

Conjoint Behavioural Consultation with Children who are Socially Withdrawn

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Abstract

This study examined the efficacy of conjoint behavioural consultation (CBC) with children who are socially withdrawn, the generalization of treatment gains across home, school, and a play session, and whether treatment gains are positively associated with teacher and parent ratings of goal attainment. An A-B design was used and participants included 5 boys (ages 7, 5, 6, 5, and 6) and their parents and teachers. Children evidenced improvements in target behaviour from baseline to treatment at home or at school (effect sizes = -6.48 to +1.77). Preliminary evidence was obtained indicating that treatment gains generalize to non treatment settings, however z scores were not significant. Overall, children's social skills increased, problem behaviour decreased, and internalizing difficulties decreased (Reliable Change Indices -4.71 to 4.75). In addition, preliminary evidence of the positive relationship between effect size and perceptions of goal attainment was obtained. Results are discussed in light of their practical and theoretical implications.

Résumé

Cette étude a examiné l'efficacité de la consultation conjointe de comportement (CCC) avec des enfants isolés socialement, la généralisation des résultats acquis lors du traitement soit à la maison, à l'école et lors des sessions de jeux, et si les gains sont associés positivement avec l'évaluation du professeur et du parent pour atteindre le but visé. Une méthode de recherche (A-B) a été utilisée avec cinq garçons (âges de 7, 5, 6, 5 et 6) et leurs parents et professeurs. Les enfants ont démontré des améliorations dans le comportement cible de la phase de pré-traitement jusqu'à la fin de traitement soit à la maison ou à l'école (effets = -6.48 à +1.77). Les résultats préliminaires obtenus indiquaient la généralisation des gains de traitement dans autres environnements où le traitement n'était pas implanté, par contre, les résultats ne étaient pas significatifs. En général, les habiletés sociales des enfants ont augmentées, le problème comportemental a diminué ainsi que les difficultés d'introversion. [Indice de changement fiable (*Reliable Change Indices*) -4.71 à 4.75]. Additionnellement, l'évidence préliminaire a démontrée une relation positive entre l'étendue de l'effet et la perception du but final ont été atteints. Les résultats sont discutés et analysés en vue des implications pratiques et théoriques.

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Chapter 1

Introduction

Jean Piaget was one of the first to document the importance of early, positive peer relationships for the development of social competence (1926, 1932). His early work on the development of communication and moral judgment held that the mutuality and cooperation inherent within peer relationships allow children to develop more accurate cognitive perspectives about their social worlds (Piaget, 1932). According to developmental theorists, peer interaction provides the opportunity for children to establish egalitarian and reciprocal relationships whereby they may learn to consider another's point of view in relation to their own (e.g., Mead, 1934; Piaget, 1932; Sullivan, 1952). Learning and social-learning theorists are in agreement with developmental psychologists regarding the importance of healthy peer relationships (Bandura, 1977; Bandura & Walters, 1963; Eron, 1980; Hartup, 1983; Serbin & O'Leary, 1975). These theorists believe peers act as influencing agents by punishing or ignoring divergent behaviour, while reinforcing appropriate, culturally accepted behaviour (Rubin, LeMare, & Lollis, 1990).

Recent research has provided evidence for the importance of early, healthy peer relationships (e.g., Dunn, 1994; Erwin, 1993; Rubin, Hymel, & Mills, 1989; Rubin & Ross, 1982). Healthy relationships have been associated with the emergence of a variety of skills and positive behaviors that include leadership, altruism, interpersonal problem solving, and self-esteem (Rubin, Hymel, & Mills, 1989). Unfortunately, there are

children, who are socially withdrawn, who only rarely interact with their peers (Rubin & Mills, 1988). These children may be deprived of social experiences that could significantly influence their social competence later in life (Rubin, Hymel, & Mills, 1989).

Little attention has been given to determining the long-term correlates and consequences of social withdrawal in childhood, and as result, the prognosis is uncertain (Elliott & Busse, 1993). However, Rubin, Hymel, and Mills (1989) argue that social withdrawal reflects internalizing feelings and emotions and has negative consequences related to poor social skills and weak problem-solving abilities. Moreover, Rubin and his associates posit that these consequences produce “costs” for children. Minimal peer interaction contributes to low self-esteem (Rubin, Hymel, & Mills, 1989), loneliness and depression (Rubin & Mills, 1988), social anxiety (Rubin & Mills, 1991) and low-school competence (Moskowitz & Schwartzman, 1989). Children who are socially withdrawn require the attention and assistance of researchers, teachers, and practitioners. Conjoint behavioural consultation provides a useful framework in which a consultant, teachers and parents may collaborate in an effort to assist children who are socially isolated.

Conjoint behavioural consultation has been shown to be effective as a means of increasing positive social-initiations of withdrawn children (Sheridan, Kratochwill, & Elliott, 1990). Conjoint behavioural consultation involves an indirect form of service delivery in which the consultant works collaboratively with parents and teachers in order to bring about positive change in a child. This process involves four stages: Problem Identification, Problem Analysis, Treatment Implementation, and Treatment Evaluation

(Sheridan & Kratochwill, 1992). Structured interviews are associated with three of these four stages (exception: Treatment Implementation).

During the Conjoint Problem Identification Interview (CPII), the consultant and consultees identify the most salient problem(s) and agree upon a data collection procedure for the purpose of collecting baseline information. During the Conjoint Problem-Analysis Interview (CPAI), baseline data is reviewed in order to confirm the existence of a problem. Following functional and conditional analyses of the behavior across settings, an intervention plan is designed and guidelines set for implementation. Finally, after the treatment has been implemented according to the agreed upon strategies, the Conjoint Treatment Evaluation Interview (CTEI) is conducted. During this interview, the treatment data is compared to baseline in order to assess the effectiveness of the treatment plan. The teacher, parent and consultant then discuss continuation, modification, or termination of treatment. The final interview is concluded once strategies for maintaining and promoting the generalization of treatment effects are considered (e.g., Bergan & Kratochwill, 1990; Sheridan & Colton, 1994; Sheridan & Kratochwill, 1992). Home and school cooperation is seen as critically important in conjoint behavioural consultation, as the main goals include sharing the responsibility of finding a solution to the posed problem, improving home and school communication and interaction, and the development of useful behavior management skills for both parents and teachers (Sheridan & Kratochwill, 1992).

Purpose of the proposed study

The purpose of the present study was to evaluate the effectiveness of conjoint behavioural consultation as a means of increasing the social skills and/or decreasing the internalizing problem behaviour of male children who are socially

withdrawn. Moreover, the following study examines the generalization of treatment effects across home, the classroom, and a play setting. The present study contributes to the existing conjoint behavioural consultation literature. It is the first study of its kind to examine the generalization of treatment effects in a setting apart from the classroom or home. Specifically, generalization effects were investigated using a structured play session. A structured play session was selected as a third setting, as it provided a novel situation for each participant that presented the children with natural opportunities for socialization as compared to the classroom and home. Two summary variables were used to document treatment generalization: child deviance and interpersonal skills.

Hypotheses

It was hypothesized that there would be a significant difference in each child's target behaviour (e.g., number of social interactions) from baseline to treatment both at home and in the classroom. It was also hypothesized that treatment gains would generalize across three settings: the home, the classroom, and the play session (child deviance would decrease or interpersonal skills would increase from baseline to treatment). In addition, it is hypothesized that each child will evidence a decrease in internalizing difficulties, or problem behaviours, or an increase in social skills. Furthermore, it is hypothesized that treatment gains will be positively associated with teacher and parent ratings of goal attainment.

Chapter 2

Literature Review

The literature review is divided into three major sections. The first section begins with the definition of social withdrawal. Next, the methodological shortcomings found in the research examining the predictive correlates of social withdrawal are discussed. Finally, evidence to date on the effects of social withdrawal is presented. An examination of two large research projects that have successfully and systematically addressed the stability and outcome of social withdrawal in childhood, the Waterloo Longitudinal Project and the Concordia Study of Children at Psychological Risk, are discussed.

In the second section, conjoint behavioural consultation is proposed as an effective treatment option for children who experience social withdrawal. The research pertaining to the efficacy of conjoint behavioural consultation is reviewed. In the third section, a discussion and consideration of the generalization of treatment effects across settings is presented.

Definition of social withdrawal

Researchers who have examined social withdrawal typically include two types of low-status children: those children who are rejected and those who are neglected by their peer group (Burton, 1987). Rejected children are those who are actively disliked by their peers, while neglected children are those who are frequently overlooked and not noticed. The distinction between rejected and neglected children has emerged in the literature as a result of conceptual concerns that these two groups of children are developmentally distinct (Rubin, Hymel, LeMare, & Rowden, 1989). Rejected children have been labeled

aggressive and hostile, whereas neglected children have been described as withdrawn and shy (Bierman, 1986; Krehbiel & Milich, 1986). The differences in the profiles of the two groups of children are consistent with the notion that neglected and rejected children are “at risk” for different behaviour problems and outcomes (Rubin, LeMare, & Lollis, 1990). The neglected child is expected to have difficulties of an internalizing nature, such as depression, while the rejected child is more likely to develop externalizing problems, such as delinquency (Rubin, LeMare & Lollis, 1990). This study will include those children who display fewer social skills and more internalizing behaviour or social withdrawal than the average child the same age.

Methodological shortcomings of research concerning withdrawal in childhood

The weaknesses characteristic of research examining the long term consequences of early social withdrawal are similar across studies (Janes & Hesselbrock, 1978; Janes, Hesselbrock, Myers, & Penniman, 1979; John, Mednick, & Schulsinger, 1982; Michael, Morris, & Soroker, 1957; Morris, Soroker, & Burruss, 1954; Robins, 1966). These studies utilized clinic-referred samples, rather than samples obtained from children in schools (Janes & Hesselbrock, 1978; Janes, Hesselbrock, Myers, & Penniman, 1979; John, Mednick, & Schulsinger, 1982; Michael, Morris, & Soroker, 1957; Morris, Soroker, & Burruss, 1954; Robins, 1966). Clinic-referred children comprise a high-risk sample, and thus tend to be a rather homogeneous population. A high-risk clinic-referred sample severely limits the generalizability of the findings because most adults with psychopathology were never seen in a clinic during childhood. Only the most severe cases result in clinic referral, and boys are four times more likely than girls to be referred for treatment (Parker & Asher, 1987). On the other hand, school samples, being highly

representative of the majority of children, offer the greatest potential for generalization. Moreover, school samples are comprised of children who display a wide variation in behavior providing a richer, more heterogeneous sample (Parker & Asher, 1987).

Another limitation characteristic of the research pertaining to the long term correlates of social withdrawal is that the majority of studies have been retrospective rather than prospective (e.g., Garmezy, 1974, Kohlberg, LaCrosse, & Ricks, 1972; Loeber & Dishion, 1983; Robins, 1966). Although retrospective research is easier and cost-efficient, the reliability and validity of the results may be questionable. Retrospective studies rely on childhood data, such as teacher's anecdotal comments in school records, rather than empirical data characteristic of prospective studies. Of perhaps greater consequence, retrospective research has very limited predictive value (Rubin, Hymel, & Mills, 1989). Retrospective designs, although useful for suggesting an association between child and adult behaviour, cannot provide predictive information indicating that children with lower levels of peer involvement, as compared with children with higher levels of involvement, have an increased probability of developing problems later in life (Parker & Asher, 1987). For example, retrospective research shows that the majority of adults with schizophrenia have a history of low acceptance, without a high percentage of low-accepted children developing schizophrenia as adults (Garmezy, 1974; Kohlberg, LaCross, & Ricks, 1972). Hence, retrospective research of this kind provides information concerning the etiology of schizophrenia, without assessing causality, nor the consequence of low acceptance in childhood.

Another weakness with most "outcome" studies of withdrawal in childhood is that only predictive variables of the externalizing type are used, while internalizing type

variables are overlooked. Researchers have examined the relationship between poor peer relationships and subsequent externalizing outcomes, such as delinquency, aggression, and hostility (Kohlberg, LaCrosse, & Ricks, 1972; Parker & Asher, 1987). However, there is very little data showing the possible connection between negative peer relationships in early childhood and the development of later internalizing disorders such as depression and loneliness. Social withdrawal has been viewed as a behavioural manifestation of internalizing problems, and hence a risk factor for later feelings of loneliness, depression, and low self-esteem (Hymel, Rubin, Rowden, & LeMare, 1990). Research that focuses on predictive variables of the externalizing type, may overlook the association between early social isolation and later internalizing difficulties.

A final weakness is that researchers use many different conceptual meanings to define social withdrawal, causing confusion and misunderstanding (Rubin & Asendorf, 1993). Social withdrawal can occur for different reasons, ranging from exclusion by the peer group to anxious withdrawal from the peer group (Rubin & Mills, 1988). However, researchers have not made the distinction between the different subtypes of the phenomenon. Hence, there is a lack of a clear, specific definition of this construct across research studies (Strain & Kerr, 1981; Coie & Kupersmidt, 1983; Honig, 1987). Terms, such as “social isolation”, “sociometric rejection”, and “behavioural inhibition”, have been used interchangeably with the term “social withdrawal” causing confusing and inconclusive research findings (Rubin, Hymel, & Mills, 1989).

As a result of unclear definitions of social withdrawal, the use of clinic-referred samples, the use of retrospective rather than prospective data, and inappropriate predictive variables (e.g., juvenile delinquency), there is little information about the

prognosis for socially withdrawn children. Fortunately, recent longitudinal studies have improved on the weaknesses plaguing past research.

Stability and outcome of social withdrawal in childhood

The Waterloo Longitudinal Project (WLP) was conducted from 1980 to 1990 and examined the stability and predictive outcomes of early social withdrawal. The original sample of the WLP consisted of 111 kindergarten students and 88 students in Grade 2 enrolled in public schools in the regional municipality of Waterloo, Ontario. These children were followed up in Grades 3, 4, and 5. Although children were lost over time through attrition, new children were added to the sample each year (Rubin, Hymel, & Mills, 1989).

The outcomes associated with the WLP have been documented most closely by Rubin and his colleagues (Rubin, 1985; Rubin, 1993; Rubin & Asendorpf, 1993; Rubin, Hymel & Mills, 1989; Rubin & Mills, 1991). Their research provides convincing evidence that social withdrawal reflects internalizing difficulties. For example, Rubin, Hymel and Mills (1989) investigated the outcomes of social withdrawal in childhood by studying normal children in kindergarten through grade five. Social withdrawal was defined in this study "...as the observed production of solitary activities...encompassing shyness and fearfulness as well as solitude" (Rubin, Hymel, & Mills, p. 241, 1989). Rather than relying on a clinical sample, a school sample was obtained consisting of lower-middle to middle-class children of normal intelligence. Predictors of the internalizing type were used to assess difficulties in grades four and five. Internalizing difficulties were assessed using self-reports of social-competence, overall self-worth,

loneliness, and depression. Teacher ratings of shy/anxious behaviors were also obtained in later childhood.

Results revealed a modest degree of stability across the 2-year period for observed overall social withdrawal. A slightly higher degree of stability was obtained across the 3-year interval when peer perceptions were used to judge sociability and withdrawal. The correlational results in many ways support the hypotheses that social withdrawal, at a young age, is predictive of internalizing problems in later childhood. A significant relationship was found between social withdrawal in kindergarten and grade 2 and internalizing difficulties such as self-reported feelings of depression and negative self-worth, in grades 4 and 5. The self-report measure of social incompetence in grade 2 was the strongest predictor of internalizing difficulties in grade 5. It was concluded, based on the above findings and other reports pertaining to the Waterloo Longitudinal Project (Rubin, 1985; Rubin & Mills, 1988) that social withdrawal reflects a child's poor self-regard and affect. The withdrawal from peer relationships, combined with low self-esteem, together predict later difficulties-notably internalized feelings of loneliness and depression (Rubin, Hymel, & Mills, 1989).

The Waterloo Longitudinal Project, in its final year, tracked the initial participants into their first year of high school, grade nine. Social withdrawal in kindergarten, grades 2 and 5, were significant predictors of ninth-grade self-reports of loneliness, lack of self-competence, and social anxiety (Rubin & Mills, 1991). The WLP advanced the existing research on social withdrawal by demonstrating certain important features. First, it provides evidence that social withdrawal is stable over time. Second, social withdrawal is associated with internalizing feelings such as insecurity and poor self-perception. Last,

negative self-image, social anxiety, and withdrawn behavior together are predictive of later internalizing problems, such as depression and loneliness (Rubin & Mills, 1991).

Further support of the conclusion that children who are socially withdrawn are at risk of later maladjustment is supported by findings from the Concordia Study of Children at Psychological Risk (Schwartzman, Ledingham & Serbin, 1985). This study began in 1976 with the screening of over 4000 Quebec school children for aggression and withdrawal using a French translation of the Pupil Evaluation Inventory (PEI; Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976). Subsequently, over 1700 children in grades 1, 4, and 7 were selected and placed into one of four groups: an aggressive group, a withdrawn group, an aggressive-withdrawn group and a “contrast” group comprised of children who received non-deviant scores on both aggression and social withdrawal on the PEI. The sample included approximately the same number of boys and girls, making this longitudinal study one of the first to follow a large number of aggressive and/or withdrawn girls into adulthood. Several interesting studies emerged from this project.

Based on the Concordia study, Moskowitz and Schwartzman (1989) assessed intelligence, behavioural problems and social competence of each group approximately 6 years after identification. Results indicated that children from the withdrawn group were lower on school competence than were children from the control group. Although, it remains unclear whether their academic achievement was sufficiently low as to interfere with future occupational success, the children from the withdrawn group frequently exaggerated their poor achievement (Moskowitz & Schwartzman, 1989). The children’s low expectations, aside from increasing the risk of dropping out of school, further

hampers the child's chances of success in future endeavors (Moskowitz & Schwartzman, 1989).

Moskowitz and Schwartzman (1989) also examined the physical and psychiatric health of 95% of the original sample. Medical records were gathered for a 4- year period beginning approximately 4- years after identification. Results indicated that females from the withdrawn group were more than twice as likely to have had an abortion than females from the control group. A similar study, examining parenthood and the perpetuation of risk from one generation to the next, found that girls' childhood withdrawal is predictive of low scores on ratings of overall quality of their adult home environment, based on factors such as the mother's emotional and verbal responsiveness and the physical and temporal environment, when these girls do become mothers (Serbin, Peters, McAffer, & Schwartzman, 1991). Hence, these studies provide evidence that socially withdrawn females have an increased probability of having an abortion during adolescence and are at risk for parenting difficulties when they do have children (Serbin, et. al., 1991).

