, C. (1994). Advancing videotape parent training: A comparison study. *Journal of Consulting and Clinical Psychology, 62,* 583-593.

Webster-Stratton, C., & Herbert, M. (1994). Strategies for helping parents of children with conduct disorders. *Progress in Behavior Modification, Vol 29* (pp. 121-142). Pacific Grove, CA: Brooks/Cole.

Webster-Stratton, C., Hollinsworth, T., & Kolpacoff, M. (1989). The long-term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. *Journal of Consulting and Clinical Psychology, 57,* 550-553.

Webster-Stratton, C., Kolpacoff, M., & Hollinsworth, T. (1988). Self-administered videotape therapy for families with conduct-problem children: Comparison with two cost-

effective treatments and a control group. *Journal of Consulting and Clinical Psychology, 56,* 558-566.

Weiner, R. K., Sheridan, S. M., & Jenson, W. R. (1998). The effects of conjoint Behavior alconsultation and a structured homework program on math completion and accuracy in junior high students. *School Psychology Quarterly, 13,* 281-309.

Wells, K. C. (1995). Parent management training. In G.P. Sholevar (Ed.), *Conduct disorders in children and adolescents* (pp. 213 -236). Washington, DC: American Psychiatric Press.

Witt, J. C., & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In T. R. Kratochwill (Ed.), *Advances in school psychology* (Vol. 4, pp. 251-288). Hillsdale, NJ: Erlbaum.

Witt, J. C., & Martens, B. (1983). Assessing the acceptability of behavioral interventions used in classrooms. *Psychology in the Schools, 20,* 510-517.

Witt, J. C., Martens, B., & Elliott, S. N. (1984). Factors affecting teachers' judgments of the acceptability of behavioral interventions: Time involvement, behavior problem severity, and type of intervention. *Behavior Therapy, 15,* 204-209.

Witt, J. C., & Robbins, J. R. (1985). Acceptability of reductive interventions for the control of inappropriate child behavior. *Journal of Abnormal Child Psychology, 13,* 59-67.

Witt, J. C., Moe, G., Gutkin, T. B., & Andrews, L. (1984). The effect of saying the same thing in different ways: The problem of language and jargon in school-based consultation. *Journal of School Psychology, 22,* 361-367.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11,* 203-214.

Zins, J. E. (1984). A scientific problem-solving approach to developing accountability procedures for school psychologists. *Professional Psychology: Research and Practice, 15,* 56-66.

Zins, J. E., & Erchul, W. P. (1995). Best practices in school-based consultation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology - III* (pp. 609-623).

Washington, DC: The National Association of School Psychologists.

Zins, J. E., Kratochwill, T. R., & Elliott, S. N. (Eds.). (1993). *Handbook of consultation services for children: Applications in educational and clinical settings.* San Francisco: Jossey-Bass.

# Appendix A

## Treatment Acceptability Probe

## Interview Protocol

Subject Number: _____ Date: _____

1. Do you like the intervention procedures you are being asked to implement with your child?

_____

_____

_____

_____

_____

_____

_____

_____

_____

2. Do you think the intervention is a good way to handle your child's behavior problems?

_____

_____

_____

_____

_____

_____

_____

_____

_____

# Appendix B

*Behavior Intervention Rating Scale*

## PARENT-TEACHER INTERVENTION PROJECT

You have just completed an intervention program identified for the Parent-Teacher Intervention Project (PTIP). Please evaluate the intervention by circling the number which best describes your agreement or disagreement with each statement. Please answer each question.

| | | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|---|
| 1. | This was an acceptable intervention for my child's problem behavior. | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. | Most parents would find this intervention appropriate for behavior problems in addition to the one described. | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. | The intervention was effective in changing my child's problem behavior. | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. | I would suggest the use of this intervention to other parents. | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. | My child's behavior problem was severe enough to warrant use of this intervention. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. | Most parents would find this intervention suitable for the behavior problem described. | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. | The intervention did not result in negative side-effects for my child. | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. | The intervention would be appropriate for a variety of children. | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. | The intervention was a fair way to handle my child's problem behavior. | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. | I liked the procedure used in the intervention. | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. | The intervention was a good way to handle my child's behavior problem. | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. | Overall, the intervention was beneficial for my child. | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. | The intervention quickly improved my child's behavior. | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. | The intervention produced a lasting improvement in my child's behavior. | 1 | 2 | 3 | 4 | 5 | 6 |

| | | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|---|
| 15. | The intervention improved my child's behavior to the point that it would not noticeably deviate from other children's behavior. | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. | Soon after using the intervention, I noticed a positive change in my child's problem behavior. | 1 | 2 | 3 | 4 | 5 | 6 |
| 17. | My child's behavior remained at an improved level even after the intervention was discontinued. | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. | Using the intervention not only improved my child's behavior in the home, but also in other settings (e.g., other homes). | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. | When comparing my child with a well-behaved peer before and after use of the intervention, my child's and peer's behavior was more alike after using the interventions. | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. | The intervention produced enough improvement in my child's behavior so the behavior no longer was a problem. | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. | Other behaviors related to the problem behavior also were improved by the intervention. | 1 | 2 | 3 | 4 | 5 | 6 |

# Appendix C

*Parent/Teacher Consultation Services Questionnaire*

# PARENT-TEACHER INTERVENTION PROJECT

## Parent Consultation Services Questionnaire

Thank you for your participation in the Parent-Teacher Intervention Project (PTIP). Your cooperation has been greatly appreciated. The following questionnaire is part of an evaluation of the PTIP. The information obtained will help us evaluate and improve the program; therefore, it is important that you respond as honestly as possible.

### Overall Program

Please circle the response that best expresses your feelings.

1. The major problem that originally prompted me to seek treatment for my child is presently

considerably worse | worse | slightly worse | the same | slightly improved | improved | greatly improved

2. My child's problems that have been treated during my participation in the program are now

considerably worse | worse | slightly worse | the same | slightly improved | improved | greatly improved

3. My child's problems that have not been treated during my participation are

considerably worse | worse | slightly worse | the same | slightly improved | improved | greatly improved

4. My feelings now about my child's progress are that I am

very dissatisfied | dissatis-fied | slightly dissatisfied | neutral | slightly satisfied | satisifed | very satisifed

5. To what degree has the treatment program helped with other general personal or family concerns not directly related to your child?

hindered much more than helped | hindered | hindered slightly | neither helped nor hindered | helped slightly | helped | helped very much

6. At this time, I believe that the treatment will continue to have a positive outcome.

strongly disagree | somewhat disagree | disagree | neutral | agree | somewhat agree | strongly agree

7. I feel the approach to treating my child's behavior problems in the home by using this type of manual-based parent program is

very inappropriate | inappro-priate | slightly inappropriate | neutral | slightly appropriate | appropriate | very appropriate

8. Would you recommend the program to a friend or a relative?

| strongly recommended | recommended | slightly recommended | neutral | slightly not recommended | not recommended | strongly not recommended |
|---|---|---|---|---|---|---|

9. How confident are you in managing your child's <u>current</u> behavior problems in the home on your own?

| very confident | confident | somewhat confident | neutral | somewhat unconfident | unconfident | very unconfident |
|---|---|---|---|---|---|---|

10. How confident are you in your ability to manage <u>future</u> behavior problems of your child in the home using what you learned from this program?

| very confident | confident | somewhat confident | neutral | somewhat unconfident | unconfident | very unconfident |
|---|---|---|---|---|---|---|

11. My overall feeling about the treatment program for my child and family is

| very negative | negative | somewhat negative | neutral | slightly positive | positive | very positive |
|---|---|---|---|---|---|---|

## <u>Teaching Format</u>

We would like to know how <u>difficult</u> each of the following types of teaching has been for you to follow. In addition, we would like to get your ideas of how <u>useful</u> each of the instructional strategies were for you. Please circle the response that most closely describes your opinion.

1. Instructions from the Consultant

<u>Difficulty</u>:

| extremely easy | easy | somewhat easy | neutral | somewhat difficult | difficult | extremely difficult |
|---|---|---|---|---|---|---|

<u>Usefulness</u>:

| extremely not useful | not useful | somewhat not useful | neutral | somewhat useful | useful | extremely useful |
|---|---|---|---|---|---|---|

2. Treatment methods or skills demonstrated by the consultant

<u>Difficulty</u>:

| extremely easy | easy | somewhat easy | neutral | somewhat difficult | difficult | extremely difficult |
|---|---|---|---|---|---|---|

<u>Usefulness</u>:

| extremely not useful | not useful | somewhat not useful | neutral | somewhat useful | useful | extremely useful |
|---|---|---|---|---|---|---|

3. Use of skills in the home with your child

Difficulty:

| extremely easy | easy | somewhat easy | neutral | somewhat difficult | difficult | extremely difficult |
|---|---|---|---|---|---|---|

