5-2007

# Does Teaching Problem-Solving Skills Matter?: An Evaluation of Problem-Solving Skills Training for the Treatment of Social and Behavioral Problems in Children

Bryan B. Bushman
*Utah State University*

DOES TEACHING PROBLEM-SOLVING SKILLS MATTER?:  AN EVALUATION

OF PROBLEM-SOLVING SKILLS TRAINING FOR THE TREATMENT OF

SOCIAL AND BEHAVIORAL PROBLEMS IN CHILDREN

by

Bryan B. Bushman

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

2007

ABSTRACT

Does Teaching Problem-Solving Skills Matter?: An Evaluation of

Problem-Solving Skills Training for the Treatment of Social

and Behavioral Problems in Children

by

Bryan B. Bushman, Doctor of Philosophy

Utah State University, 2007

Major Professor: Gretchen Gimpel Peacock, Ph.D.
Department: Psychology

Parent training combined with problem solving skills training has been proposed

as a comprehensive treatment for childhood oppositional behaviors, poor child social

skills, and parental stress. The current study compared Parent Training + Problem

Solving Skills Training with a Parent Training + nondirective condition. Parents of 32

children first attended Parent Training. After the parents completed Parent Training,

children were randomly assigned to individual therapy in either a Problem Solving

Skills Training condition or a nondirective condition. Data comparisons between the

groups were made at postindividual therapy and at 6-week follow-up. Results indicated

that children in the Problem Solving Skills Training condition improved more than their

counterparts regarding parent-reported, parent-observed, and child-reported social

skills. Children in the Problem Solving Skills Training condition also improved more

than children in the nondirective condition on parent-observed oppositional behaviors; however, children in the non-directive condition demonstrated more improvement than their Problem Solving Skills Training counterparts on parent-reported measures of oppositional behaviors. There were no differences between the groups regarding parental stress. The clinical implications and limitations of these findings are discussed.

(269 pages)

# ACKNOWLEDGMENTS

Most of the time, this project seemed far too ambitious for its own good. It was only after I defended my proposal that I fully realized how much I would depend on collaboration from others. As such, several acknowledgments should be made to recognize those who spent their time and talents helping me bring this project to fruition.

First, I would like to thank my committee chair, Gretchen Gimpel Peacock, for all her help and support. I am indebted to her willingness to help me revise numerous drafts and make something coherent from the data. The clarity and direction of the final document are due in no small part to her efforts. Similarly, I would also like to thank the members of my defense committee who helped me weed out the relevant from the less-than-relevant. I am also indebted to Dr. Gimpel Peacock for giving me the funding so that I could successfully recruit participant families to the study. The majority of those recruited came via newspaper advertisements, which would not have been run had she not been willing to part with grant funding. Many graduate students also volunteered their time to act as student therapists. Although I attempted to lure them with "a great clinical experience" and the promise of brief progress notes, it was always clear that they were the ones doing me the favor. After all, time is a great commodity in graduate school. Therefore, a special thank you to those who acted as student therapists: Sara Boghosian, Melissa Davis, Devin Healey, Matt Kirby, Azure Midzinski, Chris Pacetti, Julie Pelletier, and Penny Sneddon.

Acknowledgment also needs to be given to those who, while not directly involved in the project, had to put up with me while I was completing it. Thank you to my wife, Christina, for her willingness to push me out the door (speaking figuratively and sometimes literally) to work on my dissertation when I would rather have spent time with her. Don't worry, honey, I never took it personally. Thank you to my mother who took my side every time I needed to complain. You've always been my greatest cheerleader. I owe a debt of gratitude to my father who instilled in me the spirit of scientific discovery. I may never compare to you as a scientist, Dad, but hopefully the next 200 or so pages will demonstrate that some of what you told me through the years took root.

Bryan B. Bushman

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

PROBLEM STATEMENT

Among mental health professionals who work with children, oppositional

behaviors are one of the most frequently encountered problems. The most commonly

used mode of treatment for these problems is parent training (PT; Patterson, 1982;

Webster-Stratton, 1985). Parent training teaches parents to use skills such as ignoring,

appropriate discipline strategies, and positive reinforcement for appropriate behavior

(Eyberg, 1992a; Webster-Stratton, 1993). Such skills are theorized to disrupt a coercive

interaction cycle between parents and oppositional youth that has been associated with

poor outcomes (Patterson, Reid, & Dishion, 1992). Research has generally supported

PT as a treatment for oppositional behaviors. For instance, PT has been demonstrated

to have a substantial positive effect on parental stress and such child behaviors as

noncompliance, tantruming, and aggression (Adams, 2001; Serketich & Dumas, 1996;

Weinberg, 1999). These results have inspired some investigators to consider PT the

"treatment of choice" for dealing with oppositional youth (Reid, 1993).

Nevertheless, PT is not without its critics. Common criticisms of PT include:

(a) poor maintenance of treatment outcomes over time (Eyberg, Edwards, Boggs, &

Foote, 1998; Forehand & Long, 1986); (b) many treated children are still considered to

be in the "clinical" or severely problematic range immediately after treatment

(Jacobsen, Follette, & Revenstorf, 1984; Webster-Stratton, 1990a); (c) treatment

outcomes typically do not generalize across settings (e.g., from home to school; Taylor

& Biglan, 1998); and (d) PT does not address certain cognitive deficits that have been

noted in oppositional children (e.g., lack of social skills, empathy) sometimes referred to as childhood cognitive risk factors (Crick & Dodge, 1994; Kendall & Braswell, 1985; Lochman, Whidby, & FitzGerald, 2000).

In explaining the nonresponsiveness or relapse of some families, the last criticism bears particular scrutiny. For instance, researchers have noted that oppositional children are different from their peers on a number of cognitive dimensions: attributing hostile intent from others when situations are ambiguous, assuming positive consequences for aggressive acts, difficulty reading facial cues, and difficulty problem solving (Crick & Dodge, 1994; Dodge, 1993; Walker, Colvin, & Ramsey, 1995). Consequently, some believe that these social and cognitive delays must be specifically addressed for treatment to reach its maximum efficacy (Taylor & Biglan, 1998).

Training children in problem solving skills, typically provided via Problem Solving Skills Training (PSST), a specific type of cognitive-behavioral therapy (CBT) has been proposed as a specific treatment that will meet this need. Indeed, research has identified a deficit in problem-solving skills as a specific target area because: (a) many oppositional children demonstrate difficulty in this area compared with controls (Webster-Stratton & Lindsay, 1999), and (b) such children frequently display negative long-term outcomes in social relationships (Coie, 1990; Loeber & Farrington, 2000). It is theorized that if children can be taught how to apply specific problem-solving steps to social situations then negative social outcomes, which may further reinforce oppositional behaviors, can be averted.

Indeed, there are some indications that children can be taught problem solving skills through PSST (Kazdin, Esveldt-Dawson, French, & Unis, 1987a; Kazdin, Siegel, & Bass, 1992). Research indicates that children treated with PSST demonstrate improved social skills as measured by standardized measures and direct observation (Kolko, Loar, & Sturnick, 1990; Prinz, Blechman, & Dumas, 1994). Additionally, there are data suggesting PSST impacts social-skill outcomes to a greater extent than other forms of treatment, like relationship-based therapy (Brestan & Eyberg, 1998; Kazdin & Weisz, 1998). However, some are skeptical that PSST actually targets the cognitive dimensions it proposes to treat. Instead, improvement may be based on providing the child with access to the general treatment factors of attention and empathy. Thus, additional research is needed to ensure that a generic treatment would not produce similar outcomes to PSST on social-skills outcomes.

Even if PSST targets cognitive problem-solving deficits, this form of treatment, in isolation, would still be vulnerable to the same types of criticisms leveled at treating oppositional behaviors purely through PT: treatment outcomes are not maintained over time, outcomes do not generalize across settings, and treatment does not address all relevant factors needed to treat such a population (Coie, 1990; Lochman, 1985; Prinz et al., 1994). Why? Many believe it is because a purely problem-solving approach to treatment does not take into account the contingency management factors addressed by PT (Bierman, Miller, & Stabb, 1987). Consequently, researchers believe that combining the two forms of treatment will provide more positive outcomes than offering either form of therapy in isolation (Gross, Fogg, & Webster-Stratton, 2003).

Only a handful of studies have experimentally evaluated the combined effect of PT and the problem-solving training (Dishion & Andrews, 1995; Kazdin et al., 1987a, 1992; Webster-Stratton & Hammond, 1997). In examining these studies, a few things are evident. First, in order to target oppositional behaviors, PT must, in some format, be included in treatment. Studies that have compared PSST plus PT with PSST only indicate that PSST in isolation has only a mild-to-moderate effect on oppositional behaviors (Kazdin et al., 1992; Webster-Stratton & Hammond). The child has a much greater likelihood of exhibiting a "normal" amount of oppositional behaviors at posttreatment when PT is included in the treatment plan. Second, more robust findings are generally found when both parent and child are involved in treatment. For instance, children in a PT-only treatment, as opposed to those in a PT plus PSST, demonstrated nearly no change in social-skills or problem-solving ability (Dishion & Andrews). Third, there are some limited implications that treatment outcomes are greater immediately posttreatment and at follow-up when both child and parent are involved in treatment (Kazdin et al., 1992; Webster-Stratton & Hammond).