The Concordia Study of Children at Psychological Risk has contributed to the literature on social withdrawal in several ways. First of all, the sample was one of the first to include a large number ($n = 910$) of female subjects. Findings indicated that withdrawn girls are more likely than boys to be overlooked by referral agents (Serbin, Peters, McAffer & Schwartzman, 1991). Furthermore, withdrawn females have very specific risks, such as poor parenting skills, which may require specific intervention. Hence, a second contribution of this project is that outcome variables specific to females were investigated for the first time. A third contribution of this project is that it provided further evidence documenting negative long term consequences of social withdrawal in

childhood. Well-designed longitudinal research has provided convincing evidence showing that children who are isolated from their peers are at risk for later internalizing problems and therefore in need of treatment. It is clear that children who are socially withdrawn need attention and intervention in order to counteract the increased likelihood of experiencing internalizing difficulties in adulthood.

Children who are socially withdrawn need attention. However, the behavioural manifestations of internalizing problems, such as social withdrawal, are less salient and less likely to evoke a negative response than externalizing problems, such as attention deficit disorder with hyperactivity and aggression (Rubin & Mills, 1991). As a result, internalizing difficulties are more likely to go unnoticed by teachers and caregivers. In fact, socially withdrawn children are often reinforced by their teachers for their quiet behaviour in the classroom (Rubin & Mills, 1991). Consequently, this population is presently under serviced as evidenced in recent Canada-wide studies (Dworet & Rathgeber, 1990, 1996).

Intervention: conjoint behavioural consultation

Children who are socially withdrawn need intervention services (Dworet & Rathgeber, 1990, 1996). Conjoint behavioural consultation (CBC) is a systematic model for delivering interventions that can be used to service children who are socially withdrawn from their peers (Sheridan, Kratochwill, & Bergan, 1993). It is a treatment of choice for these children for three reasons. First, it is a form of service-delivery in which a large number of children can be targeted and helped (Erchul & Chewing, 1990; Gutkin & Conoley, 1990; Martens, Erchul, & Witt, 1992). Second, the empirical effectiveness of this process has been documented in past research (Galloway & Sheridan, 1994; Sheridan

& Colton, 1994; Sheridan, Kratochwill, & Elliott, 1990), and last, it encourages the collaboration of home and school, an integral ingredient for student achievement (Epstein, 1984, 1985; Fine & Carlson, 1992; Henderson, 1987; Kroth, 1989).

Collaboration is an important means of improving the school competence of children who are socially withdrawn (Sheridan & Kratochwill, 1992).

Conjoint behavioural consultation is an indirect form of service-delivery in which parents, teachers and consultants collaborate in order to address the academic, behavioural, and social needs of an individual (Sheridan & Kratochwill, 1992). A key element of behavioural consultation is the reliance on an indirect form of service in which a consultant trains another adult or adults to elicit change in the client (e.g., a child) (Erchul & Chewing, 1990; Gutkin & Conoley, 1990; Martens, Erchul, & Witt, 1992). This emphasis on training relieves the caseload of many overburdened school psychologists. Consequently, psychologists are more accessible, enabling a greater number of children to receive treatment at any one time. It is for this reason that consultation is becoming more popular in the schools, as educators are in need of services shown to be efficient and functional. Moreover, conjoint behavioural consultation has been shown to be a useful means of servicing children (Sheridan & Colton, 1994).

Sheridan, Kratochwill, and Elliott (1990) tested the empirical effectiveness of conjoint behavioural consultation as a means of increasing the social initiations of withdrawn children. This was the first study investigating the effectiveness of CBC with children who are socially withdrawn. Four elementary school children between the ages of 9 to 12 comprised the sample. These children were of average intellectual and language abilities. They were selected for treatment based on their specific difficulty of

initiating interaction with peers. There were two forms of consultation being investigated. Two subjects received conjoint consultation (parent and teacher), while two subjects received teacher-only consultation. The treatment was identical across the four cases. Based on direct observation, rating scales, and self-report data, conjoint behavioural consultation was found to be an effective means of increasing social initiation both at home and at school. Teacher-only consultation was shown to be an effective method of increasing the social initiation of withdrawn children at school only. Furthermore, the maintenance of treatment effects were greater when the parents were involved in the consultation process. This research suggests that conjoint behavioural consultation is an effective means for increasing the social behaviour of withdrawn children both at home and at school.

Other research documenting the effectiveness of conjoint behavioural consultation is slowly emerging (Galloway & Sheridan, 1994). One study examined CBC as a means of improving academic performance in underachieving children (Galloway & Sheridan, 1994). Six students from grades 1 through 3 and their parents and teachers participated. Two different types of case studies were conducted with the goal of improving accuracy and task-completion in mathematics. The first set of case studies utilized a home note procedure, and the second consisted of the same home note procedure implemented within the conjoint behavioural consultation framework. The students were randomly assigned to either condition. Results showed that all six children showed an improvement in accuracy and task-completion from baseline to intervention. However, consistent performance and statistically significant differences between baseline and treatment conditions were documented only by those children receiving consultation. Furthermore,

the maintenance of treatment gains were stronger for those receiving home notes with consultation than the home-note-only group.

Sheridan and Colton (1994) demonstrated the immediate and long term usefulness of conjoint behavioural consultation as a means for treating the irrational fear of a kindergarten student. This is the only documented study to examine the effectiveness of the conjoint behavioural consultation approach in treating a problem manifested only in the home setting. Mark, the participant in this study, was a six-year old boy who was recommended for consultation by his teacher, based on the distressing stories he was telling her at school. Mark feared that monsters and spiders were living in his bedroom, and hence slept each night on the floor of his parents' room.

Sheridan and Colton (1994) implemented the four stages of conjoint behavioural consultation with the goal of having Mark sleep in his own bed all night (1994). During the problem identification stage, the general characteristics and concerns related to the child's fears of sleeping in his own room were reviewed and procedures outlined for the child's mother and teacher for collecting baseline data. The second phase of CBC involved the CPAI interview. During this interview, the baseline data was analyzed and a behavioural program developed to increase the amount of time the child spent sleeping.

The intervention program, implemented by Mark's parents, was a fading technique that was comprised of five equidistant steps. Each step marked a small progression from moving the child from the parents' bedroom to his own room. "Mastery", defined as two consecutive successful nights sleep in the designated physical space, was necessary before moving to the next step. A reinforcer of Mark's choice (e.g., a folder, baseball cards) was provided following mastery of each step and a long-term

secondary reinforcer (i.e., a life-size poster of Michael Jordan) was provided following Mark's successful completion of an entire night's sleep in his own bed.

Following 15 consecutive nights of intervention, the final stage of CBC was implemented, the treatment evaluation interview. An AB with follow-up design was used to evaluate treatment effectiveness. In this case, treatment was successful, as the goal of having the child sleeping in his own bed all night was met. The success of this study provides further evidence that conjoint behavioural consultation is a useful model and intervention for childhood problems.

A five year research project headed by Kratochwill and Elliott, investigating the effectiveness of CBC has recently come to fruition (1997). Preliminary findings have been presented at conferences (e.g., Sladeczek, Kratochwill, & Elliott, 1996). Sladeczek, Kratochwill, and Elliott (1996) examined the effectiveness of the CBC approach combined with a self-help manual based treatment for helping children who are experiencing social withdrawal or conduct problems. The sample comprised of 39 Head Start children (experimental group, $n = 31$, control group, $n = 8$). CBC in the form of the three interviews was conducted. The treatment also included a self-help manual which focused on helping parents and teachers work to improve the social skills of the target children. The Social Skills Rating System (SSRS: Gresham & Elliott, 1990) Teacher Form and Parent Form were used to evaluate the child's social behaviour. Results indicated that parents of children in the experimental group rated improvements in social skills and a decrease in problem behaviour on the SSRS from pretest to posttest. However, there was no significant difference between the ratings for children in the

experimental group and the control group. Hence, although preliminary findings suggest results in the expected direction, further investigation is needed.

In summary, although the behavioural approach to consultation has received considerable research attention, there have been few studies to date which have examined the efficacy of conjoint behavioural consultation. The most relevant study considered the usefulness of CBC as a means of increasing social initiations in withdrawn children (Sheridan, Kratochwill & Elliott, 1990). A second study provided evidence that CBC is a successful intervention for improving school performance in underachieving students (Galloway & Sheridan, 1994) and a third study documented the effectiveness of this process in treating irrational fears and childhood phobias (Sheridan & Colton, 1994). Most recently, the effectiveness of the CBC approach, in combination with a self-help manual, was examined in treating children with behaviour problems (Sladeczek, Kratochwill, & Elliott, 1996). Based on the research available, there is evidence that conjoint behavioural consultation provides an effective framework to treat children who are socially withdrawn. However, more research is needed to further document the usefulness of conjoint behavioural consultation. One area that is well documented, however, is the importance of involving parents in their children's education (Epstein, 1984, 1985; Fine & Carlson, 1992; Henderson, 1987; Kroth, 1989).

Conjoint behavioural consultation is designed to enhance the home-school relationship. The active involvement of parents in their children's education is believed to benefit children, teachers, and parents (Sheridan & Kratochwill, 1992). Saint-Laurent, Royer, Hebert, & Tardif (1994) found that parent involvement reduces the likelihood of school failure. Children who are isolated from their peers reported that they were low on

school competence and underestimated their scholastic abilities (Moskowitz & Schwartzman, 1989). Hence, school-family collaboration is particularly important when treating the child who is socially withdrawn in order to reduce his/her negative perceptions related to school competence.

In a recent study, the practices, attitudes, needs and expectations of over 630 teachers and 957 parents were investigated (Saint-Laurent, Royer, Hebert, & Tardif, 1994). A particularly interesting finding in this study was that parents wanted to cooperate with the school and receive training in order to best achieve a collaborative relationship. In fact, over 70% of parents were interested in becoming involved in their children's schooling. Furthermore, it was found that teachers were in favor of parent involvement and thought that parent training would be useful as a means of helping parents better deal with their children, in cooperation with the school (Saint-Laurent, Royer, Hebert, & Tardif, 1994). Preliminary findings suggest that conjoint behavioural consultation is an effective means of providing parent training (Sheridan, Kratochwill, & Bergan, 1993), and increasing home-school collaboration (Sheridan & Kratochwill, 1992). Indeed, the more teachers and parents work cooperatively, the greater the chances for success in helping the child who is socially withdrawn achieve behaviour change across settings (Sheridan, Kratochwill, & Elliott, 1992).

Generalization across settings

One of the most important goals of any intervention program is to achieve generalization of treatment effects across settings (Cooper, Heron, & Heward, 1987). This type of generalization occurs when the desired behavior is emitted in settings that are distinct from those in which treatment took place (Allen, Tarnowski, Simonian, Elliott, &

Drabman, 1991). In the past, however, the generalization of treatment effects was treated as a passive phenomenon. Researchers seldom considered programming for such effects, and when observed, occurrence was often incidental. In 1977, Stokes and Baer published a classic paper proposing strategies and approaches for promoting the generalization of treatment effects. From this point forward, the production and analysis of the generalization of behaviour became one of the major issues in applied behavioural analysis.

Conjoint behavioural consultation provides the framework by which the consultant can systematically program for the generalization of treatment effects (Sheridan, Kratochwill, & Elliott, 1990). Of particular relevance is whether the positive behaviour changes occurring in school are also occurring at home, and whether changes at home are also occurring in school. Moreover, it is important to examine whether the desired behavior is occurring in non-treatment settings. There are very few studies that have examined the generalization of treatment effects across settings (Sheridan et al., 1990). Conjoint behavioural consultation provides a useful tool to empirically analyze and better understand such effects.

Context for the proposed study

There is a need to study and help children who are socially withdrawn for three main reasons. First, the long term prognosis for children who are socially withdrawn is unclear due to a paucity of research in the area. Furthermore, the research that has been done is fraught with conceptual and empirical problems. Hence, systematic research is needed in order to better understand the population of children who are socially withdrawn. Second, low levels of early peer interaction may contribute to problems of an

internalizing nature such as depression, low self-esteem, and social anxiety (Sheridan, Kratochwill, & Elliott, 1990). These children need the help of researchers and practitioners. Lastly, this population has been under served because children with social withdrawal are often overlooked when targeting those with a behaviour disorder (Rubin & Mills, 1991).

Chapter 3

Method

The data examined in the present study is part of a larger study, the Parent-Teacher Intervention Project (P-TIP), being conducted by Dr. Ingrid Sladeczek comparing the effectiveness of two intervention programs (videotape therapy and conjoint behavioural consultation) for children evidencing social withdrawal or conduct disorders. The present study evaluated the efficacy of conjoint behavioural consultation as a means of treating children who are socially withdrawn.

Participants

Children. Five male preschool/kindergarten school children experiencing social skill difficulties, problem behaviours, and/or internalizing problem behaviours were recruited from private preschools and elementary schools through initial screening, teachers' referral, or via other staff in the schools. The children were English speaking and from middle class homes. The sample size was based on the number of internalizing cases which emerged from a caseload of seven children. Seven cases were serviced based on the number of cases each consultant could service over the four month period in which the study was carried out.

Participant 1 (J.) was a 7-year, 3-month old boy in grade 1. At the onset of consultation, J. lived with his mother, his mother's boyfriend, and his older brother. However, approximately one week into treatment, J. and his brother moved to their father's home to live with their father, their father's wife, and the wife's son. J.'s aunt, who attended the three consultation interviews, reported that routines and rules were more

consistently followed in the father's home, and that J.'s behaviour problems were less evident when he was with his father. However, in both home environments, J. displayed great difficulties interacting with other children, including low levels of social initiations, and inappropriate, immature, social behaviour. His teacher explained that J. was often teased by the other children in the class. As a result of the teasing, J. became visibly upset and withdrawn from social interactions. The target behaviour identified for consultation was social skills training. Moreover, the goal of consultation was to reduce or minimize inappropriate, immature behaviour (e.g., whining, and silly talk).

Participant 2 (A.), a five-year, seven-month old boy living with his mother and father, was evidencing serious difficulties interacting with peers, and frequently displayed atypical, bizarre behaviour, such as rocking back and forth and talking to himself. He only rarely interacted with other children. His teacher reported that A. was not capable of following the structure in the classroom and his mother reported that A. did not comply with structure in the home. In fact, when requests were made of A., he typically reacted by falling to the floor, crying, stamping his feet, flapping his hands, and screaming profanities. This tantrum behaviour was of serious concern to A.'s teachers and mother, as it was interfering with his peer relationships and more generally, in his overall ability to integrate into the regular classroom. Hence, A.'s tantrum behavior was targeted for consultation, both at school and at home. Although this case was initially conjoint (teacher and parent), due to life-stressors, A's mother did not attend the final treatment evaluation interview, nor did she complete the posttest measures.

Participant 3 (T.), a 6-year, 6-month old male in kindergarten, was the oldest of two children, and lived at home with his mother, father, and baby sister. T. was described

by his teachers as likable, but often overbearing and aggressive with the other children in the class. His teachers' explained that he lacked the social skills necessary for appropriate social interactions, and as a consequence, he was unaware of how to initiate or maintain interactions with others. T.'s mother reported that the other children living in their neighborhood rarely included her son in their games and play. She explained that her son desired more involvement with children his age, but did not know how to play appropriately with the other children. The behaviour targeted for consultation was social skills training, while reducing inappropriate social behaviour (i.e., talking loudly, bullying the other children, reprimanding his peers, and not capable of following rules).

Participant 4 (T.D.), a 5-year-old kindergarten boy who lived at home with his parents, was described by his mother and teachers as lacking positive peer relationships. Moreover, it was explained that his social skills were poor and if he did interact with children his age, he was often aggressive. In fact, he frequently screamed, threw objects, hit, cried, and pulled hair. Hence, in order to ultimately improve T.D.'s peer relationships and social skills, the consultant and consultees decided that aggression be targeted for consultation. Specifically, the target behaviour was aggressive outbursts.

Participant 5 (N.) was a 6-year, 9-month-old boy who lived at home with both of his parents. Although N.'s teacher and parents were concerned about his poor peer relationships and weak social skills, it was his teacher who completed the treatment program and the consultation interviews. Hence, behaviour difficulties evidenced in the classroom became the focus of consultation. N. was inattentive in the classroom. His teacher explained that he did not comply to the school rules and was often disobedient and disruptive. Moreover, he was a "loner" and only rarely interacted with the other

children in the class. It was believed that N. would have greater opportunities to interact with his peers and a better chance of being accepted by the other children in the classroom, if his inattentive behaviour could be minimized. Hence, the target behaviour for consultation was N.'s inattentive behaviour.

Parents and teachers. Parents interested in participating in this study were asked to complete the Social Skills Rating System-Parent Form (SSRS: Gresham & Elliott, 1990) and the Child Behavior Checklist (CBCL/4-16: Achenbach & Edelbrock, 1991).

Interested teachers were asked to complete the Social Skills Rating System-Teachers Form (SSRS: Gresham & Elliott, 1990) and the Teacher's Report Form-Revised (Achenbach & Edelbrock, 1991).

Consultants. The consultants in the present study were six advanced graduate students from McGill University. The graduate students were trained in behavioural consultation. Training included: (a) reading relevant consultation literature (e.g., Bergan & Kratochwill, 1990; Sheridan, Kratochwill, & Bergan, 1996).; (b) attending workshops which reviewed the theory and process of behavioural consultation; (c) experience in conducting behavioural consultation with parents and teachers; and (d) conducting mock interviews until a minimum of 85% proficiency was reached using the Consultation Objective Checklist (COC; Kratochwill & Bergan, 1990). Proficiency ratings were performed by Dr. Sladeczek, the Director of the McGill Behavioural Consultation Laboratory, in order to ensure the integrity of the consultation procedure.

For every case, close supervision by Dr. Sladeczek was maintained throughout each phase of the consultation process. Each interview was audio taped and reviewed by Dr. Sladeczek using the COC. A minimum of 85% of the interview's objectives had to be

met or the interview was repeated. In addition, regular meetings were held between Dr. Sladeczek and the consultants, both individually and as a group, in order to discuss relevant consultation issues and to review the progress made in each case.

Measures

Direct observations were used to evaluate the impact of treatment on each participant's specific behaviour targeted during the problem identification interview. Parents and teachers collected data by directly observing the child and by quantifying the target behaviour into a molecular measure (frequency count) immediately as it was occurring. The frequency of each occurrence of the observed target behaviour was recorded during a baseline period and continued during a period of intervention for each child.