Usefulness:

| extremely not useful | not useful | somewhat not useful | neutral | somewhat useful | useful | extremely useful |
|---|---|---|---|---|---|---|

4. The home assignments you were asked to complete

Difficulty:

| extremely easy | easy | somewhat easy | neutral | somewhat difficult | difficult | extremely difficult |
|---|---|---|---|---|---|---|

Usefulness:

| extremely not useful | not useful | somewhat not useful | neutral | somewhat useful | useful | extremely useful |
|---|---|---|---|---|---|---|

5. The manual you were asked to read

Difficulty:

| extremely easy | easy | somewhat easy | neutral | somewhat difficult | difficult | extremely difficult |
|---|---|---|---|---|---|---|

Usefulness:

| extremely not useful | not useful | somewhat not useful | neutral | somewhat useful | useful | extremely useful |
|---|---|---|---|---|---|---|

## Parent Opinion

How could the program be improved to help you more?

## Parent Benefits

For each of the following statements, circle the number which most accurately reflects the benefits you have received as a result of working with the consultant.

---

0 = Don't Know or Not Applicable
1 = Strongly Disagree
2 = Somewhat Disagree
3 = Disagree
4 = Neutral
5 = Agree
6 = Somewhat Agree
7 = Strongly Agree

---

1. I am able to see the problem situation in greath depth.

   0 1 2 3 4 5 6 7

2. I am able to see other ways of dealing with a problem that I hadn't thought of before.

   0 1 2 3 4 5 6 7

3. I find myself trying out some of my own ideas.

   0 1 2 3 4 5 6 7

4. I feel encouraged to make my own decisions regarding the management of my child's problems.

   0 1 2 3 4 5 6 7

5. I am able to interact more effectively with my child.

   0 1 2 3 4 5 6 7

6. Did you implement any of the strategies you learned during consultation and training sessions?

   ___ No ___ Yes (Specify which ones: _____

   _____)

   (a) If yes, how successful were they:

   Unsuccessful 1 2 3 4 5 6 7 Successful

   (b) If no, why not? _____

   _____

| | |
|---|---|
| 0 = Don't Know or Not Applicable | 4 = Neutral |
| 1 = Strongly Disagree | 5 = Agree |
| 2 = Somewhat Disagree | 6 = Somewhat Agree |
| 3 = Disagree | 7 = Strongly Agree |

7. How confident are you in your ability to solve similar problems of your child's in the future?

Not at all 1 2 3 4 5 6 7 Very Confident

## The Consultant

For each of the following statements, please circle the number which most accurately reflects your perception of the consultant you worked with during the consultation and training sessions. Use the same 0-7 scale listed above.

1. Easy to work with

0 1 2 3 4 5 6 7

2. Knowledgeable about the behavior of individual children

0 1 2 3 4 5 6 7

3. Established a good relationship with parents

0 1 2 3 4 5 6 7

4. A good listener

0 1 2 3 4 5 6 7

5. Offered useful information

0 1 2 3 4 5 6 7

6. Seemed flexible in his/her ideas

0 1 2 3 4 5 6 7

7. Helped identify useful resources

0 1 2 3 4 5 6 7

| | |
|---|---|
| 0 = Don't Know or Not Applicable | 4 = Neutral |
| 1 = Strongly Disagree | 5 = Agree |
| 2 = Somewhat Disagree | 6 = Somewhat Agree |
| 3 = Disagree | 7 = Strongly Agree |

8. Viewed role as a facilitator rather than an expert

0 1 2 3 4 5 6 7

9. Respected values which were different

0 1 2 3 4 5 6 7

10. Understood important aspects of problems brought up

0 1 2 3 4 5 6 7

11. Worked well with teachers

0 1 2 3 4 5 6 7

12. Provided moral support

0 1 2 3 4 5 6 7

13. Appeared interested in my concerns

0 1 2 3 4 5 6 7

14. Offered a valuable service

0 1 2 3 4 5 6 7

Thank you!

# Appendix D

## *Parenting Sense of Competence Scale*

# Being A Parent (Form M)

Name: _____ Date: _____

Listed below are a number of statements. Please respond to each item, indicating your agreement or disagreement with each statement.