However, these studies do not definitively indicate that the child *must* be involved in PSST for this additive effect (if it indeed exists) to take place. As discussed earlier, there is still some debate that PSST specifically impacts problem-solving skills and consequent social relationships rather than treatment in general producing positive outcomes in this dimension. To the author's knowledge, no study has specifically examined PSST and another form of individual therapy when the parents of children in both treatment conditions have first participated in PT. Consequently, one must

entertain the possibility that the additive effects mentioned earlier are the result of PT and individual therapy *in general* rather than PT and PSST *specifically*. Stated another way, to what extent is it necessary to target the specific cognitive factor of problem solving to produce the additive gains inferred by research? This question seems relevant because studies in which researchers have demonstrated a change in social skills have not necessarily demonstrated a similar change in oppositional behavior, as would be theorized (Spivack, Platt, & Shure, 1976). Perhaps providing the child empathy and personal attention, which is offered in most forms of individual counseling, would produce an additive effect.

The current study sought to answer the following questions. First, at the conclusion of individual therapy and at follow-up, do the children of families involved in PT + PSST demonstrate a greater improvement in social skills than children of families involved in PT + nondirective therapy? Second, at the conclusion of individual therapy and at follow-up, do the children of families involved in PT + PSST demonstrate a greater decrease in oppositional behaviors and parental stress than children of families involved in PT + nondirective therapy? It was hypothesized that: (a) being involved in PSST would be associated with a greater improvement in social skills than involvement in a nondirective form of therapy; and (b) targeting both PT and problem-solving skills would lead to greater reductions in oppositional behaviors and parental stress than combing PT with nondirective therapy.

To test these questions and hypotheses, parents of oppositional children (ages 7 to 12) completed six weekly sessions of group-based PT. At the conclusion of PT, the

children of these parents were randomly assigned to one of two treatment conditions: PSST and a nondirective therapy condition. Regardless of condition, children completed six sessions of individual therapy. Assessment of oppositional behavior (parent report), social skill competency (parent report and child report), and parental stress (parent report) were conducted at four intervals: pretreatment, post- PT, postindividual therapy, and 6-week follow-up.

CHAPTER II

LITERATURE REVIEW

This literature review contains an overview of topics related to the current study.
First, the prevalence and long-term outcomes of oppositional behaviors in children will
be discussed. Empirical evidence supporting and refuting the effectiveness of PT, the
most frequently used treatment modality for these types of problems, will also be
discussed. Many researchers have noted that oppositional children demonstrate several
cognitive deficits related to problem-solving skills; consequently, research will be
reviewed regarding the effectiveness of teaching problem-solving skills to children
independent of PT. Finally, this chapter will review the limited number of studies that
combine PT and individual therapy for problem-solving skills.

An Overview of Oppositional Behaviors in Children:

Diagnosis, Prevalence, and Long-Term Outcomes

This first section will review common diagnoses and prevalence rates associated
with defiant or oppositional behaviors in children. A special emphasis will be placed on
studies demonstrating negative long-term outcomes for those youth who meet
diagnostic criteria and for those youth who demonstrate subsyndromal negative
behaviors. Hence, this first section will demonstrate the need for early intervention to
"preempt" these negative outcomes.

*Diagnosis and Prevalence*

Oppositional behaviors are one of the most frequently encountered problems by mental health professions who work with children. Recent research indicates that approximately one third to one half of all referred cases to childhood mental health professionals are related to oppositional or conduct disordered behavior (Kazdin, 2002). Diagnostically speaking, oppositional behaviors in youth have been classified in one of three ways: antisocial behavior problems of children, oppositional defiant disorder (ODD), and conduct disorder (CD; American Psychological Association [APA], 1994). Technically speaking, only the latter two classifications are mental disorder diagnoses. The former classification is considered a V-code or stage-of-life problem and is reserved for children who demonstrate some oppositional behaviors, but not enough to meet diagnostic criteria for either ODD or CD (APA). In contrast, children who meet diagnostic criteria for ODD have demonstrated a pattern of behavior typified by angry, defiant, stubborn, and temperamental characteristics that have lasted for at least 6 months (APA). Children and adolescents with the diagnosis of CD demonstrate a persistent pattern of behavior in which the rights of others and age appropriate social norms are violated. Examples would include such acts as physical aggression, destruction of property, stealing, and fire setting. Epidemiological studies indicate that the diagnosis of CD often coincides with beginning of adolescence (APA). Not only are these diagnoses very problematic for parents, teachers, and families, but they also entail a significant financial impact on society. Some estimate that the CD diagnosis, in particular, is one of the most costly in the US because these youth are often involved in

multiple social services (e.g., special education, mental health, juvenile justice; Robins, 1981).

Although some believe the difference between ODD and CD are qualitative rather than quantitative (Frick, 1998), others suggest that ODD simply represents a mild form of CD (Werry, Reeves, & Elkin, 1987). For instance, children and adolescents with CD almost always have a previous diagnosis of ODD (August, Realmuto, MacDonald, Nugent, & Crosby, 1996). However, because not all children who have ODD will develop CD, the data suggest that two types of children exist: those demonstrating behaviors that will remit in childhood, and those whose behaviors will persist and become more severe. The latter children are generally differentiated from the former children by more severe behavioral symptoms and greater family dysfunction (Pierce, Ewing, & Cambell, 1999).

Compared with most mental health disorders, oppositional behaviors of youth (at least as represented by ODD) are relatively common. For instance, data indicate that between 2-16% of all children meet diagnostic criteria for ODD (APA, 1994). The wide variance in these percentages is related to the population sampled (e.g., urban children vs. rural children, low socioeconomic (SES) compared with high SES) and the type of informant (e.g., parents, teachers). In comparison, CD occurs in 2-6% of all children based on community samples of elementary school-aged youth (Zoccolillo, 1993), with rates being slightly higher (7%) among adolescents (Offord, Boyle, & Racine, 1991). During the grade school years, boys may meet diagnostic criteria for oppositional behavior at a rate four times higher than that of girls; however, there is

some indication that these rates "even out" by adolescence (Kazdin, 2002).

It should be noted, however, that these rates may grossly underestimate the rate of oppositional behavior because they are only an estimate of the number of children who meet diagnostic criteria for either CD or ODD. Many believe that youth with subsyndromal symptoms of oppositional behavior are also significantly impaired, yet are generally not included in these estimates (Angold, Costello, Farmer, Burns, & Erkanli, 1999). For instance, in a random sample of parents from a primary health-care setting, negative behavior (defined as noncompliance, tantruming, bossiness, or demanding/whining) was found to be a significant problem for 50-80% of the children between the ages of 2 and 4 and 7 and 10 (Schroeder, Gordon, Kanoy, & Routh, 1983). Similarly, Achenbach and Edelbrock (1981) reported that 50% of 4- and 5-year-old children exhibit disobedience and 26% engaged in destruction of possessions.

*Long-Term Outcomes*

There are many indications that conduct disordered or oppositional youth continue to demonstrate poor outcomes years after they are first diagnosed (Robins, 1981). In one study 8- to 10-year-old children ($n = 84$) who were diagnosed as "behavior disordered" (e.g., ADHD, CD, ODD), yet did not receive therapy, were tracked over a period of several years. At follow-up the children were between the ages of 9 and 24. Family reports indicated that nearly 18% of these children had been involved with "serious" legal infractions (Weiss & Hechtman, 1986). Of course, for such numbers to be meaningful they must be compared with a cohort of "normal," similarly aged youth. Another study cited by these same researchers compared

"hyperactive and behaviorally disordered" children with similarly aged children who did not score high on measures of oppositional behavior or hyperactivity. Neither group of children received therapy and both groups were tracked over a period of several years. Follow-up data, which was taken approximately 5 to 10 years later, indicated that participants in the first group were arrested at least once for serious, police-related offenses at a rate of 58% (low SES), 36% (middle SES), and 52% (high SES), compared to the rates of the controls, which were 11%, 9.6%, and 2%, respectively (Weiss & Hechtman).