In addition, the following study evaluated the impact of treatment on the children's social skills, problem behaviours, and internalizing problem behaviours. Social skills were operationalized using the standard score for Social Skills from the Social Skills Rating System-Parent and Teacher Forms (SSRS: Gresham & Elliott, 1990). Similarly, problem behaviours were operationally defined using the standard score for problem behaviours on the SSRS. The SSRS was selected because it provides norm-referenced scales that can be used to evaluate a child's social competence and adaptive functioning both at home and in school (Kratochwill & Elliott, 1991). Internalizing problem behaviours were defined using the Internalizing T-score of the Child Behavior Checklist-Revised (CBCL-R: Achenbach & Edelbrock, 1991) and the Teacher's Report Form-Revised/4-18 (TRF-R: Achenbach & Edelbrock, 1991). The CBCL-R and the TRF-R were selected because they are empirically validated measures (Achenbach &

Edelbrock, 1991; Achenbach, Howell, McConaughy, & Stanger, 1995; McConaughy, Stanger, & Achenbach, 1992). Furthermore, these measures provide a comprehensive evaluation, as parents and teachers are usually the two most important sources of data regarding a child's competencies and problems (Achenbach & Edelbrock, 1991).

Social skills and problem behaviours

The Social Skills Rating System is designed to assess the frequency (Never, Sometimes, Very Often) and importance (Not Important, Important, Critical) of social skills across five domains- Cooperation, Assertion, Self-Control, Responsibility, and Empathy (see Appendix A to obtain the reference for the questionnaire). Scores across the five domains yield a standard social skills score. In addition, there are three scales measuring the frequency of potential Problem Behaviours-Externalizing problems, Internalizing problems, and Hyperactivity problems. Uniquely, the SSRS also provides different viewpoints of the student's social and adaptive functioning, as separate ratings can be obtained from the student, teacher, and/or parent (Gresham & Elliott, 1990). The SSRS-Teacher Form includes a nine-item scale evaluating Academic Competence, and the parent version of the Social Skills Rating System (SSRS-P) includes a Responsibility scale. Importantly, the SSRS also offers a direct link connecting the assessment results to intervention planning (Gresham & Elliott, 1990).

Studies have documented the reliability and validity of the Social Skills Rating System-Teacher (SSRS-T) Form (Clark, Gresham, & Elliott, 1985; Elliott, Gresham, Freeman & McCloskey, 1988; Gresham & Elliott, 1990; Gresham, Reschly, & Carey, 1987). Elliott, Gresham, Freeman and McCloskey (1988) reported test-retest reliability coefficients of .90 for the total score and individual factor stability coefficients ranging

from .60 to .93. High internal consistency of test items and factors was also reported, with a coefficient alpha of .96 at the first administration of the SSRS-T and .95 at a follow-up six weeks later. The coefficient alphas for the separate factors ranged from .80 to .93 at the first administration and ranged from .71 to .93 at a follow-up six weeks later (Elliott, Gresham, Freeman & McCloskey, 1988).

Psychometric properties of the Social Skills Rating System-Parent Form (SSRS-P) have been reported by Gresham and Elliott (1990). The coefficient alpha was .87 for the Social Skills scale and above .74 for the three Problem Behavior subscales. Test-retest reliability was .87 for the Social Skills scale and ranged from .48 for the Internalizing subscale to .72 for the Hyperactivity subscale for Problem Behaviors.

Internalizing problems

The Child Behavior Checklist-Revised is a 118-item questionnaire designed to obtain parent's ratings on their child's problem behaviours and competencies on a 3-point ordinal scale; 0 ("not true"), 1 ("somewhat or sometimes true"), and 2 ("very true or often true") (see Appendix B to obtain the reference for the questionnaire). The CBCL-R is a global measure which provides a holistic view of the child being assessed. The items relate to specific maladaptive behaviors that are classified as internalizing (i.e., anxious/depressed, withdrawn, somatic complaints), externalizing (i.e., aggression and delinquent behavior), or other (i.e., social problems, thought problems, attention problems). Twenty items assessing the social competence of the child are also included. These items address the child's school performance, social relations, and leisure time (Achenbach & Edelbrock, 1991).

The Child Behavior Checklist-Revised was normed on a national sample that included 2,479 referred and non-referred children between the ages of 4 to 16. The normative sample yielded standardized T scores with a mean of 50 and a standard deviation of 10 (Achenbach & Edelbrock, 1991). T scores beyond 70 are considered to lie within the clinical range and are found in 5% of the population (Achenbach & Edelbrock, 1991). The distinction provides a useful marker for identifying the children who are more like the referred versus the non-referred children in the standardization sample (Achenbach & Edelbrock, 1991). T scores can be converted from the overall maladaptive behavior score. This score provides a general index comparing the results of a given child to the typical child of the same age (Achenbach & Edelbrock, 1991). Further, T scores are available separately for the Internalizing and Externalizing broad band scores.

The Teacher Report Form-Revised (Achenbach & Edelbrock, 1991), modeled on the Child Behavior Checklist/4-18, is a comprehensive questionnaire designed to obtain a teacher's ratings on a student's adaptive functioning and problems in a standardized format. The similarity between the items of the TRF and the CBCL facilitate comparisons between these two reports. Parents' ratings on the CBCL-R and teachers ratings on the TRF have been found to discriminate between demographically matched referred and non-referred children, and are consistent with one another and the ratings of other professionals (Achenbach, Howell, McConaughy, & Stanger, 1995; Achenbach, Howell, Quay, & Conners, 1991; McConaughy, Stanger, & Achenbach, 1992). Interrater reliability averaging between .84 to .90 were found using the CBCL (Achenbach et al., 1995; Achenbach et al., 1991; McConaughy et al., 1992). Test-retest reliability, of

differences between teachers' ratings, averaged .90 for the adaptive scales and .92 for the problem scales using the TRF (Achenbach, 1991).

Eligibility. In order to be eligible for this study, the parent or teacher rating of the child had to indicate evidence of poor social skills [a score of at least 1 standard deviation (15 points) below the mean of 100 on the SSRS] or problem behaviours [a score of at least 1 standard deviation above the mean on the SSRS or a score within the clinical range (Total T score beyond 70) on the CBCL-R or on the TRF-R] or maladaptive internalizing behaviour [a score within the clinical range (T score beyond 70) on the CBCL-R or the TRF-R]. One parent rating or one teacher rating must have indicated a problem in order for a child to be eligible to participate in this study. Moreover, in the case in which both the parent and teacher rated the child as evidencing problem behaviours (SSRS-P&T, CBCL or TRF), one of the two ratings had to indicate that the problem was of the internalizing type.

Procedure

Dr. Sladeczek and members of the Behavioural Consultation Laboratory conducted presentations explaining the nature of the study and services that would be provided to interested parents and teachers. In addition, brochures and an information sheet were used to inform parents and teachers about the project.

After the initial referral, a consultant was randomly assigned to the case. The consultant contacted the parents and teachers of the assigned case in order to obtain additional screening information, after parental consent had been given to do so. In addition, the consultant obtained consent from the parent and teacher to participate in treatment, and for the release of information between the school and parents.

Behavioural Observations. Direct observations were used to evaluate the impact of treatment on each participant's specific behaviour targeted during the problem identification interview. During the CPII interview, the consultant assisted the consultees in identifying and defining the problem of concern in behavioural terms and in developing the procedures to measure the frequency of the client's target behaviour.

Following the first interview, baseline information was obtained as parents and teachers collected the frequency data by directly observing the participant and by quantifying the observed behaviour immediately as it was occurring. The behaviour was documented on a frequency chart which depicted the number of times the target behaviour was emitted per each day of observation. During a second interview, the consultant and consultees worked together to develop a plan to improve the problem. The frequency of the target behaviour continued to be documented during the period of intervention for each participant.

Pretreatment and post treatment assessment. The Social Skills Rating System-Parent and Teacher Form (SSRS: Gresham & Elliott, 1990), the Child Behavior Checklist (CBCL/4-16: Achenbach & Edelbrock, 1991), and the Teacher Report Form (TRF: Achenbach & Edelbrock, 1991) were administered at two time points. They were first administered for screening purposes, in order to identify children experiencing internalizing problem behaviour, and/or social skills problems and then re-administered a second time following the termination of conjoint behavioural consultation, in order to evaluate treatment effectiveness.

Experimental treatment. The experimental treatment in this study was conjoint behavioural consultation. Parents and teachers, serving as consultees implemented the

intervention. Conjoint behavioural consultation occurred through 3 interviews (Sheridan, Kratochwill, & Bergan, 1993: see Appendix C for the interview manuals). The Conjoint Problem Identification Interview (CPII) was conducted in order to initiate consultation services. The purpose of this interview was to ascertain the problem being addressed and to discuss the procedures to be used in collecting baseline data. Shortly after the CPII, a second interview was held, the Conjoint Problem Analysis Interview (CPAI). The goal of the second interview was to validate the problem based on the data the parents and teachers had collected and to develop and discuss a treatment plan. The environmental conditions that influenced the behaviour were discussed, as a complete functional analysis of behaviour was conducted prior to designing the treatment plan. Four to eight weeks was allotted for parents and teachers to implement the treatment both at home and at school, with a mean treatment duration of 4.2 weeks across the 5 cases. Following treatment implementation, a Conjoint Treatment Evaluation Interview (CTEI) was held in order to determine the effectiveness of the plan and to discuss plan modifications. Weekly telephone contact was maintained during treatment implementation. The purpose of maintaining contact was to monitor the progress and effectiveness of the treatment plan using Goal Attainment Scaling (GAS: see Appendix D for the anchor points and descriptions for each case) and to implement modifications when needed. In addition, GAS was used as a treatment outcome measure.

Goal attainment scaling was created and developed by Kiresuk and Sherman in 1968 as a method for evaluating mental health services, and has since been used as an assessment technique in many diverse settings such as day treatment programs, and family therapy units (Moyer & Rosenroll, 1984). GAS involves three basic steps: (a) the

selection of the target behaviour; (b) an objective, measurable description of the desired treatment outcome; and (c) the development of three to five descriptors of the target behaviour that gradually approximate the desired outcome (Elliott, Sladeczek, & Kratochwill, 1995). Hence, GAS provides an individualized, criterion-referenced approach to describing behaviour change and documenting treatment effects. Moreover, GAS is conceptually well suited for use in conjoint behavioural consultation, as it is cost and time effective (Elliott, Sladeczek, & Kratochwill, 1995).

Concurrent validity of the goal attainment scaling approach was investigated by examining the correspondence between GAS ratings and various behaviour rating scales (Elliott, Sladeczek, & Kratochwill, 1995). Specifically, GAS ratings were shown to correspond with the Social Skills and Problem Behavior subscale scores on the Social Skills Rating System (Elliott, Sladeczek, & Kratochwill, 1995). The relationship between the measures was evidenced when a positive change (ratings of +1 or +2) in the target behaviour defined in the GAS corresponded with a clinically significant change (i.e., +1/2 SD) in the subscale scores on the SSRS. A less consistent relationship was found between parents' GAS scores and their ratings on the Child Behavior Checklist (CBCL). However, when parents' GAS ratings were compared with teachers' GAS ratings, there was a perfect match 76% of the time (13 of the 17 ratings), providing evidence for inter-rater agreement (Elliott, Sladeczek, & Kratochwill, 1995). Hence, the available data suggest that GAS is an accurate estimate of treatment effectiveness (Kiresuk, Smith, & Cardillo, 1994). Moreover, GAS is a particularly sensitive and valid measure of treatment induced change produced throughout each phase of the treatment process (Kiresuk, Smith, & Cardillo, 1994).

In the following study, GAS was used to define the target behaviour according to a five-point scale ranging from +2 to -2. The numbers corresponded with the following conditions: Best Possible Behaviour (+2), No Behaviour Change (0), and Worst Possible Behaviour (-2). The numerical descriptors provided the consultee with a specific rating of treatment. For example, one participant's progress towards a goal of 2 or 3 negative social interactions (i.e., hitting, talking to self, and yelling) per day was measured by weekly goal attainment scale (GAS) ratings of behaviour. These ratings were done by the child participant's teacher, using a five point GAS with the following anchors: School scale (+2 = 2 or 3 negative interactions per school day, +1 = 4 or 5 negative interactions per day, 0 = 6 or 7 negative interactions per day, -1 = 8 or 9 negative interactions per day, -2 = 10 or more negative interactions per day).

Intervention

The skills to be taught and used as part of the treatment intervention were based on problems identified during the problem analysis interview. During the interview, the results of the pretreatment assessment and the observational data collected in the home, and the classroom were reviewed by the teacher, parent, and consultant and the treatment package was outlined and strategies reviewed. The treatment package entitled Social Program for Children, was individualized and personalized for each case (Kratochwill & Elliott, 1991). The consultant and consultees collaborated and decided on the elements of the program that best addressed the needs of each particular child.

The treatment package was comprised of four components: skill selection, goal setting, peer activity, and positive reinforcement. Child management skills were included

in the package for children who were evidencing behavioural difficulties, in addition to internalizing problems.

Skill selection. Information pertaining to the child's social skills problems and internalizing problem behaviours was assessed in order to identify the most significant problem(s) contributing to the child's socially withdrawn behaviour. Focusing on one problem at a time, the parent, teacher, and consultant worked collaboratively to develop goals and to form a plan to meet these goals.

Goal setting. The goal was to help the student learn the selected skill (e.g., initiating conversation). Four steps were used to guide the child's learning of the skill: Tell, Show, Do, and Practice.

1. Tell: The teacher and parent talk about the skill to the child and explain why the skill is important.
2. Show: The parent and teacher model and practice the skill for the student.
3. Do: The child practices the skill both at home and in the classroom.
4. Set a goal and Practice: Set a specific goal of having the child acquire the skill and on a daily basis, have the child practice the skill in different situations, with different children.

Goal setting procedures allowed children to develop appropriate personal goals for improving social competence. It was important that the child had control over the goal and was capable of meeting the goal that had been set. Moreover, the goal directed the child's actions and was specific to the child. Parents and teachers monitored the progress the child was making using a goal attainment scale sheet.

Peer activity. The importance of early, healthy peer relationships has been well documented (e.g., Rubin, Hymel, & Mills, 1989; Rubin & Ross, 1982). Hence, opportunity is needed for children who are socially withdrawn to practice interacting with peers. Teachers and parents were encouraged to provide children with time to play with a peer(s) at least once a week. There were eight steps that parents and teachers followed in order to initiate peer activities:

1. With consultant, decide on type of activity;
2. Selects materials needed for the activity;
3. Bring child and friend together in an appropriate environment;
4. Explain activity and give directions;
5. Tell child what behaviours are expected of him/her;
6. Praise child and friend for positive behaviour;
7. End activity after 10-15 minutes;
8. Provide feedback.

Positive reinforcement. Positive reinforcement or a “special reward” was provided after the child reached the target goal. Selecting and planning appropriate reinforcement techniques occurred in connection with the goal-setting procedures. The child was involved in selecting the particular reward that he/she worked towards. A reinforcement “menu” or “survey” was used in order to provide the parents and teacher with additional ideas and activities that can be provided in response to appropriate behaviour.

Prompting is a necessary component of a reinforcement program. Prompts, such as a teacher saying: “Jimmy may like a chance to roll the dice first”, were used as a means of promoting the appropriate behaviour, while cueing the child on what needed to be done

to reach his/her goal. In some cases several prompts were necessary in order for the child to reach the goal. Once the behaviour occurred, it was reinforced.

Praising the child's social behaviors was especially important at the beginning of intervention. Praise provided the child with feedback that their behaviour had been noticed and approved. Praising was used less frequently as social behaviors became more established.

Child management. Child management consisted of differential attention, instruction giving, and time away. Differential attention, which involved attending, rewarding, and ignoring, was used when the child was behaving inappropriately. This strategy involved consistently attending and rewarding good behaviour, while ignoring inappropriate behaviour whenever possible. Instruction-giving skills, in combination with differential skills, were used to help parents and teachers be more effective in issuing instructions, and encouraging compliant behaviour. Finally, the time away procedure, or removing the child from a negative situation for three to five minutes, was used to discourage specific inappropriate behaviour.

Experimental design(s)

The research study utilized a single-subject research design. The basic design was a single-subject experimental, A-B, repeated measures design. Single-subject experiments are scientific investigations which examine the effects of a series of experimental manipulations on a single subject and the reasons for these effects (e.g., Hersen & Barlow, 1976; Kazdin, 1982; Kratochwill, 1978; Wilson, 1996). The underlying rationale of single-subject experimental designs, to compare the effects of different conditions on

performance, is similar to that of traditional between-group experimentation (Kazdin, 1982).

The design of this study consisted of a baseline (A) period followed by a period of intervention (B). Baseline information was gathered for each participant until there was a satisfactory estimate of the frequency of the natural occurrence of the target behaviour. It is in this manner that each participant acted as his/her own control, as the baseline data collected for each participant served as a criterion to evaluate whether the intervention led to change. Presumably, if the treatment program was effective, the participant's performance would differ from the projected level of baseline (Kazdin, 1982). Hence, once baseline information was collected, treatment was introduced and information about the behaviour continued to be gathered throughout the treatment phase. Information was collected for all participants in the home, classroom and the play session across baseline and treatment conditions in order to allow for the investigation of setting generalization. Continuous assessment was essential in order to investigate the effects of the intervention on the child's target behaviour. Weekly contact with the teacher and parents was maintained in order to assess treatment progress.

Generalization of treatment effects

A semi-structured play session was used to assess the generalization of treatment effects across a non-treatment setting. The purpose of the play sessions was to elicit the target child's natural behaviour in a situation involving social interaction and involvement, and to provide the opportunity to observe and document the quality of the consultant-child social interaction. Play is a major activity in the life of a child, and the characteristics of play reflect the child's social, emotional, and cognitive development (Vygotsky, 1981).

Moreover, play is a form of natural training for a small child that is future-oriented. Thus, play is a natural means to assess a child's social expression and typical behaviour (Vygotsky, 1987).