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

2. Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

3. I go to bed the same way I wake up in the morning - feeling I have not accomplished a whole lot.

Strongly agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

4. I do not know what it is, but sometimes when I am supposed to be in control, I feel more like the one being manipulated.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

5. My mother was better prepared to be a good mother than I am.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

6. I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good parent.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

7. Being a parent is manageable, and any problems are easily solved.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

8. A difficult problem in being a parent is not knowing whether you are doing a good job or a bad one.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

9. Sometimes I feel like I am not getting anything done.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

10. I meet my own personal expectations for expertise in caring for my child.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

11. If anyone can find the answer to what is troubling my child, I am the one.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

12. My talents and interests are in other areas, not in being a parent.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

13. Considering how long I have been a mother, I feel thoroughly familiar with this role.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

14. If being a mother of a child were only more interesting, I would be motivated to do a better job as a parent.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

15. I honestly believe I have all the skills necessary to be a good mother to my child.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

16. Being a parent makes me tense and anxious.

Strongly Agree Agree Mildly Agree Mildly Disagree Disagree Strongly Disagree

# Appendix E

## 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 that 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 (514) 398-4908.

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 : _____

## 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 treament.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, but 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 (514) 398-4908.

Sincerely,

Ingrid Sladeczek, PhD.
Project Director

## PARENT CONSENT FOR PARTICIPATION

Ingrid E. Sladeczek, Project Director

I acknowledge being informed to my statisfaction 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 I or my child may withdraw from the program at any time without penalty to me or my child

_____
Student's Name

_____ _____
Parent 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 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 parents will be asked to assist in program implementation at various levels. Among the responsibilities of the parents are the following.

1. Assist in monitoring your child's progress by completing several 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 inclusion in the program , review the program procedures in greater detail, and enlist cooperation and participation of the parent.

3. Learn to use the treatment program for your child's behaviours. The training consists of a video-based program for parents and teachers. The program includes handouts and nine video cassettes divided into four programs: (1) Play, (2) Praise and Rewards, (3) Effective Limit Setting, and (4) Handling Misbehaviour. The handouts contain a summary of points to remember, while the videotapes illustrate essential child management concepts by displaying brief scenes of parents interacting with children in various situations. Parents should have access to a VCR to facilitate the treatment program.

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 (514) 398-4908.

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. The teaching of skills using a videotape program that contains four main techniques including: (a) Play, (b) Praise and Rewards, (c) Effective Limit Setting, and (d) Handling Misbehaviour;

4. Having access to a VCR to facilitate involvement in treatment implementation

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 I or my child may withdraw from the program at any time without penalty to me or my child.

_____
Child's Name

_____ _____
Parent 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 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 parents will be asked to assist in program implementation at various levels. Among the responsibilities of the parents 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 to discuss your child's inclusion in the program, review the program procedures in greater detail.

3. Meet with other parents and a consultant for weekly sessions wherein a video-based program serves as a vehicle for discussion of dealing effectively with children's problem behaviours. More specifically, the program includes handouts and nine video cassettes divided into four programs: (1) Play, (2) Praise and Rewards, (3) Effective Limit Setting, and (4) Handling Misbehaviour. The handouts contain a summary of points to remember, while the videotapes illustrate essential child management concepts by displaying brief scenes of parents interacting with children in various situations. Parents should have access to a VCR to facilitate the treatment program.

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 (514) 398-4908.

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. The teaching of skills using a videotape program that contains four main techniques including: (a) Play, (b) Praise and Rewards, (c) Effective Limit Setting, and (d) Handling Misbehaviour;

4. Having access to a VCR to facilitate involvement in treatment implementation

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.

_____
Child's Name

_____ _____
Parent Signature Date

# Appendix F

## History Questionnaire

## HISTORY QUESTIONNAIRE

Name of Child:_____

Name of parent/guardian completing this questionnaire:_____

Your relationship to this child: ☐ Mother ☐ Father

☐ Guardian ☐ Other (please specify):_____

1. Who is currently living in the home?

| *Name* | *Indicate whether brother/sister, father, mother, grandparent, etc.* |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

2. Have there been any recent major events in the home (e.g., birth of a child, divorce, a move to another town)? ☐ No ☐ Yes

If so, please explain:

_____

_____

_____

_____

_____

_____

3. Is your child currently taking medication prescribed by a physician? ☐ No ☐ Yes

If so, name the medication:_____

Why was the medication prescribed?

_____

_____

_____

_____

_____

_____

4. Is your child currently receiving other services for his/her behavioural or social difficulties? ☐ No ☐ Yes If so, please describe:

_____

_____

_____

_____

_____

_____

_____

5. Is there any other information regarding your child or your family history that you would like to share?

_____

_____

_____

_____

_____

_____

_____

# Appendix G

## Ethics Approval Certificate