Other disturbing trends have been indicated in the literature. For instance, Block, Block, and Keys (1988) noted that antisocial behavior in early adolescence tends to precede substance abuse. However, many note that acting out may become a dominant way of responding to the world for children much earlier than adolescence. Eron (1990) noted that a pattern of behavior problems may "crystallize" in children as early as age 8. Similarly, Esser, Schmidt, and Woerner (1990) found that children described as having CD at age 8 had a high likelihood of having another psychiatric problem at age 13, with the majority of them (75%) continuing to be described as CD. Early indications of problem behavior have also been associated with an escalating pattern of school problems, dropout, substance use, delinquency, and violence (Snyder, 2001; Tremblay, Mas, Pagani, & Vitaro, 1996). Some investigators have examined longitudinal community samples ($n => 1,000$) of children between the ages of 3 and 18 and reported that observed disruptive behavior as early as age 3 could predict, to some extent, crime in adulthood (Caspi, Morritt, Newman, & Silva, 1996). Clearly not all

children who demonstrate problem behaviors at an early age develop such poor outcomes (Loeber & Hay, 1997). Nevertheless, these data indicate the critical need for therapeutic help for children with behavior disorders.

*Summary*

Oppositional behaviors in youth appear to be an all-too-common problem impacting families, schools, and society. While not all children continue to demonstrate a pattern of opposition or defiance over time, there is a significant amount of evidence indicating that the long-term outcomes for children meeting diagnostic criteria are fairly dismal. Simply put, for many of these children oppositional behaviors are not simply a phase they will "grow out of." Consequently, it is generally believed that dealing with these oppositional behaviors early is better than doing so later (Kazdin, 2002). Even among children that do not meet diagnostic criteria for either CD or ODD, a pattern of acting out is often associated with the development of a diagnosis later on. Hence, there is a need for clinical attention and therapeutic remediation across the diagnostic dimension of what is considered "oppositional behaviors." This paper will now discuss the most commonly used mode of treatment regarding childhood oppositional behaviors: PT.

Synopsis and Evidence Regarding PT

This section will introduce the theoretical rationale behind PT (PT) and the principles and techniques generally taught to parents during the course of treatment. Next, evidence related to the effectiveness of PT will be presented, including which

behaviors seem to be influenced the most by PT. Next, moderating "risk factors" that commonly interfere with treatment outcomes will be discussed. Finally, data that corroborates common criticisms of this form of intervention will be presented. These criticisms will be discussed according to the following categories: (a) PT treatment outcomes are not maintained over time, (b) many treated children are still in the "clinical" range at the conclusion of treatment, and (c) PT does not address many common "risk factors" associated with negative treatment outcomes.

*Theoretical Basis of PT*

For many years investigators have noted that some parents of oppositional children lack certain fundamental skills. Current modes of behavioral PT are based, in part, on the theories of Patterson (1982), specifically coercion theory. Coercion theory proposes that repeated use of aversive behavioral control strategies (e.g., yelling, spanking) exacerbates child behavior problems and undermines parental effectiveness. It is theorized that children escalate the intensity and frequency of oppositional behavior because: (a) they are punished so severely and frequently that they feel that they will be found at fault no matter what they do, and (b) they are provided with little or no incentive to change their behavior other than fear of retaliation (Patterson). For instance, Patterson notes that in many families there is an escalating cycle of negative reinforcement: the parents give a command, the child whines, cries, or becomes aggressive in response, both the parent and the child escalate the intensity of their demands/responses, eventually the parent "backs down" and the child stops his or her aversive behavior. In the end, all members of the interaction are negatively reinforced

for their behaviors. Other features of families who demonstrate coercive interactions include an inability of the parents to appropriately monitor behavior. When parents do discipline, harsh punishment is generally applied; however, it is often applied inconsistently. Consequently, if the child does well, the behavior is ignored, and if the child does poorly only erratically applied and harsh punishment is provided (Patterson et al., 1992).

There is good reason to examine coercion as a significant factor in oppositional behaviors. Schrepferman and Snyder (2002) recently found that the two family factors that predicted future arrest in children were the use of coercive control strategies and a general lack of contingency plans for negative behaviors. Campbell, March, and Pierce (1991) found that negative maternal control strategies predicted follow-up ratings of externalizing problems in a sample of boys originally assessed in preschool. Similarly, Stormshak, Bierman, and McMahon (2000) found that discipline tactics such as yelling, nagging, threatening, and spanking predicted increased severity of oppositional and hyperactive behaviors, while parental warmth and positive involvement were correlated with decreased oppositional behaviors. Based on these findings, it would appear that families of oppositional children have several things in common: (a) the children are punished harshly, (b) the children are not given attention or reward for appropriate behavior, and (c) no predetermined plan for how to deal with negative behavior is agreed upon before the negative behavior actually occurs. Regarding this last point, parents often find themselves frustrated in response to the child's behavior.

Consequently, they lash out by punishing in an even more aversive manner (Patterson et al., 1992).

Other parent or family characteristics that have been associated with oppositional behaviors include: erratic disciplinary practices, parental criminal behavior, alcoholism, low demonstrated affection in the family, poor child attachment, defensive communication, and less participation in activities as a family (Kazdin, 2002). Finally, poor parental supervision and poor marital quality have also been associated with oppositional behaviors (Kazdin). Another indication that parent behaviors play a big factor in childhood defiance and acting out is that improvement in childhood functioning is noted in approximately two thirds of the children when their parents are taught principles to counteract the factors listed above (Patterson, 1982; Webster-Stratton, 1985).

Several common principles and techniques are generally included in behavioral PT. For instance, most intervention approaches teach parents how to ignore negative attention seeking behavior while attending to positive behaviors that the parent wishes to see increase in frequency (Webster-Stratton, 1993). Often this is done through the use of a special one-on-one "play time" where the parent is instructed to refrain from giving commands or asking questions and is encouraged to play with the child in an activity of the child's choosing while providing reflection and praise (Eyberg, 1992a). Once parents are taught how to ignore minor infractions and give their child attention for behaving appropriately (and potentially reward such behavior), the parents are taught discipline strategies that are designed to de-escalate oppositional behavior (e.g.,

timeout). Hence, parents learn the behavioral principles of positive reinforcement, extinction, and response cost. Parents are also taught how they might be unwittingly reinforcing oppositional behavior and how to be more consistent in discipline practices (Webster-Stratton).

In summary, behavioral PT teaches parents principles that reverse negative trends such as coercion, erratic discipline practices, and using attention inappropriately (e.g., attending to acting out behaviors and not to adaptive behaviors). The specific principles of response cost, extinction, and positive reinforcement have been used to disrupt coercive interaction patterns.

*Empirical Evidence Supporting Parent Training*

PT is probably one of the most researched, and empirically proven treatments for childhood oppositional behavior (Kazdin, 2002). A meta-analysis by Serketich and Dumas (1996) indicated that families participating in PT report many positive short-term gains. These researchers examined the results of 26 controlled studies where participants were assigned to PT treatment. The average effect size change on the parental measures (e.g., Child Behavior Checklist; CBCL) from pre- to posttreatment was .84, which is considered a large effect size change (Cohen, 1988). Observer-reported and teacher-reported (Teacher's Report Form) problem behaviors also decreased dramatically (effect sizes of .85 and .73 for observer report and teacher report, respectively). Serketich and Dumas reported that the average decrease in negative behaviors, across the types of informants, was .86 (*SD* = .36), and that the

primary behaviors changed by the intervention were the frequency of aggressive acts (e.g., pushing, shoving, hitting), tantrums, and noncompliance. Although the average measure of parental adjustment did not change as dramatically (*ES* = .44), this meta-analysis seems to indicate that PT is an effective way to deal (at least in the short-run) with common oppositional behaviors in children.

Many of these findings are replicated in more recent studies. For example, Adams (2001) randomly assigned oppositional children between the ages of 3 and 16 and their parents to either a PT condition or a no-treatment control where the families had access to clinic materials but were not required to come in for treatment. Families in both conditions completed the Family Assessment Device pre- and posttreatment (eight weekly group meetings). The Family Assessment Device is a 60-item self-report measure that scores the family across six dimensions of functioning: family problem solving, communication, appropriate roles, ability to express feelings, "behavioral control" (measures if standards of expected behavior are maintained by children), and Overall Family Functioning. Tests of statistical significance demonstrated improvement across all dimensions for the treatment group ($p = <.05$), while no differences were indicated for the waitlist control group. This would seem to demonstrate that PT results in more than a reduction in oppositional behaviors because all dimensions, including those dealing with communication and ability to express feelings, changed.

The finding that PT produces positive changes in behaviors other than those directly targeted in treatment is nothing new. For instance, the parents of 12 children

who demonstrated disruptive behaviors were given PT, which was designed to specifically target noncompliance (Wells, Forehand, & Griest, 1980). At posttreatment children were observed as being significantly more compliant (76% compliance rate) compared to pretreatment (40% compliance rate). In fact, treated children were rated as demonstrating a similar rate of compliance compared to 12 "normal" controls posttreatment. However, tests of statistical significance also indicated that treated children demonstrated decreases in parent-reported levels of tantruming, aggression, and crying, although none of these behaviors were specifically targeted by the treatment. Based on results such as these, it is little wonder than large-scale prevention efforts have involved implementing PT as a core strategy (Reid, 1993).