Each participant took part in two play sessions, one during baseline and a second following treatment. During each play session, the consultant engaged the child participant in a board game for eight minutes. Following eight minutes of play, a two minute clean-up period was used to terminate the session. The play sessions were videotaped and later coded by undergraduate psychology students at McGill University using a frequency count of two separate summary variables: child deviance behaviours and interpersonal skills. Interrater reliability was $r = .97$ for Child Deviance behaviours and $r = .96$ for Interpersonal Skills. Child deviance was comprised of the following behaviours: (a) whine, cry, yell; (b) smart talk; (c) physical negative; (d) destructive; (e) noncompliance; and (f) cheat attempt. These behaviours, with the exception of cheat attempt, were taken from the Dyadic Parent-Child Interaction Coding System (DPICS: Eyberg & Robinson, 1992). DPICS is designed: (1) to provide an observational measure of parent and child behaviours; (2) to serve as a baseline pretreatment assessment of behaviours; (3) to provide a measure of treatment progress during parenting that focuses on parent-child interaction patterns; and (d) to serve as a behavioural observation measure of treatment outcome.

The coding categories pertaining to the child behaviours were selected from the list of empirically derived child deviant behaviours provided by Adkins and Johnson (1972). The DPICS was initially standardized and validated on 42 families, with and without children evidencing conduct problems and was found to correctly classify 94% of families with conduct problems and predict 61% of the variance in parental report of behaviour

problems in the home. Moreover, the mean interrater reliability was assessed as .92 for coding the child behaviours (Robinson & Eyberg, 1981).

Interpersonal skills was comprised of the skills targeted by parents and teacher during goal setting that could likely emerge during a semi-structured play session. Moreover, the Consultant Social Interaction Code (CSIC) was used as the framework to develop the interpersonal skills categories. The CSIC is a coding system which provides data on child interactive behaviours. The following skills were selected: (a) eye contact; (b) verbal initiations (rate of starts); (c) verbal responses (rate of answers); (d) positive social statements; and (f) compliance. The total child deviance and interpersonal skills occurring in the first play session were compared to the total child deviance and interpersonal skills in the second play session for each participant.

Chapter 4

Results

The results section is organized in the following format: (a) statement of the hypothesis; (b) description of the analysis used to test the hypothesis; and (c) results of the analysis. The above format is repeated for each of the four hypotheses under investigation.

Hypothesis 1. It was hypothesized that there will be a significant difference in each child's target behaviour (e.g., number of social interactions) from baseline to treatment across home and school.

In order to test this hypothesis, the effect size measure (Busk & Serlin, 1992) was computed. Separate effect sizes (ES) evaluating the changes in target behaviour were calculated for each child for the home and school environments. The effect-size measure takes into account the lack of independence in the data typical of successive observations of the same individual. The effect size measure can be calculated by dividing the difference between the baseline and treatment phase means by the standard deviation for the baseline phase (Busk & Serlin, 1992). This is expressed in the following formula:

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

where

$$SD = \sqrt{\frac{N \sum x^2 - (\sum X)^2}{N(N-1)}} \quad (2)$$

Effect sizes are interpreted as standard deviation units expressed in the form of z scores (Gresham & Noel, 1993). Consequently, the meaning of the ES can be translated into notions of overlapping distributions and comparable percentiles (Kavale & Glass, 1984). Effect sizes are positive when the mean frequency of the target behaviour is greater during the treatment phase than during baseline phase, and the effect sizes are negative when the frequency of the target behaviour decreases from baseline to treatment (Gresham & Noel 1993). Hence, an ES of +1.00 would indicate an increase in target behaviour from baseline to treatment of one standard deviation (Kavale & Glass, 1984; Gresham & Noel 1993).

Baseline and treatment data are presented graphically for each child.

There is a separate graph illustrating home and school observations. Immediately underneath each graph, the effect size measure is provided. These effect sizes ranged from -6.481 to +1.765. An asterisk is placed next to the effect size if the change from pretest to posttest was in the expected direction (i.e., improvement in target behaviour).