PT is an attractive treatment option for economic reasons since there is reason to believe that PT can be effectively and efficiently delivered in a group format (Webster-Stratton & Hammond, 1997; Webster-Stratton, Hollinsworth, & Kolpacoff, 1989). A recent study (Nixon, Sweeny, Erickson, & Touyz, 2003) also indicated that PT can be effectively administered over shorter treatment duration. These researchers assigned 54 behaviorally disturbed preschool children to standard PT (12 face-to-face sessions), an "abbreviated" PT condition utilizing didactic videotapes and telephone consultations (5 face-to-face sessions), and a no-treatment waitlist control group. The results indicated that both treatment groups improved regarding childhood externalizing behaviors and parental stress. While families receiving the longer form of treatment demonstrated a stronger effect immediately posttreatment, the two treatment groups were comparable at 6-month follow-up. Although these findings regarding treatment length have not (to the

author's knowledge) been replicated with older children, these data seem important because most clinic-referred families drop out of treatment after an average of 10 sessions (Weisz, Thurber, Sweeny, Proffit, & LeGagnoux, 1997).

There is some indication that PT produces not only short-term decreases in problematic behavior, but also long-term improvement. For instance, recently Feldman and Werner (2002) compared 18 PT graduates to a waitlist control group 5 years after the conclusion of therapy. Based on tests of statistical significance, parents in the PT group scored lower than parents in the control group on the frequency of childhood behavior problems and stress related to limits on family opportunities (parents felt like they could go back to work or take the child in public). Parent training parents also rated themselves higher on measures of parental self-efficacy. Even 5 years after treatment completion graduates of the program reported being able to control childhood negative behaviors, as well as teach children appropriate behaviors. These findings remained consistent even if parents were rated only as "fair" regarding their understanding of the treatment by their therapist. The generalizability of these findings is tempered by the fact that the children in this study had pervasive developmental disabilities; however, this study demonstrates the potential effectiveness of the PT intervention. Similar results have been found when young people have been followed up 4.5 to 10.5 years after treatment (Eyberg et al., 1998). Children in the Feldman and Werner study were not found to be significantly different at follow-up from a normal control group on a scale of externalizing problems.

Other studies indicate that the long-term effects of PT are not simply limited to

parent-report. One study found that PT produced reliable change in observed parenting

behaviors (e.g., frequency of coercive interactions) for two thirds of a sample of 114

conduct disordered youth between the ages of 3 and 8 (Webster-Stratton et al., 1989).

Other researchers indicated that when parents of recidivist youth are taught principles

such as discipline, monitoring, praise, and egalitarian problem solving, the number of

times such youth are arrested in the future declines significantly (Bank, Patterson, &

Reid, 1987).

*Potential Moderating Risk Factors*

Despite these findings, many researchers caution that the success or failure of

PT depends greatly on the type of family seeking treatment. More than 20 years ago,

Webster-Stratton (1985) attempted to delineate common "risk factors" of families that

seem to influence treatment outcome. In this study, Webster-Stratton had the parents of

34 children diagnosed with conduct disorder attend 9 weeks of PT. Prior to the study,

all parents were assessed for socioeconomic status (SES), parental stress

(operationalized as a high number of recent negative life experiences), attitudes towards

their children, behavioral observations at home, and maternal depression. One year

after treatment, Webster-Stratton found that she could accurately predict long-term

outcomes in 70 to 80% of the families based on these variables. The three factors that

best predicted negative outcomes were high parental stress, low SES, and single-parent

status, with single-parent status being the most related to negative outcomes (this

variable was controlled for educational and occupational status).

Nevertheless, other studies contradict some of these findings. Holden, Lavigne,

and Cameron (1990), for instance, examined a variety of background variables for 141

mothers of "noncompliant children" who enrolled in PT. Approximately 32% of the

sample dropped out of the treatment prematurely. These researchers organized those

who initially enrolled in treatment into three conditions: fast completers, slow

completers, and those families who dropped out prematurely. "Fast completers" were

operationalized as the upper third of families ($n = 32$) that completed the program in the

fewest number of sessions ($M = 14$ sessions, with a range of 7 to 17 sessions), while

"slow completers" were defined as the lower third of families ($n = 32$) that completed

the program with the greatest number of sessions ($M = 33$ sessions, with a range of 20

to 50 sessions). Based on tests of statistical significance, several factors were found to

be associated with being classified as a "fast completer." These factors include:

ethnicity (84% of the fast completer group was Caucasian), having a fewer number of

presenting problems (3.7 compared with 4.6 in the slow-completer group), having a

higher level of initial compliance, and the child being slightly older at intake by

approximately 1 year (all children were under the age of 5). Interestingly, SES was

only considered a significant factor when fast completers were compared with those

who dropped out completely. Holden and colleagues' study also did not find marital

status to be related to group classification. These findings are at variance with data

cited earlier indicating SES and marital status as being significant predictors of

treatment outcome (Griest, Forehand, & Wells, 1981; Webster-Stratton, 1985).

Obviously, predicting PT treatment outcome based on risk factors is a complex affair,

and mentioning the data supporting and refuting each risk factor is beyond the scope of

this paper. This paper will next turn to discussing common criticisms made regarding behavioral PT.

*Limitations of Parent Training*

One common criticism of PT, despite the data cited earlier, is that the gains of PT are not maintained over time. For instance, Forehand and Long (1986) reported that 30-40% of parents who had completed PT reported that treatment gains were not maintained several months after treatment. Other investigators have attempted to look at specific timeframes when the positive outcomes of PT, theoretically, begin to diminish. Eyberg and colleagues (1998) noted that although nearly all treated families of "noncompliant" youth scored in the nonclinical range immediately posttreatment, half did not maintain these treatment gains at a 3-year follow-up and were again classified as being in the clinical range on the frequency of oppositional behavior. These data are similar to those from a study by Webster-Stratton (1990a), which demonstrated that many children of parents who complete PT have clinical levels of peer problems and classroom aggression 3 years after treatment. Although all participants in Webster-Stratton's study were considered better than at baseline, up to 46% of the parents and 26% of the teachers reported clinically high levels of child behavior problems in treated children at 3-year follow-up. It is little wonder that Eyberg and colleagues concluded that treatment maintenance of PT is suspect and suggested either the inclusion of booster sessions or teaching specific skills to prevent relapse are necessary for positive treatment outcomes to be maintained. Other studies indicate even a shorter timeframe whereby PT "looses" its effectiveness. For instance,

Kazdin and colleagues (1992) followed up on oppositional children treated solely through PT 1 year after the completion of therapy. They found that a number of child improvements evident immediately at posttreatment (namely an improvement on the total problem behavior score of the CBCL) were no longer evident at follow-up.

Even the notion that treated families demonstrate actual improvement immediately posttreatment has been contested. Jacobsen and colleagues (1984) suggested a more stringent test of success than tests of statistical significance. These researchers defined treatment success or clinical significance as either: (a) the average of the treatment group being in the nonclinical range posttreatment, or (b) a high percentage of the treatment group demonstrating at least a 30% change in problematic behaviors from baseline. Unfortunately, some studies examining PT fail to demonstrate successful change operationalized in such a manner. For instance, Kazdin and colleagues (1987a) found that only 35.3% of their treated group fell in the normal range on the CBCL externalizing scale immediately posttreatment. Consequently, the average of the treatment group on this scale was well above the clinical cut-off point, similar to the results of another study conducted that same year by these investigators (Kazdin, Esveldt-Dawson, French, & Unis, 1987b). Even the study by Adams (2001), cited earlier, failed to demonstrate a high degree of clinical significance, which was defined as the percentage of the groups that fell into the normal range after treatment (those in the nonclinical range at pretreatment were excluded from analysis). Only 38% of individuals in the treatment group were rated in the nonclinical range at posttreatment. Although the percentage of children in the treatment group who were in the nonclinical

range was larger than the wait-list control group (12%), the difference in clinical

significance is not as great as might be supposed by tests of statistical significance

alone. Still other researchers have found that only half of the mothers in a group of

treated CD children (ages 3 to 8) demonstrated a 30% reduction from pre- to

posttreatment regarding the frequency of critical interactions and negative childhood

behaviors (Webster-Stratton et al., 1989). Consequently, there are at least some

indications that many children treated with PT may still be in the clinical range at

posttreatment.

A final criticism of PT, when used in isolation, is that there are many significant

problems associated with childhood oppositional behaviors that the treatment generally

fails to address. It has been noted that PT does not attempt to generalize treatment

outcomes from home to school (or vice versa); consequently, parents and teachers are

often "not on the same page" regarding treatment (Taylor & Biglan, 1998). Other

investigators have noted that PT in isolation may be inadequate to deal with all the risk

factors that often interfere with treatment. Kazdin and Wassell (2000) looked to see if

secondary factors (e.g., family functioning as a whole, parental stress) would change

when childhood noncompliance and aggression were the targeted behaviors. Although

there were decreases in childhood behavior problems at posttreatment ($ES > .7$ as

measured by CBCL, parent daily report, and semistructured interview), small changes

($ES < .4$) for parent stress and family functioning were noted. Finally, there was no

change regarding marital satisfaction.

The results regarding parental stress seem particularly discouraging because

some propose that high levels of parental stress may be indirectly or directly linked to the intensity of oppositional behaviors in children (Dodge, Pettit, & Bates, 1994; Judge, 2003). In fact, correlational studies have demonstrated that behavior problems predict parental stress even when family and parent variables, such as SES, family size, and social support have been controlled (e.g., Konstantareas & Homatidis, 1989; Quine & Pahl, 1991; Sloper, Knussen, Turner, & Cunningham, 1991). Additionally, there is reason to believe that parental stress may negatively influence treatment. In a study utilizing a large sample ($n = 405$) of parents who referred their children (ages 2-15) for treatment, Nock and Kazdin (2001) found that parents who reported high parental stress (among other variables) were more likely to have lower expectancies for child therapy. In fact, parental stress was a better predictor of treatment expectancies than parental depression or the intensity of the child's initial behavior problems. These same investigators also found that these lowered expectancies were positively correlated with barriers to treatment attendance, treatment participation and premature termination. Consequently, it is likely that a successful form of treatment must address parental stress at some level in order to truly be effective.

Some hope for positively influencing this variable remains, however. Using regression equation analyses, Capaldi and Patterson (1994) examined the predictive power of several important contextual variables in the treatment of childhood oppositional behaviors. These researchers found that the predictive power of parental stress, which was negatively correlated with outcomes, was appreciably reduced when the families had adopted positive parenting practices. Because PT is proposed as a way

to help parents adopt such practices, it is logical to assume that PT may have a positive influence on parental stress. To test this idea, Weinberg (1999) treated several families of children with ADHD using a group PT program. Pre- and posttraining questionnaires indicated that parents noted a reduction in stress; however, these findings were considered only modest in size.

PT may not have an extremely strong influence on parental stress because, in isolation, it simply cannot address all the factors that commonly need to be addressed in this population. Surely, no treatment can be "all things to all people"; however, given that treatment outcomes (and even completion) can be dramatically affected by overlooked risk factors, it seems wise to consider that PT by itself may not be the complete solution for every family referred for treatment.

*Summary*

An extensive amount of data exist to support the idea that PT is an effective way to treat specific problematic behaviors of children. Furthermore, there is reason to believe that PT can be conducted in a cost-efficient and effective group format and over a shorter treatment duration (e.g., five to six sessions). Nevertheless, over 25 years after its inception, it still arouses a fair amount of controversy. Specific criticisms of PT fall into three categories: (a) treatment outcomes are not maintained over time, (b) a significant number of children still fall in the "clinical range" at the immediate conclusion of treatment, and (c) PT does not address all the significant risk factors (such as parental stress) that have a high likelihood of influencing outcomes. Regarding this last point, it has been suggested that PT is limited because of its exclusive focus on

parenting behaviors (Webster-Stratton & Hammond, 1997). The discussion will now turn to other potential factors, not accounted for by PT, which might account for the nonresponse or relapse of some treated families.

<div align="center">An Examination of Childhood Cognitive Deficits and

Cognitive-Behavioral Therapy for the Treatment of

Oppositional Behaviors</div>

The following section will expand on the earlier discussion regarding potential risk factors that are assumed to negatively influence treatment outcomes. However, unlike the previous discussion, this section will focus on identifying childhood variables, not taken into account by PT, which may play a significant role in treatment outcomes. Data will be presented on certain cognitive deficits that have been noted in children with behavior disorders, namely a deficit in problem solving. Consequently, the theory and data surrounding this deficit will be discussed. This section will continue by examining data supporting problem-solving skills training (PSST), a specific form of cognitive-behavioral therapy (CBT) that teaches children problem-solving skills to offset these deficits. The pros and cons of this approach will be discussed, along with a comparison of PSST with other psychotherapeutic orientations to treatment.

*General Childhood Cognitive Factors not*
*Addressed by PT*

Given the previously supported findings that PT outcomes often fail to produce

robust or long-lasting change in all treated families, it is not difficult to conclude that there are factors related to parent or family dynamics that are not suitably addressed by the treatment. For instance, several researchers have demonstrated that parent dysfunction and family adversity predict treatment dropout, degree of change among those who remain, and maintenance of treatment gains (Dumas & Whaler, 1983; Kazdin, 1990; Patterson, 1986). Citing such findings, Kazdin and colleagues (1992) stated, "Thus, added and related to the task of reducing antisocial child behavior is the need to contend with parent and family issues that materially affect treatment process and outcome" (p. 733). Webster-Stratton (1990b) echoed this concern when demonstrating that treated families had difficulty maintaining strategies taught during therapy due to their own interpersonal and family issues (stress) or their child's difficult temperament.

Nevertheless, it may be argued that PT, in the hands of an adept clinician, can still address many of these concerns. For instance, a clinician working with parents may help them respond to stress and a difficult childhood temperament in a more adaptive and healthy manner. Similarly, a clinician may help parents work through dysfunctional styles of relating. In fact, some argue that the very basis for PT is helping families work through poor interaction patterns (Hembree-Kigin, & McNeil, 1995). Many of these concerns, which may be appropriately termed parent factors, were addressed in the previous discussion. However, there are some specific child factors that are not taken into account by PT. Such factors generally refer to the child's cognitive style of processing social interactions and demonstrated social skills.

There is a substantial amount of data indicating that children with conduct disorder are different from their peers across a number of dimensions. For instance, a construct referred to as executive cognitive functioning (ECF) involves the self-regulation of goal-directed behavior, which includes such higher order processes as attentional control, cognitive flexibility, planning, and self-monitoring (Lochman et al., 2000). Research indicates that children (especially boys) with ECF deficits have been found to have higher rates of reactive aggression, even years after being first assessed (Giancola, Moss, & Martin, 1996). Some noted that these deficits may be learned from primary caregivers (Lochman & Dodge, 1998); however, such a deficit would obviously pose a significant problem in treatment because the child's reaction to the anger-inducing event may be due to the child's perception and appraisal of the event rather than to the event itself (Lochman et al.).

Other theories attempt to paint a more comprehensive picture of how an aggressive child's cognitive abilities may differ from the norm. Over 10 years ago Crick and Dodge (1994) presented a social-information processing model of children's social adjustment, which delineates several steps children use when processing and reacting to their environment. First, a child encodes cues related to social interactions. These cues can be either external (e.g., what is said by others) or internal (e.g., the amount of arousal the youth is experiencing at that time). Next, the child interprets the cues and either clarifies a goal for the interaction or attempts to regulate the arousal being experienced. Next, the child constructs various responses to either regulate arousal or achieve the desired goal. Finally, a response decision is made based on an

evaluation of what the child perceives to be positive outcomes. At each stage of this process, the child uses a memory store of learned social schema to proceed from stage to stage.

Crick and Dodge (1994) proposed that while children with behavior disorders follow this process, just as other children, they differ from their "normal" peers in several ways. First, children with behavior disorders have a deficit in *encoding* information from their environment (see step 1 above). Children who are aggressive, according to theory, selectively attend to any cues of hostility in the environment. Next, these children have what is referred to as a *hostile attributional bias* or faulty mental representation. In step 2 of the model above, they perceive either neutral or unknown stimuli from the environment as being hostile, while other children do not necessarily perceive the same stimuli as being threatening. Simply put, they perceive threat where none exists, and are more likely to believe that retaliation is in order. A third difference between children who demonstrate aggressive or oppositional behaviors and other children, according to Crick and Dodge, is that oppositional children do not have access to as many socially acceptable ways of responding (step 3 and memory store), a tendency that is referred to as *response access*. In other words, only aggressive or hostile ways of responding are called up from their memory store. Finally, Crick and Dodge noted that these children frequently believe that socially unacceptable ways of responding will lead to positive outcomes, referred to as a deficit in *response evaluation*. When determining how to respond, these children often give an inappropriate amount of consideration and approval to aggressive or oppositional

actions. This deficit corresponds to the fourth stage mentioned above. Crick and Dodge believed that these four deficits in the social information-processing model are likely to be causal of behaviors that lead to the negative social status or labels often given to behavioral disordered children.