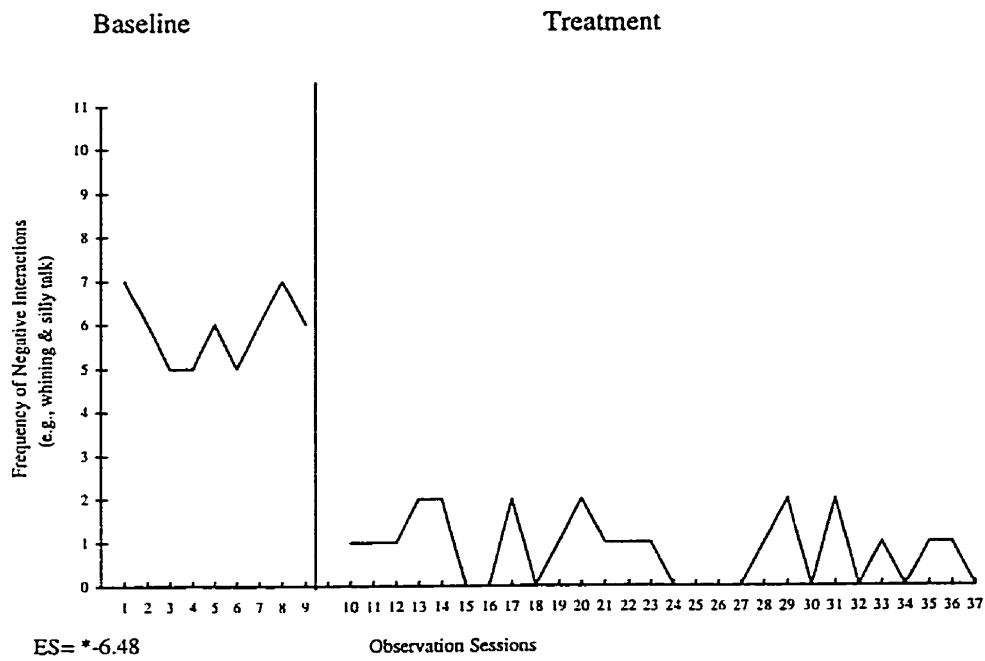


Figure 1. Mother's observations of Child 1's negative interactions

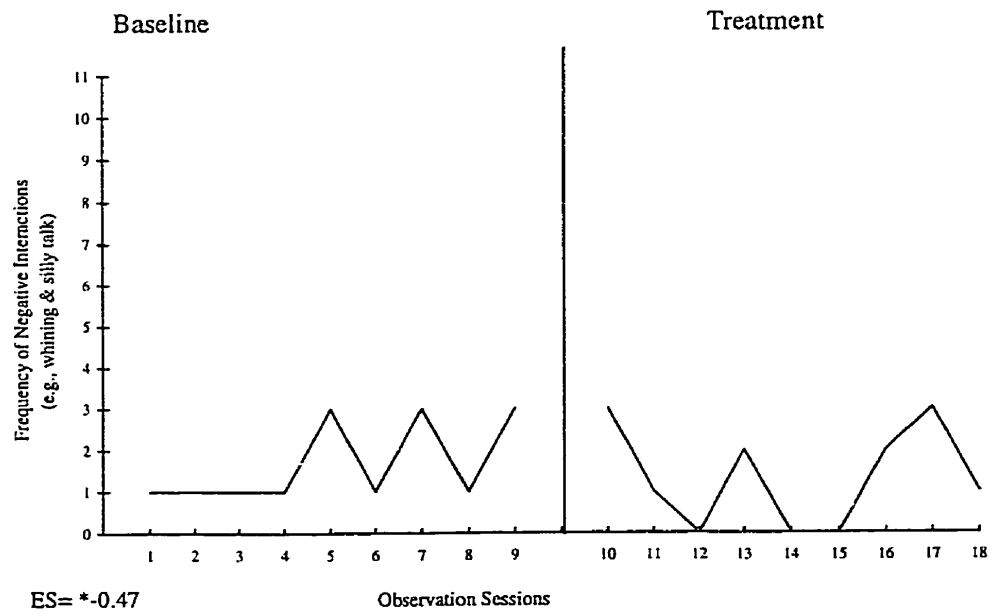


Figure 2. Teacher observation of Child 1's negative interactions

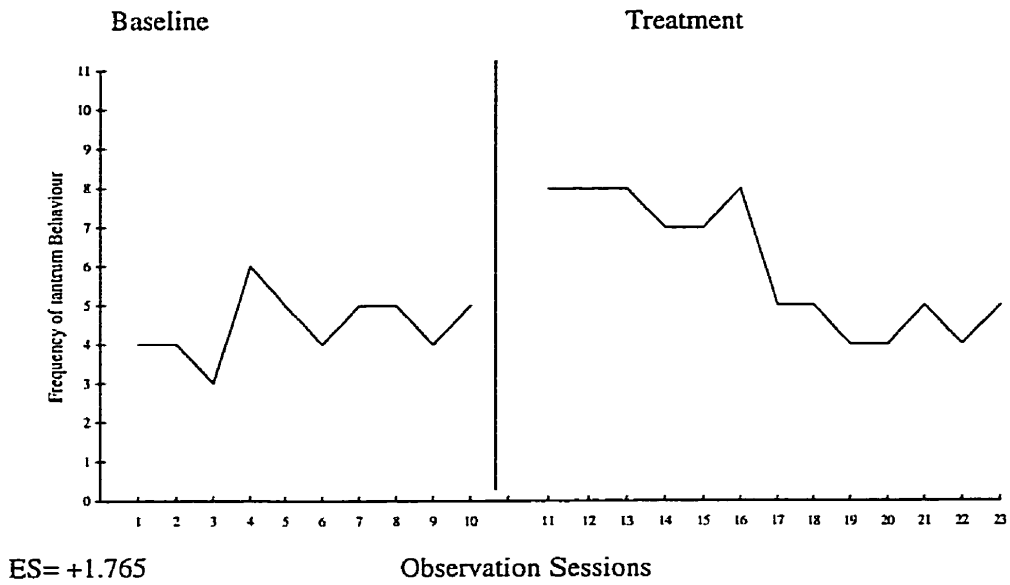


Figure 3. Mother's observations of Child 2's tantrum behaviour

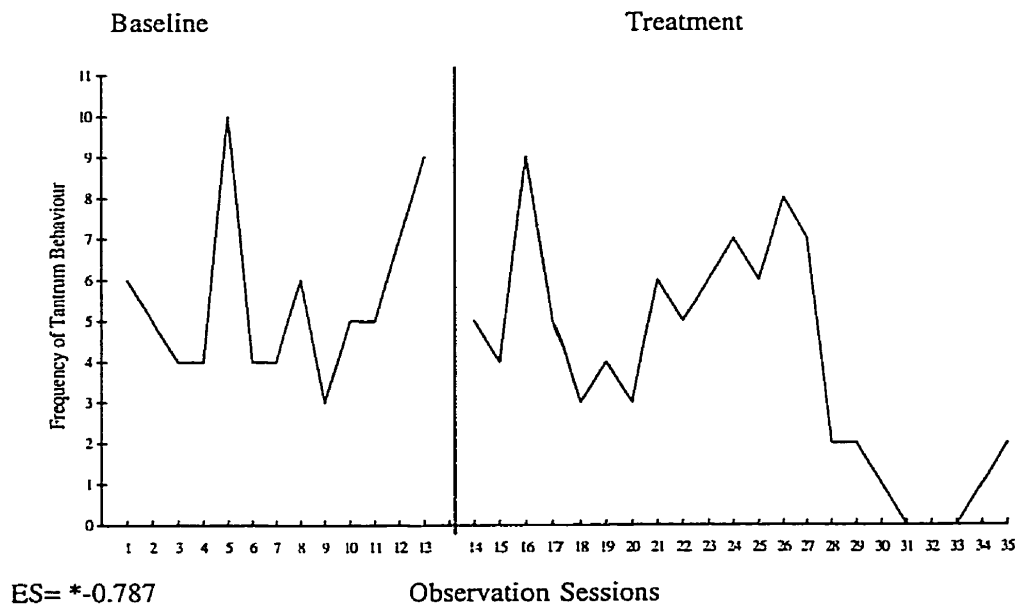


Figure 4. Teacher's observations of Child 2's tantrum behaviour

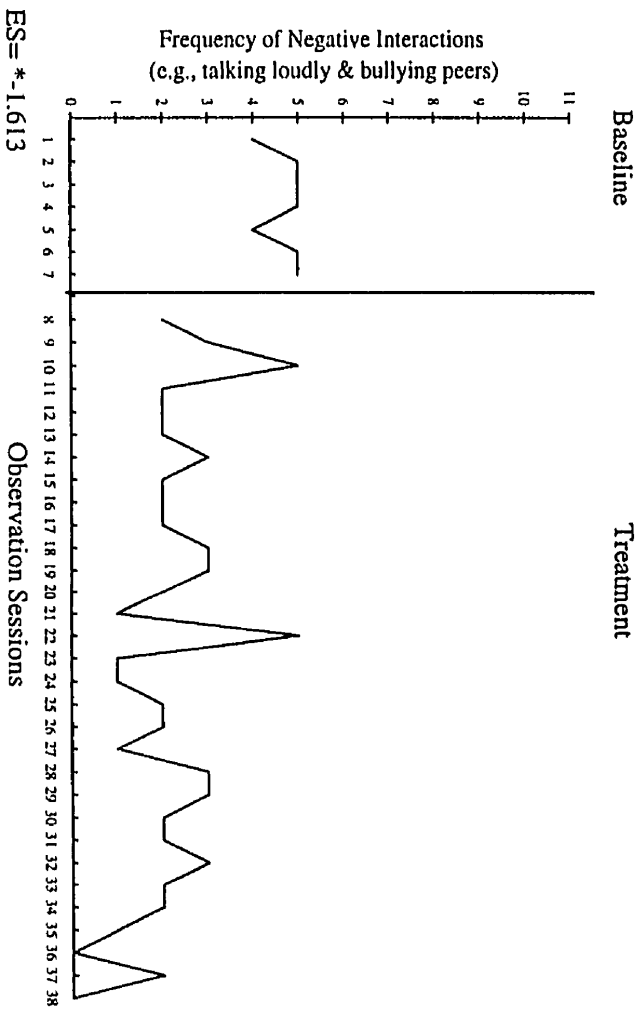


Figure 5. Mother's observations of Child 3's negative interactions

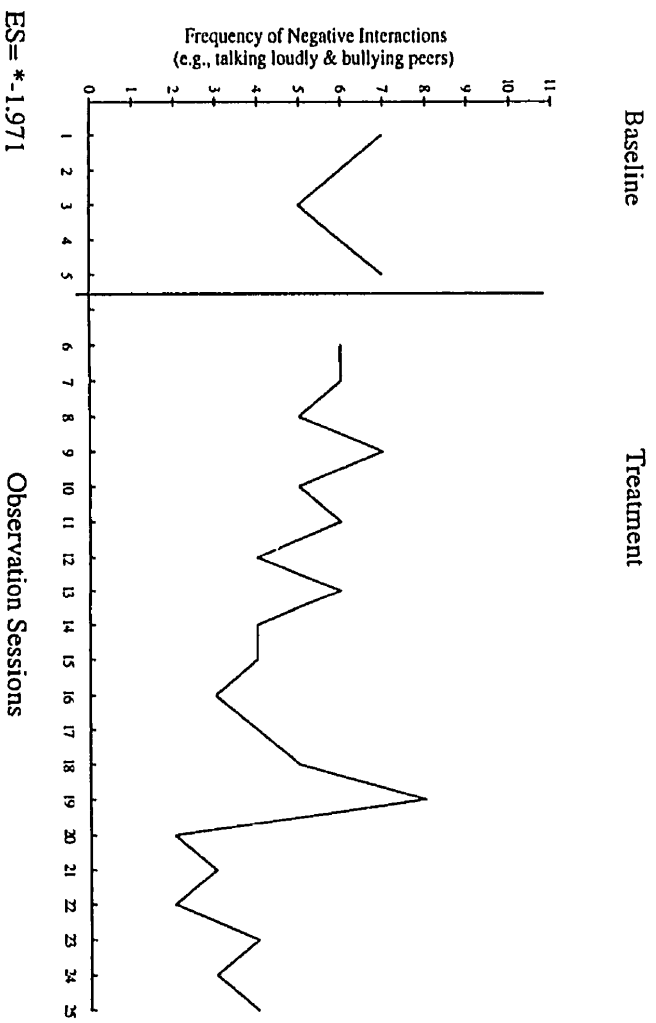


Figure 6. Teacher's observations of Child 3's negative interactions

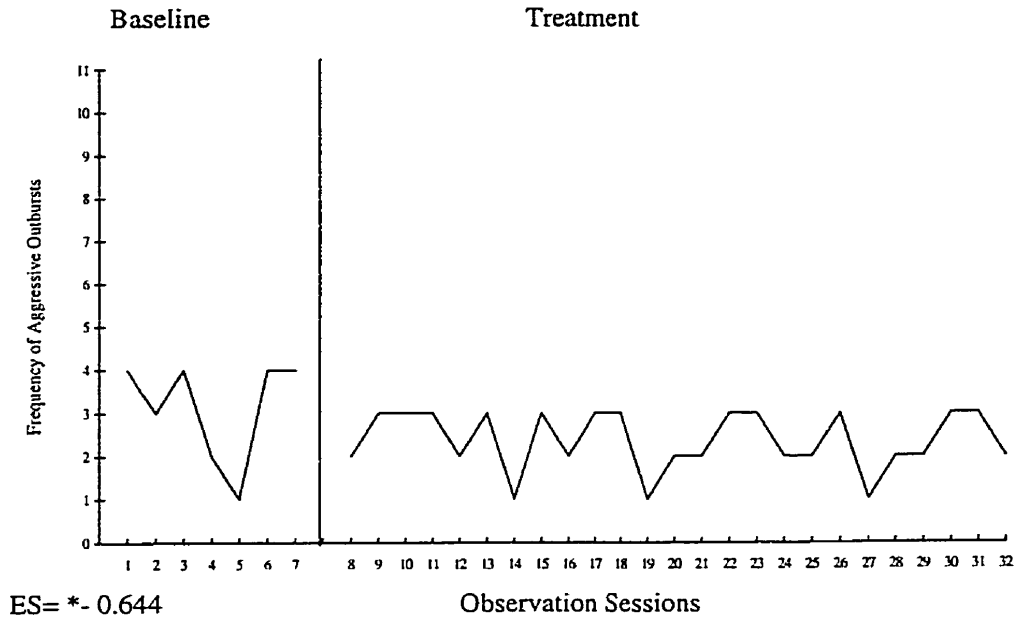


Figure 7. Mother's observations of Child 4's aggressive outbursts

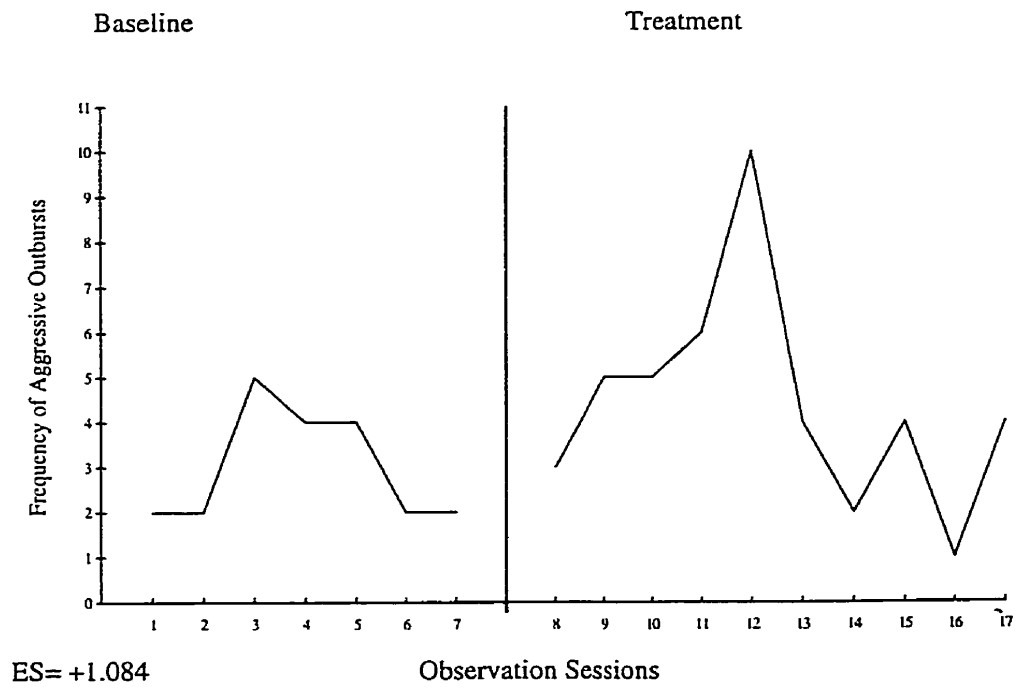


Figure 8. Teacher's observations of Child 4's aggressive outbursts

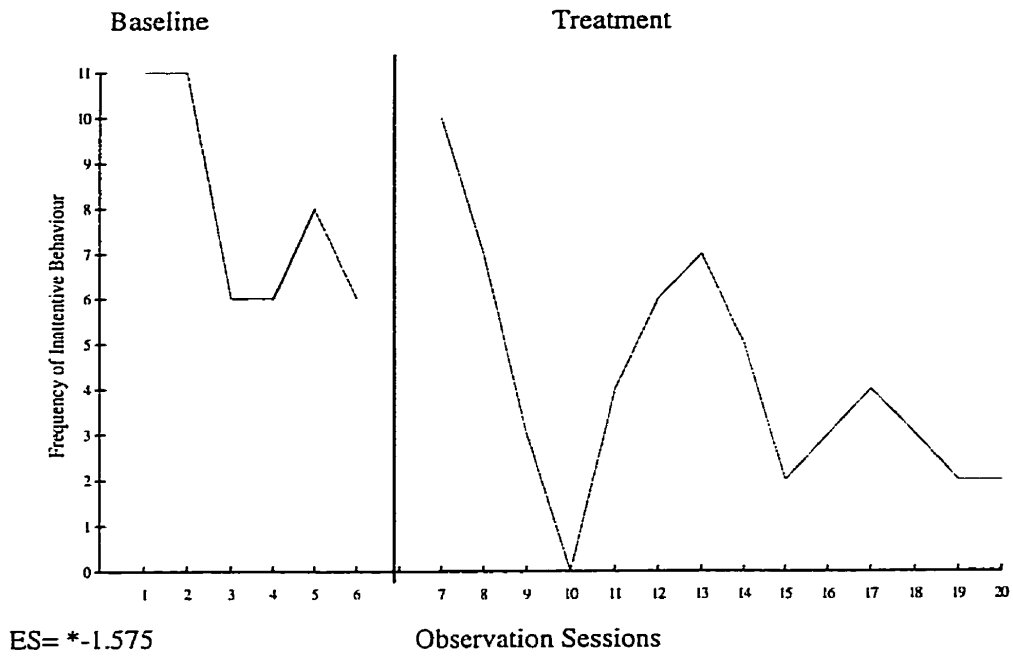


Figure 9. Teacher's observations of Child 5's inattentive behaviour

Hypothesis 2. It was hypothesized that there will be a significant improvement in each participant's child deviance behaviours or interpersonal skills from baseline to treatment.

The data derived from the child-consultant semi-structured play sessions was used to assess for the generalization of treatment effects across a non-treatment setting. The child deviance score and interpersonal skills score for each child were transformed into Z scores. A difference score between the pretest scores and posttest scores was calculated. The resulting scores were compared to the standard normal distribution. Following are the Z scores obtained for each child. Three of the five participants participated in the play sessions:

Child 1's child deviance Z score =.95 and interpersonal skills Z score =.67;

Child 2's child deviance Z score =.59 and interpersonal skills Z score =-.59;

Child 3's child deviance Z score =-.56 and interpersonal skills Z score =.16.

Z scores were not significant at the .05 level, however 2 of the 3 children displayed fewer child deviance behaviours, such as smart talk and noncompliance, from pretest to posttest. Moreover, each child evidenced an improvement in interpersonal skills, such as eye contact and social initiations, from pretest to posttest. Table 1 presents the child deviance scores and interpersonal skills for each child, at pretest and posttest. The overall mean for child deviance and interpersonal skills are provided. A difference score indicating the value of change from pretest to posttest is also given. An asterisk is placed next to the difference scores that are in the expected direction.

Table 1

Scores for Child Deviance and Interpersonal Skills at Pretest and Posttest

	Pretest Mean	Posttest Mean	Difference
Child 1			
Child Deviance	11	0	* 11
Interpersonal Skills	41	28	13
Child 2			
Child Deviance	32	8	* 24
Interpersonal Skills	12	32	*-20
Child 3			
Child Deviance	10	6	* 4
Interpersonal Skills	73	90	* -17
Overall mean			
Child Deviance	17.667	4.667	* 13.0
Interpersonal Skills	42.0	50.0	* -8.0

Note: Child 4 was not able to attend the final play session and Child 5 did not participate in the play sessions, as the case was teacher-only consultation.

Hypothesis 3. It was hypothesized that each child would evidence a decrease in internalizing difficulties, a decrease in problem behaviours, or an increase in social skills following the termination of CBC.

In order to test this hypothesis, the reliable change index (RC; Cristensen & Mendoza, 1986) was computed for each participant on each of the following variables; (a) social skills (measured by the Social Skills subscale on the SSRS); (b) problem behaviour (measured by the Problem Behavior subscale on the SSRS); and internalizing behaviours (measured by the Internalizing subscales) on the CBCL and TRF.

The reliable change index (RC) was calculated in order to determine whether the magnitude of change for a given participant was statistically and clinically reliable (Jacobson & Truax, 1991). Clinically significant change, using the RC index is defined in terms of the client's functioning after treatment and in terms of how much change has occurred (Jacobson & Truax, 1991). The reliable change index was used because it provided a clear criterion for evaluating improvement. The participant's pretest score was subtracted from his/her posttest score and divided by the standard error of difference between the two observation scores. This formula is written as:

$$RC = \frac{X_{\text{posttest}} - X_{\text{pretest}}}{S_{\text{diff}}} \quad (3)$$

where

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

The standard error of measurement (S_E) was computed using the standard deviation and the reliability of the measure. This formula is expressed as:

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

where

s_1 = the standard deviation across pretest scores and r = the reliability of the measure

A RC is considered to be statistically significant ($p < .05$) when the value obtained is ≥ 1.96 (Jacobson et al., 1984). Hence, a RC equal to or greater than this cut off value was used to ascertain that a reliable degree of change occurred as a result of the intervention.

Table 2 depicts the mean scores and standard deviations of the pretest and posttest scores on the Social Skills, Problem Behavior, and Internalizing Behavior subscales. These descriptive statistics were used in calculating the RC for each child. RC scores are reported in Table 3.

Table 2

Pretest and Posttest Scores and Descriptive Statistics for the *Social Skills, Problem Behavior, and Internalizing Behavior Subscales* for each Participant

	Child 1 Parent	Child 1 Teacher	Child 2 Parent	Child 2 Teacher	Child 3 Parent	Child 3 Teacher	Child 5 Teacher	Mean	SD
Social Skills									
Pretest	87	**79	**64	**56	120	**76	**79	80.143	20.41
Posttest	**69	87	---	95	92	97	91	88.5	10.15
Problem Behaviors									
Pretest	112	**122	**137	**128	97	*133	113	120.29	13.95
Posttest	**133	110	---	**120	89	110	115	112.833	14.47
Internalizing Behavior									
Pretest	*64	**76	**49	**66	34	**65	**66	60.0	13.94
Posttest	**74	56	---	*64	34	46	56	55.0	13.9

NOTE : For Child 1, Pretest questionnaires were completed by the mother, and posttest questionnaires were completed by the stepmother. Posttest data was unavailable for Child four at time of analyses.

* = Borderline Range; ** = Clinical Range/Significant, ---Not applicable or not available

Table 3

Reliable Change Index Obtained from Pretest and Posttest Assessment of Social Skills, Problem Behavior, and Internalizing Behaviour for each Participant

	Social Skills		Problem Behaviors		Internalizing Behavior	
	Parent	Teacher	Parent	Teacher	Parent	Teacher
Child 1	-2.354	0.974	1.673	1.414	2.132	*-4.714
Child 2	---	* 4.747	---	-0.943	---	-0.471
Child 3	-3.661	* 2.556	-0.638	* -2.711	0	* -4.478
Child 5	---	1.461	---	0.236	---	*-2.357

* = Statistically reliable degree of change in expected direction Social Skill Subscale (Parent Form) $r = .87$; Social Skills Subscale (Teacher Form) $r = .85$; Problem Behaviour Subscale (Parent Form) $r = .65$; Problem Behaviour Subscale (Teacher Form) $r = .84$; Internalizing behaviour Subscale (Parent Form) $r = .89$; Internalizing Behaviour Subscale (Teacher Form) $r = .91$; SSRS, $SD = 15$; CBCL & TRF, $SD = 10$

--- = Not applicable or not available

Hypothesis 4. It was hypothesized that treatment gains documented in the home and in the classroom will be positively associated with parent and teacher ratings of goal attainment.

Parents and teachers were asked to document the frequency of the target behaviour in their respective environments during baseline and treatment. Similarly, once a week, parents and teachers were asked to evaluate the progress and effectiveness of the treatment plan using goal attainment scaling. It was expected that there would be a significant positive correlation between the changes in target behaviour, as measured using the effect size measure, and the final GAS attainment score. Pearson product moment correlations were calculated using the effect size measures obtained for each child across home and school and the final GAS rating obtained by the parent and teacher at the termination of treatment. As predicted, a positive relationship was found between the effect sizes obtained from the parent data and the final parent GAS rating ($r = .816$, $p > .05$). A positive relationship was found between effect sizes from the teacher data and the final teacher GAS rating was found ($r = .337$, $p > .05$). Although the correlations between effect sizes and the GAS ratings for parents and teachers were in the expected direction, the correlations were not significant. Due to the small sample size, these data are viewed as preliminary indicators of the positive relationship between effect size and the final goal attainment score. The GAS data is presented graphically for each child. There is a separate graph depicting the ratings obtained by the child's parent and teacher. The dotted line at zero, on each graph, corresponds to the child's target behaviour during baseline (see Appendix D for GAS sheets with anchor points).

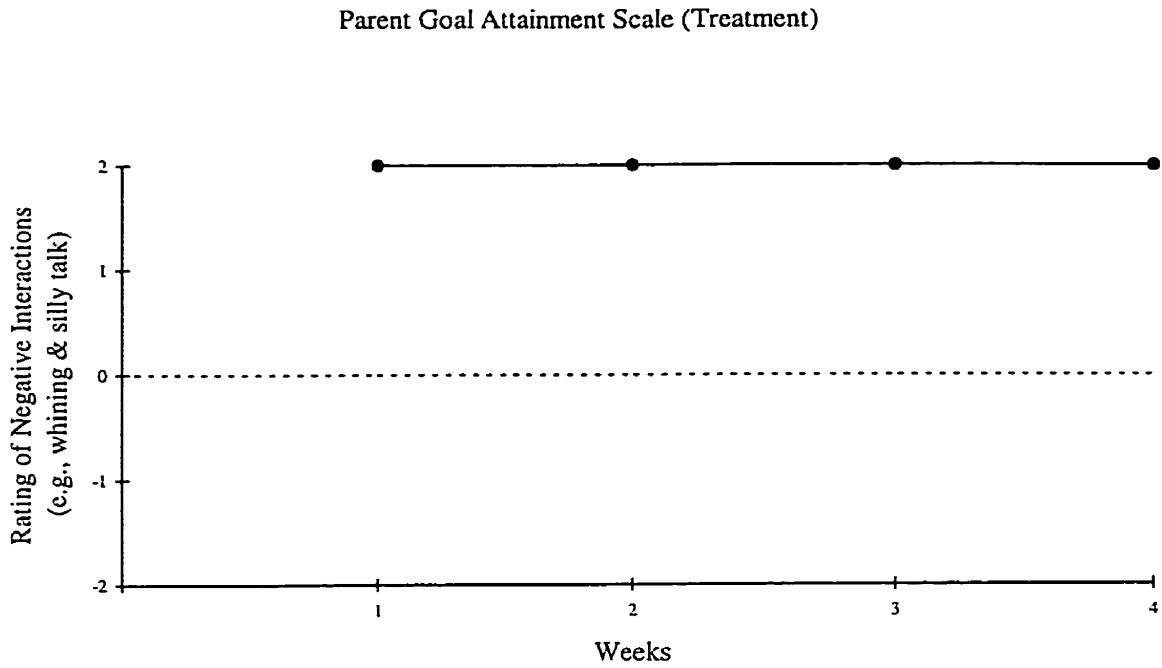


Figure 10. Parent GAS rating for Child 1

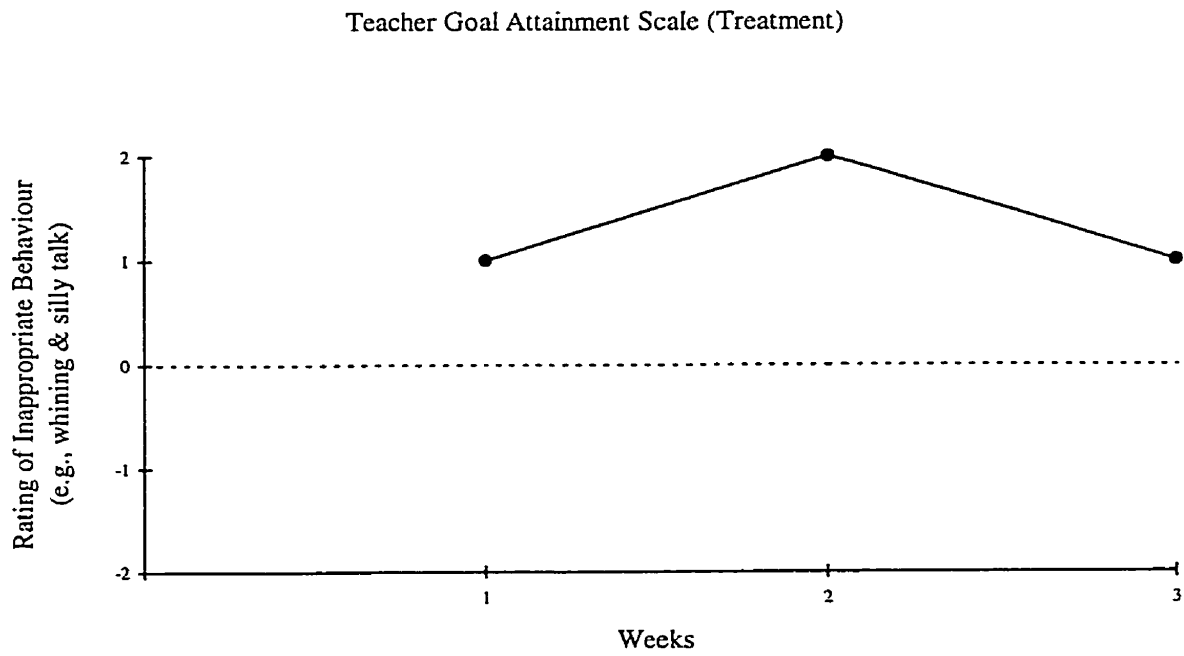


Figure 11. Teacher GAS rating for Child

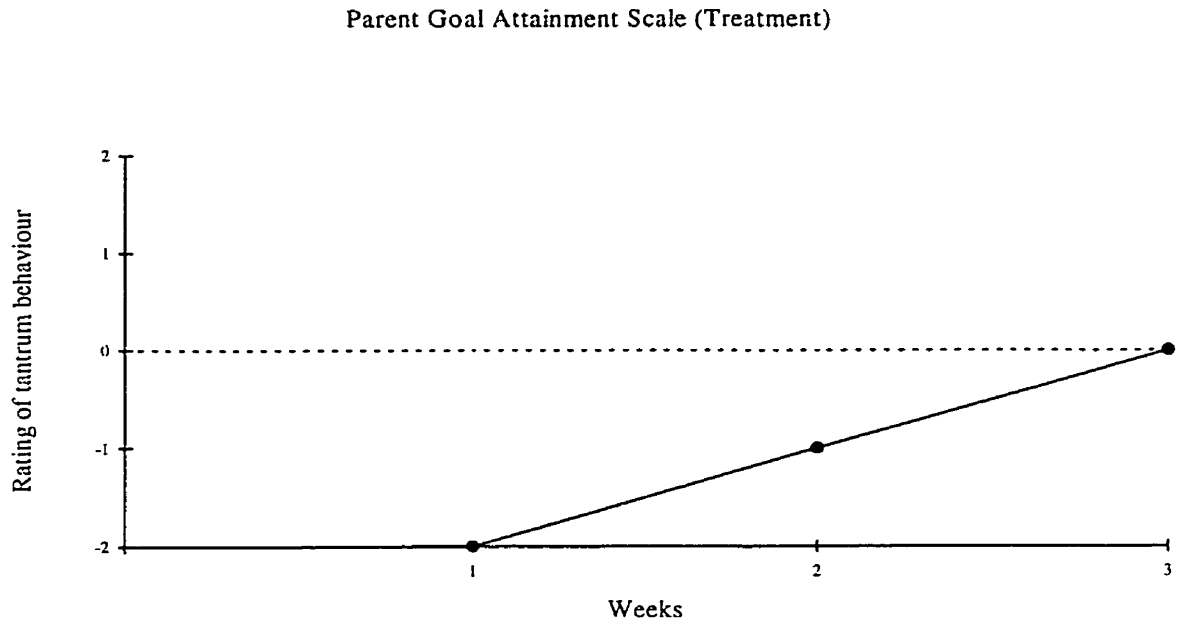


Figure 12. Parent GAS rating for Child 2

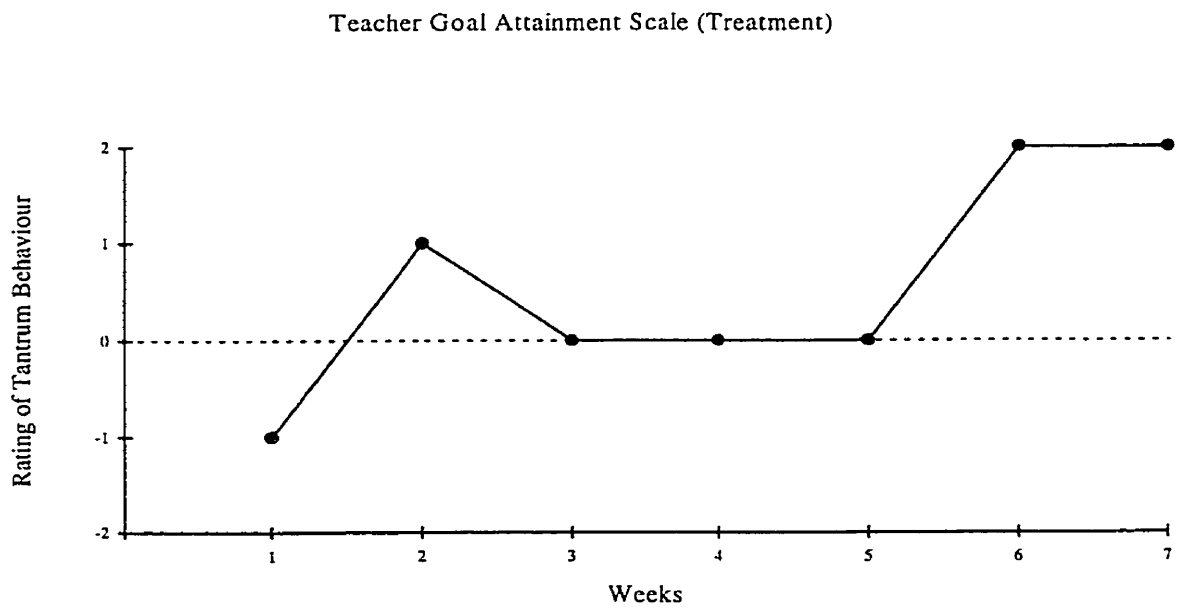


Figure 13. Teacher GAS rating for Child 2

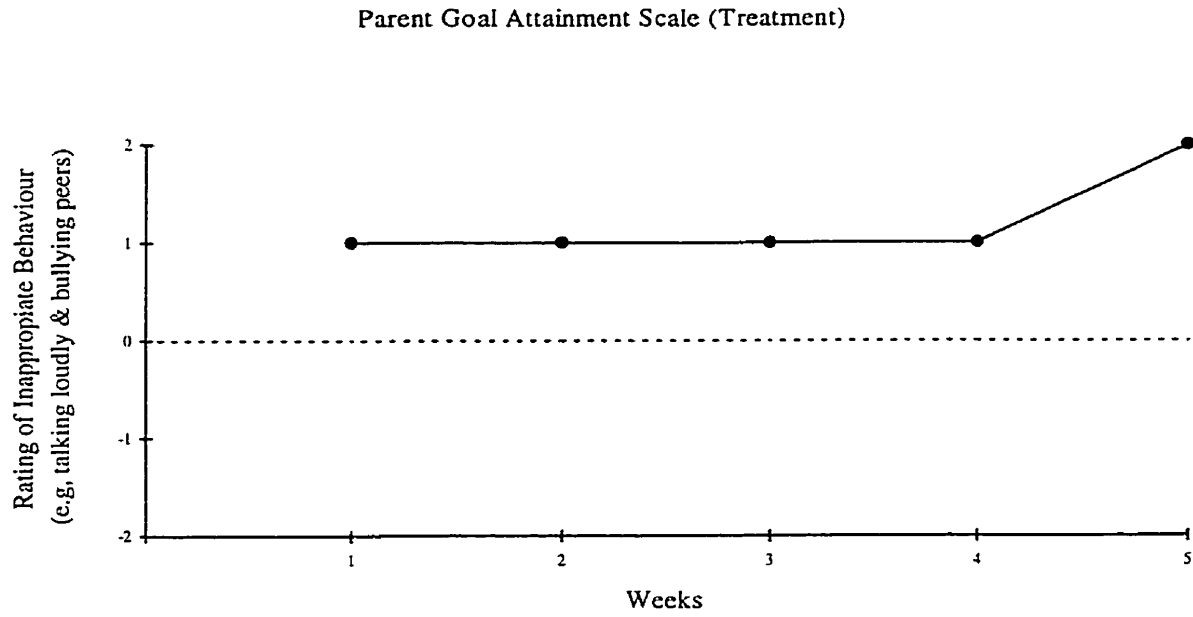


Figure 14. Parent GAS rating for Child 3

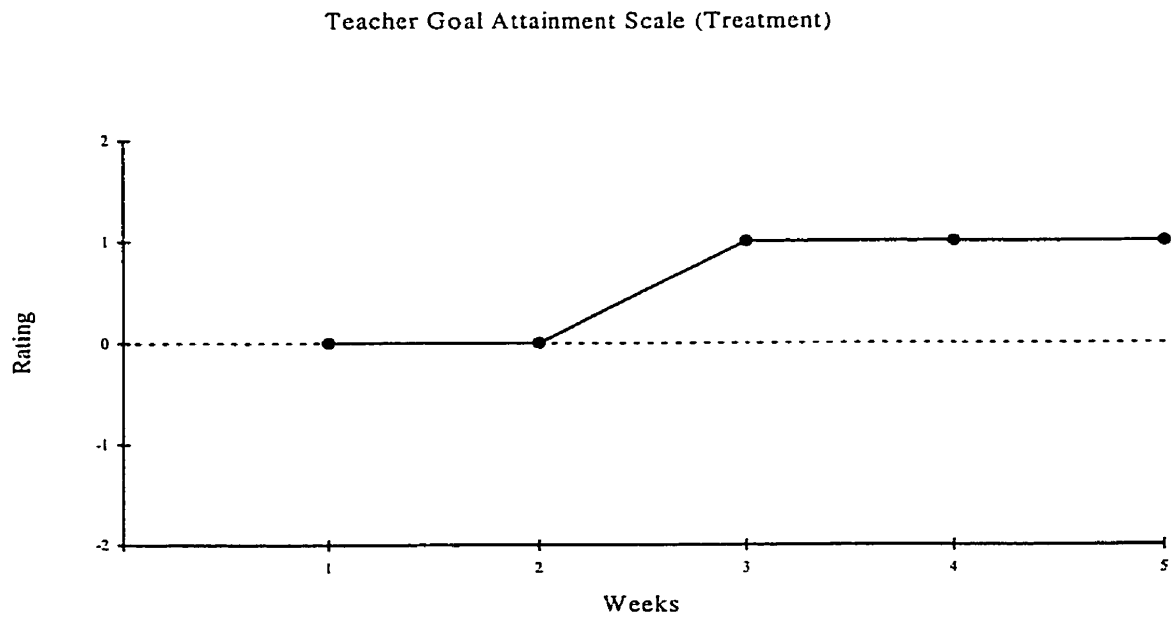


Figure 15. Teacher GAS rating for Child 3

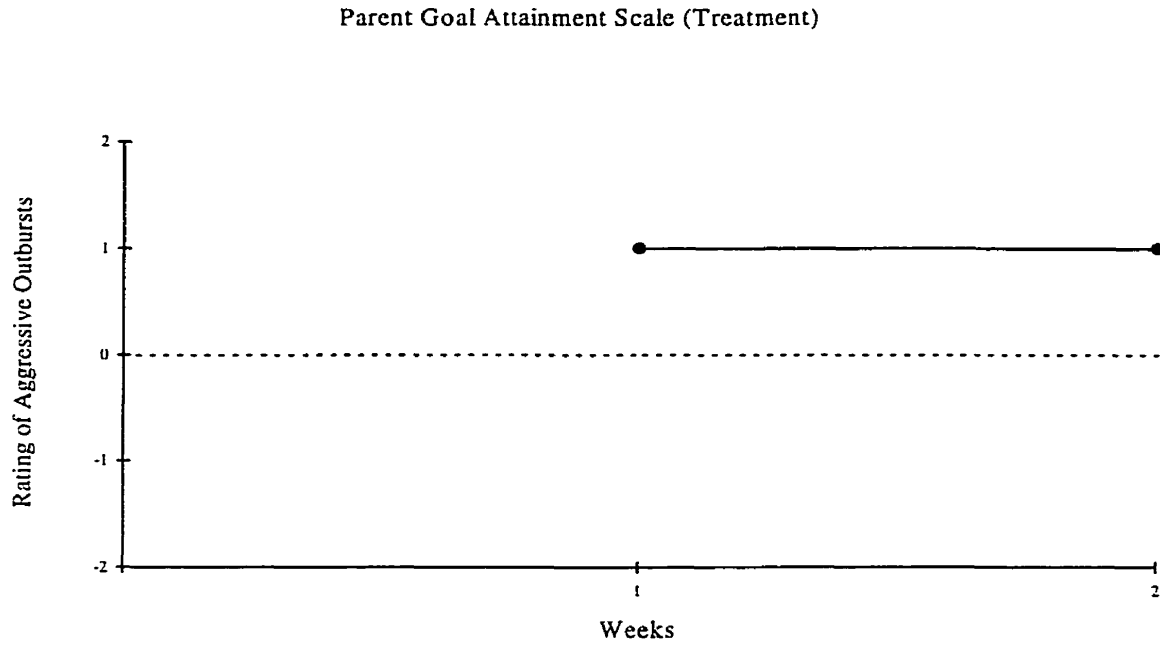


Figure 16. Parent GAS rating for Child 4

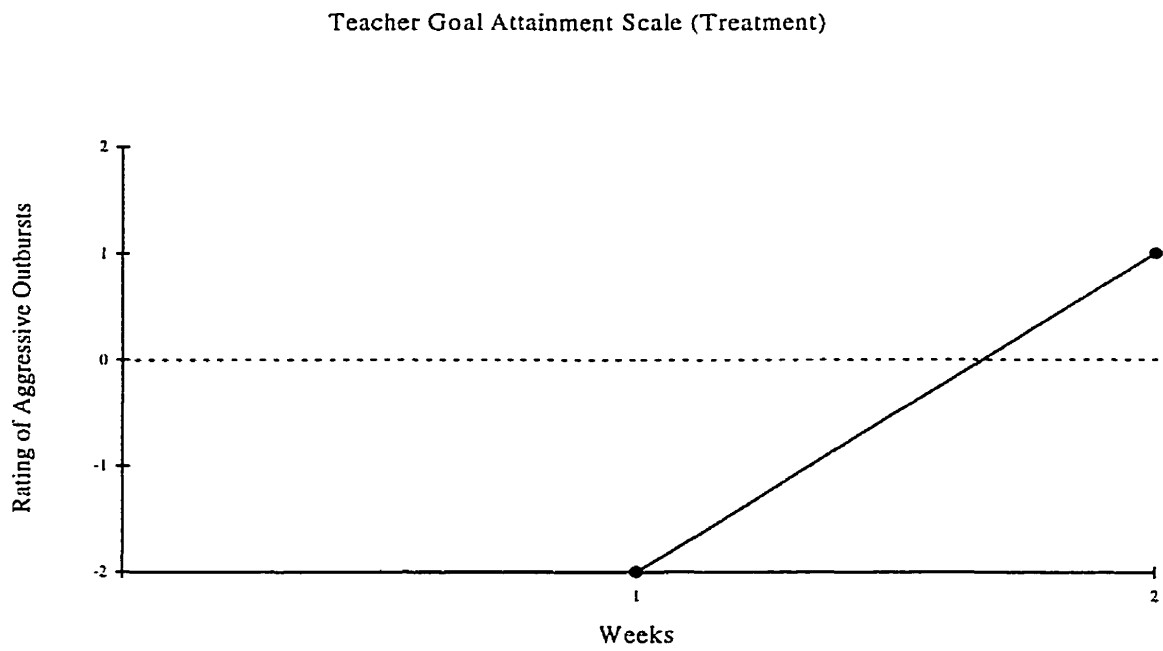


Figure 17. Teacher GAS rating for Child 4

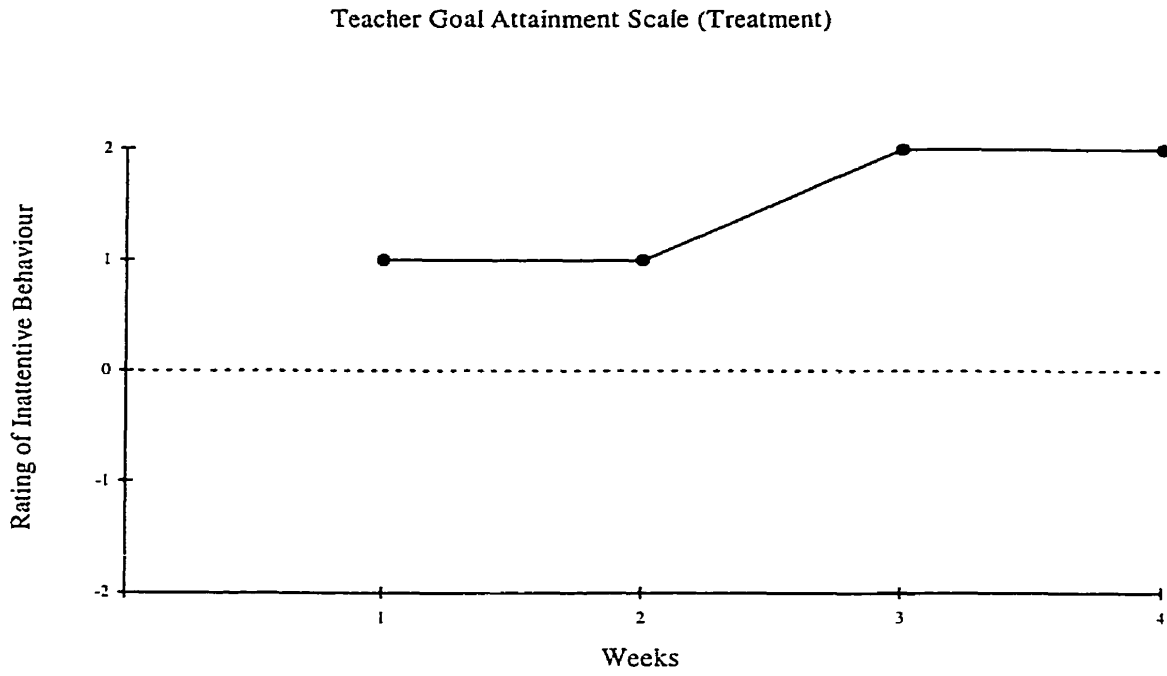


Figure 18. Teacher GAS rating for Child 5

Chapter 5

Discussion

The primary purpose of this study was to investigate the effectiveness of conjoint behavioural consultation with children who are socially withdrawn. Four findings were obtained: (a) each child obtained improvements in target behaviour from baseline to treatment at home or at school; (b) preliminary evidence was obtained indicating that treatment gains, as a result of conjoint behavioural consultation, generalize to non treatment settings; (c) each child evidenced statistically significant improvements in social skills, problem behaviour, or internalizing difficulties from pretest to posttest; and (d) preliminary evidence of the positive relationship between effect size and the final goal attainment score was obtained. In the following section, each finding is discussed in light of the relevant literature, and individual cases are discussed where applicable. Next, the implications of the present study are presented. Finally, limitations and directions for future research are proposed.

Changes in target behaviours

Each child evidenced improvement in target behaviour from baseline to treatment at home or in the classroom. The positive treatment gains obtained in the present study corroborate the findings of other researchers who have documented the efficacy of conjoint behavioural consultation in the remediation of children's academic and behaviour problems (Galloway & Sheridan, 1994; Sheridan & Colton, 1994; Sheridan & Kratochwill, & Elliott 1990; Sladeczek, 1996). More specifically, the finding that conjoint behavioural consultation is an effective model for improving the target behaviour

of children who are socially withdrawn is consistent with the finding obtained by Sheridan, Kratochwill, and Elliott (1990), who found that the social initiations of four children who were socially withdrawn had increased, across home and school, as a result of behavioural consultation.

Child 1 evidenced a reduction of inappropriate behaviour at home, however, this finding must be interpreted with some caution. The mother of Child 1 collected the baseline data, before the child moved residences to live with his father and stepmother. It was the child's stepmother who implemented the treatment plan, and collected the treatment data. The father of Child 1 and the aunt of Child 1 both reported that J. evidenced fewer behaviour problems when living in the father's home. They explained that the change in behaviour from the mother's home to the father's home may be attributed to rules and structure that the father and stepmother had in place, and which the mother did not. However, the effectiveness of treatment should not be overlooked, nor minimized. The stepmother and father both attributed the reduction of inappropriate behaviour, in part, to the treatment plan. The father and stepmother of Child 1 reported that the treatment program guided their interactions with J. and that the program encouraged them to be more consistent in providing praise and reinforcement than prior to treatment. Improvement was also evidenced at home.

Positive treatment gains were documented for Child 1 in the classroom. J's teacher reported, during the treatment evaluation interview, that J. was exhibiting more socially appropriate behaviour in the classroom, which she attributed to the treatment program. She explained that J. was whining less, engaging in appropriate conversations, and interacting socially with other children in the class. Moreover, she added that J. had made

a friend in the class, and had initiated appropriate play with this child on numerous occasions.

Child 2 evidenced an increase in tantrum behaviour from baseline to treatment at home. Before the onset of treatment, it was discussed during the problem analysis interview that the frequency of Child 2's tantrum behaviour may increase before starting to decrease (Webster-Stratton, 1993). A. was a child who resisted change in structure and routine, and hence it was anticipated that A. may initially react negatively to the new strategies delineated in the treatment plan. Child 2 did evidence an increase in the frequency of tantrum behaviour during the first week of treatment, before his tantrums returned to the number at baseline (6-7 tantrums a day) in the second week of treatment. However, due to life-stressors, Child 2's mother only implemented two weeks of a seven week treatment plan. Hence, it is hypothesized that treatment gains would have emerged with a longer time period for treatment implementation.