Many of the tenants of Crick and Dodge's (1994) theory have been empirically supported. For instance, data indicate that children who are aggressive are twice as inaccurate as children with depression in labeling the emotions of others. Furthermore, when ambiguous situations are presented to aggressive children, they are 50% more likely than peers to infer hostile intent (Dodge, 1993). Such findings have been replicated (Dodge & Prince, 1994; Walker et al., 1995) and confirm the deficits of encoding and hostile attributional bias.

An early study by Richard and Dodge (1982) examined the concepts of response access and response evaluation. In this study, 240 second- and fifth-grade boys were classified into three groups based on teacher nomination: popular, aggressive, and isolated. Boys in each group were presented with six hypothetical situations and were asked to (a) come up with as many alternatives as they could to resolve the situation, and (b) evaluate the effectiveness of alternatives given to them by the experimenter. The results indicate that boys in the popular group produced more solutions than boys in either of the other two groups, who produced approximately the same number of solutions. Richard and Dodge noted that the initial solution presented by members of each group was considered effective, but only the popular boys continued to produce effective solutions while boys in the other groups eventually produced aggressive or

ineffective solutions. In commenting on these findings, Richard and Dodge remarked:

> When more than one effective solution must be generated...deviant boys are
> relatively less skilled at doing so. It may be that the behavioral problems of
> these children occur in situations when the initial behavioral solution is not
> sufficient and alternative behaviors are necessary. (p. 232)

These results confirm that children with oppositional behavior generally have a deficit

in response access or generating additional effective solutions. A later study by Dodge

and Prince (1994) confirmed that these children might evaluate aggressive solutions

more positively than their peers (response evaluation). Similar to the results cited

earlier, these investigators found that in comparison with normal controls, children with

oppositional behaviors: (a) have difficulty reading facial cues, (b) distort or underutilize

social cues, and (c) generate fewer prosocial ways of solving interpersonal problems.

The results also indicate that these children anticipate fewer consequences for

aggression and, consequently, rate aggressive responses as being more favorable.

It should be noted that not all of Crick and Dodge's (1994) theory has been

supported. For instance, some have questioned if children who are frequently

aggressive rate aggressive actions as highly as suggested. Even in the Richard and

Dodge (1982) study cited earlier, these investigators commented, "The data support the

notion that deviant boys are deficient in cognitive problem-solving skills if generating

alternative solutions but are not deficient in the evaluation of presented solutions" (p.

226). In response, Dodge (1993) commented that the child's own emotional

involvement was crucial. In other words, Dodge theorized that children with behavior

disorders can perceive an aggressive solution as being ineffective if they are only an

observer to an event; however, they will typically evaluate the aggressive solution as

being effective if they are personally impacted by the situation.

Concern regarding these cognitive skills seems warranted. Recently, Webster-Stratton and Lindsay (1999) compared children with ODD (ages 4-7) with a matched group of normally developing children. Not only did the results indicate that the former group displayed significantly more negative attributions and fewer prosocial problem-solving strategies, but these children also demonstrated a significant delay in social skills during play interactions when compared to the control group. These investigators hypothesized that rather than these phenomena (e.g., social skills delay, cognitive deficits) simply co-occurring, the cognitive deficits had a causal effect on observed play behaviors. Other investigators have shown how an inability to demonstrate appropriate social skills in childhood can lead to a poor long-term prognosis. Loeber and Farrington (2000) demonstrated that children who are often thought of as being oppositional with poor social skills were at increased risk for long-term peer rejection and further poor social skills development. Still others have indicated that by middle school a child's negative reputation and peer group rejection may be well established (Coie, 1990). Consequently, many therapists recommend teaching children problem-solving skills to remedy the cognitive deficits that are thought to interfere in appropriate social relationships (Kazdin, 1996; Kazdin et al., 1992; Kendall & Braswell, 1985; Lochman, 1985). The evidence supporting or refuting PPST in comparison with other therapy modalities (e.g., interpersonal therapy, play therapy), will be discussed next.

*Outcome Studies Regarding Problem-*
*Solving Skills Training Independent*
*of PT*

In order to determine if teaching problem-solving skills actually effect change on the cognitive deficits that have been discussed, its effectiveness must be determined independent of PT modules. In one such study Arbuthnot and Gordon (1986) enrolled "juvenile adolescent delinquents" and controls in a "moral reasoning development program," which was designed to teach the adolescents empathy and appropriate responses in social situations. The intervention lasted for 16 to 20 weeks (45-minute sessions). The results indicated that juvenile offenders advanced an average of one moral reasoning stage, as defined by the Kohlberg Moral Judgment interview (controls demonstrated no change). Juvenile offenders also improved on several behavioral indexes, including: a decrease in the number of behavioral referrals to the principal's office, a decrease in the number of court or police contacts, a decrease in school absenteeism; and an increase in GPA (English and humanities classes). More impressively, these investigators showed that the juvenile group all maintained these gains approximately 9 months after treatment ended. It should be noted that an improvement in tardiness was seen at posttreatment, but was not maintained at the 9-month follow-up interval. Furthermore, there was only a mild improvement in teacher ratings of school adjustment. Based on these data it appears that specific training in empathy and social skills can have a tangible impact on youths' school adjustment; although, change according to teacher ratings was more difficult to demonstrate.

Other researchers have produced similar findings. Lochman, Burch, Curry, and

Lampron (1984) assigned 76 aggressive boys (ages 9 to 12) to one of four groups: anger

coping (a CBT treatment similar to PSST), goal setting (GS), CBT + GS, and no

treatment (Lochman et al.). The CBT treatment taught the youth specific cognitive

skills to handle anger and perceive problematic social situations differently. In the goal

setting condition, the child's goals were established and monitored daily by teachers.

The youth received rewards for completing their behaviorally based goals. Youths in

all treatment groups (other than the no-treatment condition) attended 12 individual

sessions. Compared to the GS only condition, children in the CBT only and CBT + GS

conditions demonstrated: (a) decreases in aggressive behaviors in the classroom, (b)

decreases in aggression at home, and (c) improved self-esteem, although this last

finding was not statistically significant. No significant changes on such variables as the

frequency of passive off-task behaviors, the number of alternatives generated on a

problem-solving measure, and an increase in social acceptance of peers and teachers

were noted for any of the groups.

In an earlier study, which also compared behavioral and cognitive behavioral

treatments, Kendall and Braswell (1982) found that the inclusion of problem-solving

training (compared to behavioral treatment alone) was associated with a larger decrease

in off-task verbal behaviors (e.g., talking in class), off-task physical behaviors (e.g.,

getting up, running around in class), and harassing others verbally. Nevertheless, these

authors noted that parental ratings on problem behaviors did not improve, although

youth who participated in the problem-solving intervention were more likely to improve

on a self-concept rating scale. Furthermore, any improvements demonstrated

immediately posttreatment were not maintained at 1-year follow-up. These data indicate that, despite some promising indicators, teacher, peer, and parental perception of child improvement remains largely unchanged.

Nevertheless, there is some indication that youth can be taught social skills. Studies have indicated that children treated with problem-solving training demonstrate improvements in assertiveness, role-playing skills, and social skills relative to "activity" group children (Kolko et al., 1990). Similarly, other investigators have taught "peer coping skills" to third-grade children (Prinz et al., 1994). Based on naturalistic observations, the treated children in this study demonstrated improved prosocial coping compared to controls. However, once again, there was no effect on peer rating acceptance, although teachers rated treated children as being less aggressive (but still in the clinical range). One of the few studies to break this trend was completed by Kazdin and colleagues (1992), who demonstrated that problem-solving/social-skills training resulted in improvements on teacher reports of social competence over a PT-only condition. Although an improvement on teacher-rated behavior has been demonstrated in other studies (Kendall & Braswell, 1982), the idea that PSST creates change in the classroom (or home for that matter) is still in contention.

In fact, there are many criticisms that can be made of a PSST only form of treatment: many of which are very similar to those made regarding PT in isolation. These criticisms include: (a) outcomes are relatively limited, (b) outcomes are not maintained across time, and (c) outcomes do not generalize across settings. A few examples are in order. Some researchers have remarked that while PSST may produce

some improvement in social skills, it does little to improve actual conduct problems and may apply only to "older children" (> age 8; Coie, 1990; Spivack et al., 1976). Hudley and colleagues (1998) recently argued that while treated children may demonstrate some improvement in social skills, there is little evidence for the therapy's long-term effectiveness in reducing oppositional behaviors when used alone. For instance, Kazdin and colleagues (1987b) demonstrated that even when a group of children with aggression were involved in 20 or more sessions of problem-solving training, they only demonstrated minimal improvement regarding the frequency of oppositional behaviors and were still well above the clinical cut-off immediately after treatment. Other authors have commented that even when change is observed immediately posttreatment on aggressive behavior, the effect is rarely maintained over time (Lochman, 1985; Prinz et al., 1994). For instance, Guerra and Slaby (1990) treated incarcerated adolescents with a variation of PSST and followed their progress over time. Although initial posttreatment scores looked promising, the 2-year follow-up assessment indicated that recidivism rates were unaffected. Other researchers indicate that conduct disordered behavior returns to "baseline" in as short as 7-months posttreatment (Lochman & Lampron, 1988). Finally, the long-term effectiveness of PSST treatment on oppositional behaviors could not be confirmed in a recent meta-analysis (Beelmann, Pfingste, & Losel, 1994; Gresham, 1998). In both of these reviews the authors report a significant decrease in effect sizes at follow-up.