Child 2 evidenced a decrease in tantrum behaviour at school. As anticipated, A.'s tantrum behaviour increased during the first week of treatment, before returning to the number at baseline (4-5 tantrums a day). Stable treatment gains (1-2 incidences a day) were achieved after five weeks of the teacher following the treatment plan. A.'s teacher reported during the treatment evaluation interview that A. had improved in the classroom. She explained that he was following the structure in the classroom, complying to her requests, and interacting more frequently with the other children. She attributed the improvements to the treatment program. It was discussed during the TEI that it was unfortunate that A.'s mother was unable to carry through with the treatment program at

home, because A.'s teacher believed consistent treatment gains would have emerged at home as result of the treatment program.

Consistent treatment gains were documented at home and at school for Child 3. The treatment program was carried out by both the mother and teacher and improvements were documented in both environments. T.'s mother reported that T. was playing appropriately with the other children in the community on a regular basis and was applying newly acquired social skills, such as initiating conversation, and joining in play activities. Moreover, she reported that he was talking in a normal tone of voice and following the rules in the home. Child 3's mother attributed the improvement in social skills and behaviour to the treatment program.

T.'s teacher reported similar improvements. She explained that T. had made friends with two children in the classroom and was initiating and maintaining interactions with these children on a daily basis. She added that he was reprimanding his peers less, and rarely bullying the other children. She also credited the improvements to the treatment program.

Child 4 evidenced a decrease in the frequency of aggressive outbursts at home. This was a surprising positive outcome, as treatment duration was of two weeks duration. Treatment implementation occurred for two weeks only, because the 1996-1997 school year had come to an end, and both parents and teachers were unavailable during the summer months. Consultation services may resume at the onset of the 1997-1998 school year based on a request made by T.D.'s parents or teacher. Nevertheless, T.D.'s mother reported that he was much calmer during the two weeks of treatment and that his screaming, crying, and aggressive behaviour (i.e., throwing objects and hitting) had

decreased to approximately two to three times a day, from four to five times a day during baseline. She attributed the improvements to the treatment program.

Similar to the situation described for Child 2 at home, Child 4 evidenced an increase in aggressive behaviour in the classroom from baseline to treatment. The increase in aggression may be attributed to the limited duration of treatment (Webster-Stratton, 1993). The increase in tantrum behaviour for Child 2 and the increase in aggressive behaviour for Child 4, both after only a two week treatment program, highlight the importance of treatment duration in achieving positive behaviour outcomes. In both cases, it is hypothesized that treatment gains would have emerged with a longer time period for treatment implementation.

Child 5 evidenced a decrease in inattentive behaviour in the classroom from baseline to treatment. N.'s teacher reported during the treatment evaluation interview that N. evidenced consistent treatment gains throughout the four weeks of treatment. She explained that N. was complying to her requests more regularly, and was more attentive to lessons. She added that the other children in the classroom has begun to include N. in their play activities. She credited the improvements to the treatment program. Hence, the improvement in each child's target behaviour from baseline to treatment provides further evidence for the efficacy of using conjoint behavioural consultation with children who are socially withdrawn (Sheridan, Kratochwill, & Elliott, 1990; Sladeczek, Kratochwill, & Elliott, 1996).

Generalization of treatment effects

Participants evidenced fewer child deviance behaviours and more interpersonal skills from pretest to posttest, however results did not reach significance. The

improvement in behaviour across the play sessions provides preliminary evidence that treatment gains, as a result of conjoint behavioural consultation, generalize to non-treatment settings. The above finding is consistent with the finding of Sheridan, Kratochwill, and Elliott (1990) who documented the effectiveness of CBC as a framework by which the generalization of treatment effects can be systematically programmed by the consultant. In addition, the present finding is the first to address the generalization of treatment effects in a setting apart from the home or classroom.

Each child who participated in the play sessions evidenced fewer child deviance behaviour, such as noncompliance, smart talk, and destructive behaviour from pretest to posttest. Similarly, two of the three children displayed more appropriate interpersonal behaviours, such as eye contact, verbal initiations, verbal responses, and compliance, from pretest to posttest. The exception, Child 1, evidenced fewer interpersonal skills at posttest. The decrease in Child 1's interpersonal skills was mainly a result of a decreased number of verbal initiations at posttest (8 verbal initiations), as compared with pretest (16 verbal initiations). It is hypothesized that the decrease in verbal initiations is due to bilingual issues in the home. J. was living with his mother in an English speaking home during pretest, while at the time of posttest, J. was living with his father and stepmother in a French speaking home. J. was not proficient in French at the time of posttest, yet he chose to speak French to the consultant. Consequently, J. communicated in gestures, when he was unfamiliar with the words in French.

Overall, preliminary findings suggest that treatment gains, obtained through conjoint behavioural consultation, generalize to non-treatment settings, however more research assessing treatment generalization is needed. Treatment generalization is an

essential component of treatment effectiveness that should not be treated as a passive phenomenon (Stokes & Baer, 1977). Rather, it is suggested that treatment generalization be considered an operant response that can be evaluated within the conjoint behavioural consultation framework. During baseline and treatment implementation, direct observations of the child's target behaviour in a community-based setting can be obtained by a neutral observer. The successive observations obtained from the baseline and treatment data would enable the calculation of effect sizes measuring treatment generalization. It is recommended that this be done in future investigations.

Social skills, problem behaviours, and internalizing difficulties

Each child evidenced statistically significant improvements, at home or at school, in social skills, problem behaviour, or internalizing difficulties from pretest to posttest. This finding is consistent with the findings of Sheridan, Kratochwill, and Elliott (1990) in their study comparing conjoint and traditional behavioural consultation for four children who evidenced social withdrawal. Sheridan et al. obtained significant improvements in both parents and teacher ratings of social withdrawal and internalizing behavior on the SSRS, CBCL, and TRF from pretest to posttest. In contrast, Sladeczek, Kratochwill, and Elliott (1996), in their study investigating the efficacy of conjoint behavioural consultation with preschool children experiencing social withdrawal or conduct problems, found no significant differences in social skills or problem behaviours on the SSRS between experimental and control group conditions, however gains were in the expected direction.

Child 1 did not obtain statistically reliable treatment gains in social skills, problem behaviours, or internalizing difficulties at home. However, this must be interpreted with caution. Separate informants completed the pretest and posttest questionnaires (i.e., J.'s

mother completed the pretest measures; J's stepmother completed posttest measures). Nevertheless, interesting qualitative comparisons can be made.

Pretest results for Child 1 indicated that J. was perceived by his mother as exhibiting average social skills and average problem behaviours in comparison to his same age peers. In contrast, J.'s teacher, at pretest, reported that J. had fewer social skills, and more problem behaviours and internalizing behaviour problems than the average child his age. Perhaps, an explanation for the deterioration in J.'s scores from pretest to posttest could be that J's mother and stepmother might have used different criteria to evaluate J.'s problem behaviours and social skills, or embraced different values of what constituted appropriate or inappropriate behaviour. An alternative explanation could be that J.'s stepmother was more aware of his difficulties and weaknesses, than was his mother. More reliable and valid comparisons can be made using J.'s teacher's pretest and posttest scores. J.'s teacher perceived Child 1 as having more social skills from pretest to posttest and fewer problem behaviour from pretest to posttest. Moreover, she reported statistically reliable improvements in J.'s internalizing problems from pretest to posttest. The consistent improvements across the behaviour domains identified by J.'s teacher provides support for the hypothesis that J. improved across behaviour domains from pretest to posttest.

Child 2 evidenced improvements in problem behaviours and internalizing behaviour problems from pretest to posttest. Moreover, he experienced a statistically reliable degree of improvement in social skills. Similarly, Child 3 experienced positive treatment gains. However, according to the mother, Child 3 did not obtain statistically reliable treatment gains. In fact, she reported that T. had fewer social skills at posttest than at pretest. When

the consultant queried T.'s mother as to why fewer social skills were reported, she answered that the consultation process had helped her become more aware of her child's problems initiating and maintaining appropriate social interactions. She explained that she had never recognized that her son was different from typical children his age until she systematically began observing his social interactions. Hence, perhaps, the pretest social skills score was an overestimate of his potential. T.'s teacher, in contrast, reported statistically reliable improvements in T.'s social skills, problem behaviours, and internalizing behaviour problems from pretest to posttest.

According to N.'s teacher as informant, Child 5 evidenced a statistically reliable degree of improvement in internalizing problem behaviour from pretest to posttest. He also displayed more social skills at the time of posttest. Overall, each child evidenced statistically significant improvements in social skills, problem behaviour, or internalizing difficulties from pretest to posttest, providing further evidence for the efficacy of conjoint behavioural consultation with children who are socially withdrawn, and supporting the findings of Sheridan, Kratochwill, and Elliott (1990).

The association of treatment gains with parent and teacher ratings of goal attainment

Parent and teacher ratings of the progress and effectiveness of the treatment plan using GAS appears to coincide with positive changes in the frequency of target behaviour. This finding was consistent with Sladeczek, Kratochwill and Elliott (1996) who found a positive relationship between independent observers ratings of children's positive social engagement and parent and teacher ratings of goal attainment. Moreover, the positive relationship between effect sizes and goal attainment scores provides further evidence of the concurrent validity of the measure (Elliott, Sladeczek, & Kratochwill,

1995; Smith & Cardillo, 1994), and supports the finding that GAS is an effective and accurate estimate of treatment effectiveness (Kiresuk, Smith, & Cardillo, 1994). In fact, Smith and Cardillo (1994) found that GAS scores were significantly related to a majority of outcome measures used in studies pertaining to the criterion-related validity of GAS. Hence, GAS is a cost and time effective procedure that is conceptually well suited for use in behavioural consultation (Elliott, Sladeczek, & Kratochwill, 1995). Moreover, consistent with Kiresuk, Smith, and Cardillo (1994), GAS was found to be a useful measure for monitoring treatment progress and for evaluating treatment outcome.

Implications

The present study contributes to the existing conjoint behavioural consultation literature in several ways. First, the present study provides evidence for the efficacy of using CBC with children evidencing social withdrawal. Few researchers have examined the efficacy the CBC with children who are socially withdrawn (Elliott & Busse, 1993). The present study suggests, consistent with Sheridan, Kratochwill, and Bergan (1993) and Sladeczek, Kratochwill, & Elliott (1996), that conjoint behavioural consultation is an effective and systematic model for delivering intervention services to children who are withdrawn from their peers, a population presently under serviced (Dworet & Rathgeber, 1990, 1996; Rubin & Mills, 1991) and at risk for later internalizing problems, such as depression and loneliness (Rubin & Mills). Hence, CBC is recommended for the treatment of children who are socially withdrawn, as it provides the framework by which a large number of children can be targeted and helped at any one time (Erchul & Chewing, 1990; Gutkin & Conoley, 1990; Martens, Erchul, & Witt, 1992). Moreover, it encourages home and school collaboration, an integral ingredient for student achievement

(Epstein, 1984, 1985; Fine & Carlson, 1992; Henderson, 1987; Kroth, 1989), and a tool for enhancing the generalization of treatment effects across settings (Sheridan, Kratochwill, & Elliott, 1990).

Second, the study provides support for the efficacy of CBC as a framework by which treatment gains may be systematically programmed by the consultant.

One of the most important goals of intervention is to achieve generalization of treatment effects across settings (Cooper, Heron, & Heward, 1987). In the past, however researchers seldom considered programming for such effects, and to date there exists very little research examining the generalization of treatment effects across settings (Sheridan et al, 1990). Further research in this area is necessary.

Third, the present study demonstrates the efficacy of the four component treatment package (i.e., skill selection, goal attainment, peer activity, and positive reinforcement) in treating children who are socially withdrawn. Traditionally, treatment approaches relied on the problem-solving skills of the consultant and consultee (Kratochwill, Sladeczek, & Plunge, 1995).

Limitations and Directions for Future Research

A limitation of the present study is that generalization gains were assessed using one pretest and one posttest measure of child deviance and interpersonal skills, rather than successive observations. Future research may investigate treatment generalization using repeated observations during a baseline and treatment period. As indicated in previous discussion, observations of the target behaviour may be made in a community setting, by neutral observers, thus facilitating comparisons of treatment gains across settings. A second limitation of the present study is that consultation services, in two

cases, began towards the end of the school year. Consequently, treatment duration was short. Future research may require a minimum of four weeks of treatment.

In conclusion, *conjoint behavioural consultation* was found to be an effective tool for bringing about meaningful change in the lives of children evidencing social withdrawal. It is a process which addresses the importance of working closely with the adults that control the children's environments: the parents and teachers. Indeed, the more parents and teachers work cooperatively, the greater the chances for helping children achieve behaviour change across settings (Sheridan, Kratochwill, & Elliott, 1992). Hence, *conjoint behavioural consultation* is a treatment of choice: an indirect form of service delivery that is both cost and time efficient.

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Appendix A

To Obtain The Social Skills Rating System

(Parent and Teacher Forms)

The Social Skills Rating System-Parent and Teacher Forms:

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

Or write:

American Guidance Service, Inc.

Publishers' Buiding

Circle Pines, MN

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Appendix B

To Obtain The Child Behavior Checklist-Revised
and The Teacher Report Form-Revised

The Child Behavior Checklist and Teacher Report Form:

Achenbach, T. M., & Edelbrock, L.S. (1991). Manual for the Child Behaviour Checklist/4-18 and 1991 Profile. Burlington, VT: Department of Psychiatry, University of Vermont.

Or write:

Thomas M. Achenbach
Centre for Children, Youth, & Families
University of Vermont
1 South Prospect St.
Burlington, VT, 05401

Appendix C

Overview of Conjoint Behavioural Consultation Manual

**Behavioral Consultation:
Problem Identification Interview (PII)**

Objectives and Definitions

PII Goals:

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

Interview Objectives:

OPENING SALUTATION

PROJECT SUMMARY: Summarize what will be covered during the meeting.

GENERAL STATEMENT: General statement to begin discussion related to referral concerns. Specifically discuss the general results of the screening process.

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

Establish Primary Language of Parent: Ask, "What is the primary language of the home?"

BEHAVIOR SPECIFICATION: Elicit behavioral descriptions of client functioning. Focus on specific behaviors. Provide as many examples of the problem as possible. Prioritize the problems from the most to the least severe (problems across settings should be prioritized).

a. Behavioral description:

What does Jamie do when he's angry?
Tell me what you mean when you say, " he gets upset with himself easily."
Give me some examples of what you mean by, "self-abusive behaviors."

b. Elicit examples:

What are some more examples of Jamie's "self-abusive" behaviors at home/at school?

c. Prioritize behavior:

We've discussed several behaviors, such as head-slapping, kicking objects, ripping up papers, and screaming.
Which of these is most problematic across settings?
Do you both agree?

BEHAVIOR SETTING: A precise description of the settings in which the problem behavior occurs.

a. General setting description:

Where is Jamie usually when he hits himself?
Give me some examples of where Jamie does this at school.
Where does the head-slapping occur at home?

b. Elicit examples:

What are some more examples of where this occurs?

c. Prioritize settings:

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

IDENTIFY ANTECEDENTS: Events which precede the child's behavior. These events can immediately precede the behavior, or they may be removed in time (e.g. events at home in the morning that impact the child's behavior at school, etc.).

Examples: What typically happens at home/at school before Jamie starts to hit himself?

What things do you notice before he starts that might be contributing to its occurrence?

What is a typical morning like before Jamie goes to school?

SEQUENTIAL CONDITIONS ANALYSIS: Situational events or environmental conditions occurring when the behavior occurs. A pattern or trend of antecedent/consequent conditions across a series of occasions (e.g. time of day, day of week).

Examples: What else is typically happening in the classroom/playground/home when Jamie is observed hitting himself?

What patterns do you notice in Jamie's head slapping behavior?

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

IDENTIFY CONSEQUENT CONDITIONS: Events which occur immediately following the behavior. These can be reactions of parents, teachers, or peers, and they can occur immediately following the behavior or at a later point in time (e.g. at home after school).

Examples: What typically happens after Jamie hits himself at home/at school?
What types of things do you notice at home/at school after that might be maintaining its occurrence?

How are school-related problems handled at home?

BEHAVIOR STRENGTH: The level or incidence of the behavior: how often (frequency) or how long (duration) the behavior occurs. The question format will depend on the specific behavior and focus on consultation.

Examples: How often does Jamie hit himself at home/at school?
How long does it last?
On a scale of 0 - 10, how severe is the behavior at home/at school?

GOAL OF CONSULTATION: Appropriate or acceptable level of the behavior

Examples: What would be an acceptable level of head-slapping at home/at school?
Is any head-slapping OK?
What would you like to see for Jamie?
Is there general agreement on our goal for Jamie across home and school?

CHILD'S STRENGTHS/ASSETS: Strengths, abilities, or other positive features of the child.

Examples: What are some of the things that Jamie is good at?
What are some of Jamie's strengths?

EXISTING PROCEDURES: Procedures or rules in force that are external to the child and to the behavior

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

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

PROVIDE A RATIONALE FOR DATA COLLECTION: A purpose or rationale for data collection is provided. At this time also note that observers will also be used to gather data in the home and classroom setting.

Examples: It would be very helpful to watch Jamie for a week or so and monitor how often he hits himself in the head. This will help us key in on some important facts that we may have missed, and also help us document the progress that Jamie makes.

DISCUSS DATA COLLECTION PROCEDURES: Specify the target responses to record, including the kind of measure, what is to be recorded, and how to record. Consistent data collection procedures across should be encouraged. Specific details of data recording should be emphasized. A written plan and format for parents and teachers is often helpful.

Examples: What would be a simple way for you to keep track of Jamie's head-slapping at home/at school?

DATE TO BEGIN DATA COLLECTION: Procedural details regarding when to begin collection data.

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

NEXT APPOINTMENT: Establish meeting time for PAI. Note that the PAI could occur at different times for teacher and parent.

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

CLOSING SALUTATION

**Behavioral Consultation:
Problem Analysis Interview (PAI)**

Objectives and Definitions

PAI Goals :

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

Interview Objective:

OPENING SALUTATION

GENERAL STATEMENT RE: DATA AND PROBLEM

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

BEHAVIOR STRENGTH: Question or statement regarding behaviors, specific to the baseline data collected.