Unfortunately, other forms of treatment do not fare any better in teaching cognitive skills to aggressive youth. For instance, relationship-based treatment (RT) is

one of the most frequently used variations of child counseling and is advocated for a broad range of child clinical problems including antisocial behavior (Patterson, 1976). Although authors of some dated studies have demonstrated improvement using RT (Persons, 1966; Redfering, 1972), many other researchers have found that relationship-based therapy has little or no effect on problematic behaviors—even when assessed immediately posttreatment (Alexander & Parsons, 1973; Feldman, Caplinger, & Wodarski, 1983). Some suggest, when it comes to oppositional behaviors, the therapeutic relationship may be necessary but is insufficient by itself in effecting change (Alexander, Barton, & Schiaro, 1976). More recent reviews of the literature also concluded that relationship or play therapy techniques do not improve social skill outcomes as effectively as cognitive-behavioral treatments like PSST (Borduin et al., 1995; Brestan & Eyberg, 1998; Kazdin & Weisz, 1998; Weiss, Catron, Haris, & Phung, 1999).

For the present discussion, one example may suffice. Kazdin and colleagues (1987b) randomly assigned hospitalized children with ODD (ages 5 to 13) to: (a) a no-treatment control condition, (b) a problem-solving/social-skills training condition (PSST), or (c) a relationship therapy (RT) condition. Children were assessed with a variety of measures at pretreatment, posttreatment, and at 1-year follow-up. Kazdin and colleagues summarized their findings by saying that at the 1-year follow-up children assigned to the PSST group scored in a less problematic range than comparison children on behavior-problem rating scales (parent and teacher report). They also scored higher than children in RT on school performance. These findings highlight the conclusion

that PSST in isolation, while being far from a "silver bullet" treatment for oppositional behaviors in children, has more empirical support than other forms of individual psychotherapy.

Yet the question persists: with such a strong empirical basis backing up the treatment's theory, why is not PSST in isolation more effective in treating childhood oppositional behavior? One idea is that the treatment is designed for older children who are not simply operational in their thinking (Webster-Stratton & Hammond, 1997). Although some evidence suggests that older children (> age 10) benefit from PSST more than younger children (Adams, 2001; Durlak, Fuhrman, & Lampman, 1991), many studies have demonstrated positive outcomes with children as young as age 7 (Kazdin et al., 1987a, 1987b, 1992). A more likely explanation is that PSST-only treatments do not cover all the factors that maintain oppositional behavior. For instance, it has been noted that behavioral consequences for misbehavior are often not included in cognitive-behavioral or PSST treatments (Bierman et al., 1987). Therefore, it is little surprise that many researchers believe including parents in treatment is "best practice" when trying to establish generalization of skills and maintenance of change (Gross et al., 2003; Prinz et al., 1994). Most of these researchers emphasize the importance of teaching parents new skills either before or concurrent with cognitive-behavioral individual therapy because setting up home-based contingencies early in treatment, it is theorized, will motivate children to participate more fully in learning the skills offered by PSST. About half of the empirical studies (cited later), which involve participant families in both PT and PSST, exposed participants to PT first (Dishion &

Andrews, 1995; Kazdin et al., 1987a), while the other half exposed participants to PT

and PSST simultaneously (Kazdin et al., 1992; Webster-Stratton & Hammond, 1997).

*Summary*

Children with oppositional behaviors have been noted to demonstrate a variety

of cognitive deficits (e.g., hostile attributional bias, encoding, response access, faulty

response evaluation) when it comes to social interactions or the way they solve

interpersonal problems. Consequently, teaching oppositional children problem-solving

skills has been proposed as a way to treat these deficits. Unfortunately, the results of

studies that have used PSST in isolation have produced rather mixed findings. It

appears that cognitive-behavioral treatments like PSST (a) have more empirical

evidence supporting them than other forms of treatment, and (b) can be effective in

teaching children basic social skills and alternative ways to deal with problems.

However, there is some doubt about whether or not these skills generalize outside of the

laboratory or across settings. There are also some findings indicating that treatment

outcomes are not maintained over time and are only effective in treating social skills,

not oppositional or aggressive behaviors. One line of thought suggests that PSST does

not produce lasting, effective change because it neglects the environmental factors of

the child's world. PT often addresses these environmental factors, especially when

offered early in treatment. Consequently, it is believed that the combination of

problem-solving skills training and PT will produce greater change than either form of

treatment in isolation. The remaining portion of this literature review will be spent

examining the limited number of studies that have combined these two treatment approaches.

<center>Combining Treatments: Outcome Literature When PT and PSST

Are Both Used in the Treatment of Oppositional Children</center>

Although many studies have examined the efficacy of PT and PSST therapies in isolation, few studies have exposed treatment participants to both to attempt to determine if a combined approach is more beneficial. This final section of the literature review will examine the relatively few experimental studies that have used both forms of treatment with oppositional children. It will also present what is currently accepted as best practice in the treatment of oppositional behavior, and what questions still remain to be answered. This discussion will lay the foundation for the current intervention study. Finally, the research questions of the current study will be presented.

*Review of Experimental Studies That*
*Combine PT and PSST Treatments*

The preceding sections examined theory and evidence related to two different treatment approaches to oppositional behaviors in children: PT and problem-solving training. As indicated previously, there are credible reasons to question the efficacy of these approaches when used in isolation. It comes as no surprise that many investigators recommend combining these two forms of treatment to create more sustained and robust change (Taylor & Biglan, 1998; Webster-Stratton & Hammond,

1997) because each treatment is proposed to address different theoretical risk factors. Nevertheless, relatively few experimental studies have been conducted to validate the efficacy of this recommendation.

A study by Kazdin and colleagues (1987a) is an exception to this rule. These experimenters randomly assigned hospitalized children and their parents ($n = 40$) to either a waitlist control (which was to represent the effect of hospitalization in general) or a PT plus problem-solving skills training (PT + PSST) condition. The dependent measures of the study, which were assessed pretreatment, posttreatment (1 month after release), and at 12-month follow-up, were ratings of overall aggression according to teacher and parent report. Prosocial behavior, as measured by the social competency scales of the CBCL, was also used as a dependent measure. Results of the study (based largely on tests of statistical significance) were that children in the treatment condition demonstrated greater improvement than children in the control condition on all variables at both posttreatment and 1-year follow-up. However, these findings are tempered by the additional result that the average $T$ score of the treated group never fell in the normal range on any of the measures of aggression. Kazdin and colleges referred to these findings as a "clinically small impact" (p. 424).

The results of the study are also limited because of the treatment design. Namely, the treatment group was not compared to either PT or PSST treatments in isolation; therefore, it was impossible to comment on the importance of either treatment component. Kazdin and colleagues (1987a) acknowledged this limitation when they stated:

It might be that PT-PSST appeared effective because of the weak control condition with which it was contrasted. Possibly a stronger alternative treatment such as intensive individual or family therapy would have effected *similar changes* as the PT-PSST group. Evidence in support of this possibility is difficult to cull from the literature...the combination of PT and PSST raises the question of *whether both were necessary* and, if so, their relative contributions. (p. 423, italics added)

Therefore, the results of this study indicate that combining PT and CBT can help maintain treatment gains over time; however, relatively few participants demonstrated aggressive behaviors in the normal range after treatment was completed. In fact, the changes in aggressive behaviors are very similar to those percentage changes reported when PSST in isolation was administered to the children in another study (Kazdin et al., 1987b). Nevertheless, one cannot determine if PSST actually targeted what it claimed (cognitive processes) because the control did not include PT and changes in social skills could have resulted simply from PT combined with any other form of treatment that gave them access to one-on-one attention from a therapist.