Example: According to the data, it looks like Jamie hit himself in the head at least 4 times at home and 5 times at school each day.

ANTECEDENT CONDITIONS: Information regarding events which precede the child's behavior. These events may have immediately preceded the behavior, or they may have been removed in time (e.g. events at home in the morning that impact the child's behaviors at school, etc.). Refer to baseline data in this discussion.

Examples: What did you notice before Jamie began to hit himself at home/at school?
What things may have led up to its occurrence?

CONSEQUENT CONDITIONS: Events which occurred following the behavior. These can be reactions of parents, teachers, or peers, and they can occur immediately following the behavior or at a later point in time (e.g. at home after school). Refer to baseline data in this discussion.

Examples: What typically happened after Jamie hit himself at home/at school?
What types of things did you notice afterwards that may have maintained its occurrence?

SEQUENTIAL CONDITIONS: Situational events or environmental conditions occurring when the behavior occurs. A pattern or trend of antecedent/ consequent conditions across a series of occasions (e.g. time of day, day of week).

Examples: What else was happening in the classroom/ playground/home when you observed Jamie hitting himself?
What time of day, or day of week seemed most problematic?
What patterns did you notice in Jamie's behavior at home/at school?

INTERPRETATION OF BEHAVIOR: Parents' and teachers' perceptions regarding the purpose or function of the behavior. Consultant may also suggest hypotheses regarding the behavior if other explanations are plausible.

Examples: Why do you think Jamie hits himself?
It sounds like it might also be related to a very low frustration tolerance level.

**Conjoint Behavioral Consultation
Treatment Evaluation Interview (TEI)**

Objectives and Definitions

TEI Goals:

- * Determine if the goals of consultation have been obtained across settings.
- Evaluate the effectiveness of the treatment plan across settings.
- Discuss strategies and tactics regarding the continuation, modification, or termination of the treatment plan.
- Schedule additional interviews if necessary, or terminate consultation.

Interview Objectives:

OPENING SALUTATION

EVALUATE GENERAL PROCEDURES AND OUTCOME: Question or statement regarding general procedures and outcome.

Example: How did things go with the plan?

QUESTIONS ABOUT GOAL ATTAINMENT: Determine specifically if the goals of consultation have been attained. Refer to treatment data collected, and the goal statement specifies in the PII.

Example: Has our goal of 1 "head slap" per day been met at home/at school?

ESTABLISHING A PLAN: Plan strategies are established with the intention of implementing the intervention across settings (when you are working with both teacher and parent). The tentative goal stated in the PII, the interpretation of the behavior, and the child's strengths should be considered in the plan.

Examples: It seems that we need to try something different.

What can be done at both home and school to stop Jamie from hitting himself and to teach him alternative, more appropriate ways to cope with frustration?

CONTINUE DATA RECORDING PROCEDURES: Data recording procedures to be used in treatment implementation. Should be identical to or consistent with baseline data collection procedures.

Examples: It would be very helpful if we could continue to collect data on the number of times that Jamie hits himself each day at home and school.

Can we continue the same recording procedures as before?

NEXT APPOINTMENT: Establish a meeting time for the TEI.

CLOSING SALUTATION

If goals have been attained:

EVALUATE PLAN EFFECTIVENESS:

Determine the effectiveness of the plan for the specific child. Was the specific plan effective in producing behavior change, or are there other competing explanations? What is the internal validity of the plan?

Example: Do you think that the behavior program was responsible for Jamie's decrease in head-slapping?

EVALUATE EXTERNAL VALIDITY OF PLAN:

Determine the potential effectiveness of the plan for another setting where the child has a similar problem. This tactic may also increase the potential for consultees to generalize the plan to other clients.

Example: Do you think this plan would work with another child with similar difficulties?

CONDUCT POST-IMPLEMENTATION PLANNING:

Decision is made regarding the advisability of leaving the plan in effect, removing the plan, or constructing a new plan. Selecting a post-treatment alternative to implement across settings may occur.

Example: Should we leave the plan in effect for a while longer?

PROCEDURES FOR GENERALIZATION/MAINTENANCE:

Procedures to encourage continued progress are discussed. The goal is to encourage generalization to other behaviors, persons, or situations, or to maintain behavior over a long period of time. If the goals of consultation are not met, this question may not be non-applicable.

Example: How can we encourage _____ to display these behavior changes in other problem settings?

What procedures should we use to make sure that the behavior change continues over time?

If goals have not been attained:

QUESTIONS RE: PLAN MODIFICATION:

Establish new plan strategies to increase plan effectiveness across settings Consultant may suggest a change or question the need for change. If plan is successful and goals are met, this question may be nonapplicable.

Examples: How can we modify the procedures so that the plan is more effective?

FOLLOW-UP ASSESSMENT: Discussion regarding follow-up recording procedures to monitor the behavior over time and over settings.

Example: How can we monitor Jamie's progress to ensure that these positive changes continue?

QUESTIONS RE: NEED FOR FUTURE INTERVIEWS

Example: When can we meet again to discuss the effectiveness of our modified plan?
Would you like to meet again to check on _____'s progress?

TERMINATION OF CONSULTATION (if goals have been met)

CLOSING SALUTATION

Appendix D
Goal Attainment Scaling

GAS Rating Sheet for Home

Parent-Teacher Intervention Project

Student' Name: Child 1
Consultant:

Date:
Phone Number:

Target behaviour: Reducing negative interactions with brother (i.e., hitting, shouting, pinching, and name calling) while improving social skills (i.e., turn taking, and verbal initiations).

+2 J.'s social interactions have significantly improved. He listens to instructions and acts appropriately with other children and his brother. He very rarely (2-3 incidences) needs additional prompts or cues each day.

+1 J.'s social interactions have improved. He listens to instructions, he acts appropriately with other children and his brother. He rarely (4-5 incidences) needs additional prompts or cues each day.

0 J. has difficulty with social interactions. He also evidences difficulties getting along with his brother. He requires adult involvement about 6-7 times each day. He has difficulty following instructions, and will interact inappropriately with his brother.

-1 J.'s social skills are weak and he has difficulty getting along with his brother. He requires adult involvement approximately 8-9 times each day. He has difficulty following instructions, and interacts inappropriately with his brother.

-2 J.'s has significant difficulty with social skills and getting along with his brother. He requires adult involvement in most occasions. He has difficulty following instructions, and interacts inappropriately with his brother. He needs adult involvement about 10-11 times a day.

GAS Rating Sheet for School

Parent-Teacher Intervention Project

Student' Name: Child 1
Consultant:

Date:
Phone Number:

Target behaviour: Reducing negative interactions with peers (i.e., hitting, shouting, pinching, and name calling) while improving social skills (i.e., turn taking, and verbal initiations).

+2 J.'s social interactions have significantly improved. He listens to instructions and acts appropriately with other children and his brother. He very rarely (2-4 incidences) needs additional prompts or cues each day.

+1 J.'s social interactions have improved. He listens to instructions, he acts appropriately with other children and his brother. He rarely (5-6 incidences) needs additional prompts or cues each day.

0 J. has difficulty with social interactions. He also evidences difficulties getting along with his brother. He requires adult involvement about (7-8 incidences) times each day. He has difficulty following instructions, and will interact inappropriately with his brother.

-1 J.'s social skills are weak and he has difficulty getting along with his brother. He requires adult involvement approximately (9-10 incidences) times each day. He has difficulty following instructions, and interacts inappropriately with his brother.

-2 J.'s has significant difficulty with social skills and getting along with his brother. He requires adult involvement in most occasions. He has difficulty following instructions, and interacts inappropriately with his brother. He needs adult involvement about (11-12 incidences) a day.

GAS Rating Sheet for Home

Parent-Teacher Intervention Project

Student' Name: Child 2
Consultant:

Date:
Phone Number:

Target behaviour: Reducing tantrum behaviour (i.e., falling to floor, crying, stamping feet, flapping hands, and screaming profanities).

+2 Reduced the number of tantrums each day to between 0-1 incidences.
A.'s compliance to my requests has improved to the point where he is listening to my requests without having a tantrum, with the exception of an average of 0-1 incidences a day.

+1 Reduced the number of tantrums each day to between 0-1 incidences.
A.'s compliance to my requests has improved to the point where he is listening to my requests without having a tantrum, with the exception of an average of 0-1 incidences a day.

0 A. has approximately 4-5 tantrums each day.

-1 Increased the number of tantrums each day to between 6-7 incidences. A.'s compliance to my requests has worsened to the point where he is having a tantrum as a result of my requests about 6-7 incidences a day.

-2 Increased the number of tantrums each day to between 8-9 incidences. A.'s compliance to my requests has worsened to the point where he is having a tantrum as a result of my requests about 8-9 incidences a day.

GAS Rating Sheet for School

Parent-Teacher Intervention Project

Student' Name: Child 2
Consultant:

Date:
Phone Number:

Target behaviour: Reducing tantrum behaviour (i.e., falling to floor, crying, stamping feet, flapping hands, and screaming profanities).

+2 Reduced the number of tantrums each day to between 1-2 incidences.
A.'s compliance to my requests has improved to the point where he is listening to my requests without having a tantrum, with the exception of an average of 1-2 incidences a day.

+1 Reduced the number of tantrums each day to between 3-4 incidences.
A.'s compliance to my requests has improved to the point where he is listening to my requests without having a tantrum, with the exception of an average of 3-4 incidences a day.

0 A. has approximately 5-6 tantrums each day.

-1 Increased the number of tantrums each day to between 7-8 incidences. A.'s compliance to my requests has worsened to the point where he is having a tantrum as a result of my requests about 7-8 incidences a day.

-2 Increased the number of tantrums each day to between 9-10 incidences. A.'s compliance to my requests has worsened to the point where he is having a tantrum as a result of my requests about 9-10 incidences a day.

GAS Rating Sheet for Home

Parent-Teacher Intervention Project

Student' Name: Child 3
Consultant:

Date:
Phone Number:

Target behaviour: Reducing negative interactions with peers (i.e., Talking loudly and not complying) while improving social skills (i.e., turn taking, and verbal initiations).

+2 Reduced the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules) each day to between 0-1 incidences. T.'s social skills have improved to the point where he requires my intervention only about 0-1 incidences a day.

+1 Reduced the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules) each day to between 2-3 incidences. T.'s social skills have improved to the point where he requires my intervention only about 2-3 incidences a day.

0 T. has approximately 4-5 negative interactions each day.

-1 Increased the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules) each day to between 6-7 incidences. T.'s social skills have decreased to the point where he requires my intervention about 6-7 times a day.

-2 Increased the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules) each day to between 8-9 incidences. T.'s social skills have decreased to the point where he requires my intervention about 8-times a day.

GAS Rating Sheet for School

Parent-Teacher Intervention Project

Student' Name: Child 3
Consultant:

Date:
Phone Number:

Target behaviour: Reducing negative interactions with peers (i.e., talking loudly and not complying) while improving social skills (i.e., turn taking, and verbal initiations).

+2 Reduced the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules)each day to between 2-3 incidences. T.'s social skills have improved to the point where he requires my intervention only about 2-3 incidences a day.

+1 Reduced the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules)each day to between 4-5 incidences. T.'s social skills have improved to the point where he requires my intervention only about 4-5 incidences a day.

0 T. has approximately 6-7 negative interactions each day.

-1 Increased the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules) each day to between 8-9 incidences. T.'s social skills have decreased to the point where he requires my intervention about 8-9 times a day.

-2 Increased the number of negative interactions (talking loudly, bullying other children, reprimanding peers, not following rules) each day to between 10-12 incidences. T.'s social skills have decreased to the point where he requires my intervention about 10-12 times a day.

GAS Rating Sheet for Home

Parent-Teacher Intervention Project

Student' Name: Child 4
Consultant:

Date:
Phone Number:

Target Behaviour: Reducing aggressive outbursts (screaming, throwing objects, hitting, crying, and pulling hair) in order to encourage positive peer relationships.

- +2 Reduced the number of aggressive outbursts each day to between 0-1 incidences.
- +1 Reduced the number of aggressive outbursts each day to between 2-3 incidences.
- 0 T.D. has approximately 3-4 aggressive outbursts each day.
- 1 Increased the number of aggressive outbursts each day to between 4-5 incidences.
- 2 Increased the number of aggressive outbursts each day to between 5-7 incidences.

GAS Rating Sheet for School

Parent-Teacher Intervention Project

Student' Name: Child 4
Consultant:

Date:
Phone Number:

Target Behaviour: Reducing aggressive outbursts (screaming, throwing objects, hitting, crying, and pulling hair) in order to encourage positive peer relationships.

- +2 Reduced the number of aggressive outbursts each day to between 0-1 incidences.
- +1 Reduced the number of aggressive outbursts each day to between 1-2 incidences.
- 0 T.D. has approximately 2-3 aggressive outbursts each day.
- 1 Increased the number of aggressive outbursts each day to between 3-4 incidences.
- 2 Increased the number of aggressive outbursts each day to between 4-5 incidences.

GAS Rating Sheet for School

Parent-Teacher Intervention Project

Student' Name: Child 5
Consultant:

Date:
Phone Number:

Target behaviour: Reducing inattentive behaviour (i.e., noncompliance, disobedience, off task behaviour, disruptive behaviour).

+2 N. exhibits attentive behaviour (complies with instructions, remains on task, and in seat, does not destroy materials) almost always (0-4 incidences) during the day.

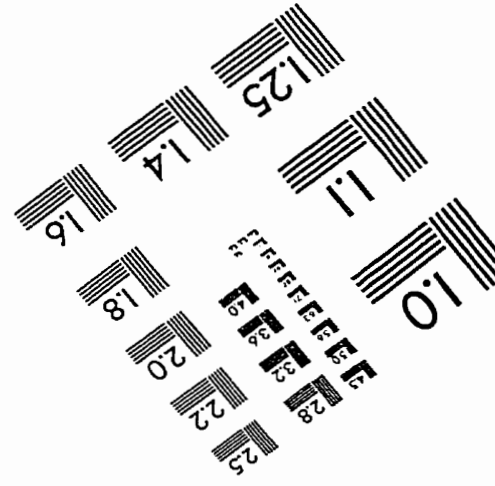
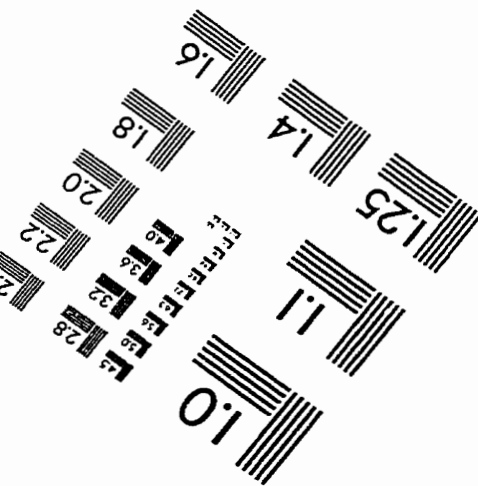
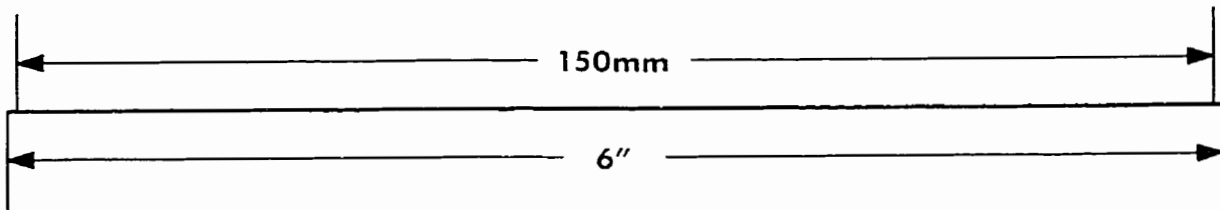
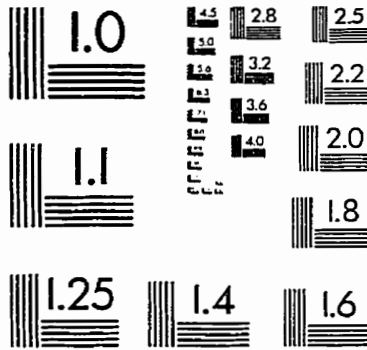
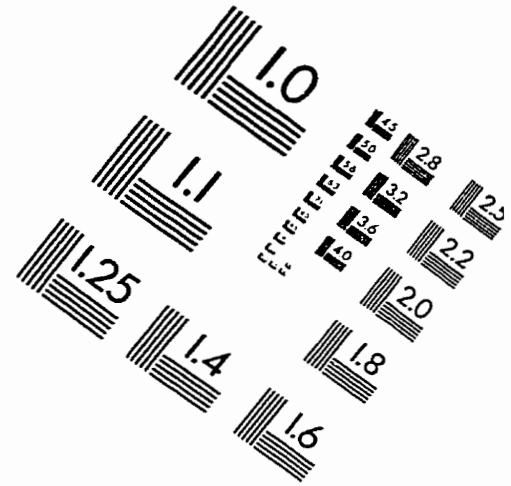
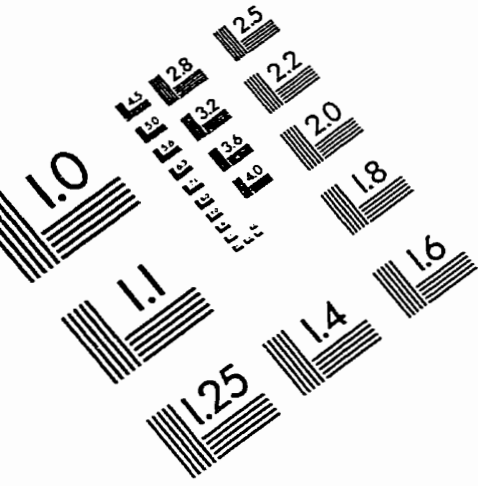
+1 N. exhibits attentive behaviour (complies with instructions, remains on task, and in seat, does not destroy materials) frequently (5-7 incidences) during the day.

0 N. exhibits attentive behaviour (complies with instructions, remains on task, and in seat, does not destroy materials) occasionally (8-11 incidences) during the day.

-1 N. exhibits attentive behaviour (complies with instructions, remains on task, and in seat, does not destroy materials) infrequently (12-14 incidences) during the day.

-2 N. exhibits attentive behaviour (complies with instructions, remains on task, and in seat, does not destroy materials) very infrequently (15-20 incidences) during the day.

IMAGE EVALUATION TEST TARGET (QA-3)



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