Other studies have taken Kazdin's limitations into account. Webster-Stratton and Hammond (1997) conducted one such study. Approximately 95 children between the ages of 4 and 8 were randomly assigned to one of four treatment conditions: PT only, CBT only, PT + CBT, or a waitlist control (CON). All CBT-treated participants attended 15 or more of 22 sessions, which used videotaped modeling and dinosaur puppets to demonstrate social interactions (in this way the CBT treatment closely paralleled PSST). Families were assessed pretreatment, 2 months after treatment, and approximately 1-year later regarding parental stress, parent report of child aggressive behavior, and teacher report of aggressive behavior. Social skills were also assessed

using the Walley Child Social Problem-Solving Detective Game. Finally, children were assessed in their natural environment during interactions with their parents and peers using a dyadic interactive coding system. In addition to running statistical significance tests (ANCOVA design), a result was deemed to be "clinically significant" if (a) the group mean on the parent measure of aggression was in the nonclinical range, (b) if there was at least a 30% reduction in the frequency of problem behaviors reported by mothers, (c) if there was at least a 30% reduction in mother criticism as measured by naturalistic observation, and (d) if there was at least a 30% reduction in childhood defiance as measured by naturalistic observations.

The results of this study demonstrated more clinically significant findings than that of Kazdin and colleagues (1987b). The data indicated that 80.8% of PT mothers and 70% of CBT + PT mothers reported that their child's oppositional behavior fell in the normal range on the parent measure (CBCL), compared with 37% of the CBT-only mothers and 27.3% of the CON mothers. Regarding a daily report of oppositional behaviors, there was a 30% reduction in behaviors for 88.9% of the CBT-only mothers, 92.3% of the PT-only mothers, and 90.9% of the CBT+ PT mothers (27.3% for CON mothers). These latter results indicate that all of the treatment conditions produced immediate clinically significant change in oppositional behavior; and, therefore, support the notion that perhaps a combined approach is not necessary. Nevertheless, the 1-year follow-up findings demonstrated that the 30% reduction in pretreatment levels of oppositional behavior was maintained by approximately 73% of the CBT children, 60% of the PT children, and 95% of the PT + CBT children. Regarding this latter finding,

Webster-Stratton and Hammond (1997) remarked, "Analysis of the clinical significance of the three interventions also suggested the superiority of the CBT + PT condition …the improvements in both sets of factors apparently reinforce each other over time to produce less child deviance at home" (p. 107). Furthermore, it was noted that when treatment contained the PT component there was also a substantial reduction in parental negative comments compared with the CON- or CBT-only conditions. In contrast, when treatment contained CBT treated children demonstrated significantly more positive potential solutions to social problems than control- or PT-only children, as measured by naturalistic observation and testing. Clinically significant change was demonstrated in child negative behaviors across each of the three treatment conditions; however, children had a higher likelihood of maintaining outcomes if the treatments were combined. Furthermore, there is some indication that PT must be included to greatly reduce initial rates of oppositional behaviors, while PSST targets specific problem-solving skills (e.g., coming up with additional solutions) that lead to positive peer interactions. Simply put, the two treatments seem to target what they said they would and there is some justification for combining treatments to help maintain outcomes.

Nevertheless, there are still some problems with this study. First, the study was conducted with young children. Hence, there is no way to tell if the results will generalize to children above the age of 8. Second, the study did not compare CBT with another form of child-focused treatment. As with the Kazdin and colleagues (1987a) study, there is no way to tell if any form of individual treatment accompanied by PT

would have demonstrated similar outcomes regarding social problem-solving skills. This latter concern is a noteworthy "gap" in the literature and will be discussed in greater detail later.

Another study by Kazdin and colleagues (1992) attempted to apply the findings of Webster-Stratton and Hammond to older children. Children (ages 7-13, $n = 97$) were randomly assigned to one of three treatment conditions: PT + PSST, PSST only, or PT only. Children were assessed for social competence (teacher and parents), aggressive behaviors (teachers and parents), child report regarding delinquent behaviors (self-report Delinquency Checklist), and parent/family functioning (Parent Stress Index, Beck Depression Inventory, and Family Environment Scale). Initial hypotheses were that children and parents in the combined condition would demonstrate marked and durable changes in functioning.

On measures of parental stress, depression, and other symptoms, only families in the combined treatment demonstrated substantial changes (confirmed hypothesis). When comparing group means on the Total Behavior Problem scores of the CBCL, improvement was seen across groups, but for the combined treatment this mean entered the normative level at follow-up (90th percentile used as the clinical cutoff). When examining the proportion of cases in each group that fell in the normal range on the CBCL, at both assessment points (posttreatment and 1 year follow-up), the percentage was higher in the combined treatment group (posttreatment = 60%, 1 year follow-up = 50%) than in either the PSST only (posttreatment = 26.7%, 1-year follow-up = 13.3%) or PT only (posttreatment = 18.2%, 1-year follow-up = 9.4%) conditions.

The results of this study are encouraging. Children and parents in all groups demonstrated improvement; however, those in the combined treatment group had more positive outcomes (parental stress, depression) and treatment gains were more likely to be maintained over time. These results are similar to the findings of Webster-Stratton and Hammond (1997), but with an older group of children. However, the same caveat applies: we cannot definitively say the superiority of the combined group was due to treatment components unique to PSST or the general treatment factors supplied by being involved in individual treatment. Obviously, in order to make such a claim PSST plus PT must be compared with another form of child-focused treatment plus PT.

*What Conclusions Are Empirically Supported and Which Are Not*

As has been demonstrated in this literature review, treating oppositional behaviors in youngsters is a complex and multifaceted issue. Obviously, there are many things yet to learn about appropriate treatment for such populations; however, a few general principles are commonly accepted as being empirically supported. First, the ideal treatment for oppositional behaviors should include some form of behavioral PT—even when such training is of a brief duration (e.g., 6-10 weeks; see Nixon et al., 2003). Despite its limitations, no other treatment modality has been shown to have a more significant short-term impact on the very behaviors for which oppositional children are often referred (e.g., aggression, tantruming, noncompliance). Although PSST in isolation may improve oppositional behaviors, a child has a much greater likelihood of being in the nonclinical range or demonstrating at least a 30% reduction in oppositional

behaviors (both are metrics commonly accepted as being indicative of clinically significant change) when the parents are directly involved (and involved early) in treatment. Nevertheless, PSST in isolation has been demonstrated to be more efficacious than any other form of individual therapy.

It comes as little surprise, therefore, that combining treatments has been recommended to maximize clinical outcomes: PT because it theoretically targets contingencies in the child's environment, and PSST because it is hypothesized to affect the cognitive skill deficits often demonstrated by oppositional children. Kazdin (2002) recently echoed this sentiment when stating,

> For a treatment to be effective, it is likely that several domains have to be addressed explicitly within the sessions…. Although one cannot say for certain what techniques will not work, it is much safer to say that treatments that neglect multiple domains are likely to have limited effect. (p. 76)

The studies cited in this literature review seem to corroborate this recommendation. For instance, children exposed to PSST often demonstrated improved social problem-solving skills, as measured by assessment instruments and naturalistic observation. Furthermore, families exposed to both forms of treatment were more likely to maintain treatment gains up to a year after study completion, contrary to the criticism of maintenance leveled at each form of intervention when used in isolation. Finally, a combined treatment approach was demonstrated to be more efficacious regarding additional clinical risk factors (e.g., maternal depression, family stress, perceived adequacy of treatment) than either treatment in isolation; however, the data supporting a reduction in parental stress is considered rather "moderate" at best.

Despite these findings, some questions still remain. First, the studies these

findings are based on are relatively few and far between. Because only a handful of studies have attempted to combine treatment approaches for children between the ages of 4 and 13 ($n = 4$), one must be cautious regarding the generalizations of these findings until they are further replicated. Second, although one study compared PSST in isolation with other forms of therapy in isolation (Kazdin et al., 1987a), no study, to our knowledge, has compared PT plus PSST with PT plus another form of treatment. This appears to be a significant gap in the literature because it is currently impossible to say that *only* the combination of PSST and PT will produce superior outcomes. Perhaps any type of therapy in combination with PT would produce similar improvement. Although theory may argue otherwise, it is not currently advisable to exclude this possibility based on the scientific literature. In other words, change may be due to some other underlying process rather than remediation of cognitive skill deficits. Kazdin (2002) recently noted that "although evidence has shown that cognitive processes change with treatment, evidence has not established that change in these processes mediates or is responsible for improvements in treatment outcomes" (p. 70). Simply put, few researchers have demonstrated that acquisition of problem-solving skills is the necessary therapeutic agent needed to decrease the frequency of oppositional behaviors in children.

Perhaps a decrease in oppositional behavior is related to factors that are present in most form of individual psychotherapy. A relatively recent emphasis in psychotherapy literature has involved defining nonspecific factors related to therapeutic improvement that are common to most forms of psychotherapy. Some of these

nonspecific factors include therapeutic alliance (a sense of being supported, encouraged, and understood by the therapist), systems of explanation (helping the patient understand their problems and suggest ways of resolving them), opportunity to express emotions/ ventilate problems (environment provided for patient to express feelings and wishes), and positive expectancy of change (patients develop expectation and hope of symptom relief; Safer & Hugo, 2006). In order to determine if increasing a child's capacity to problem-solve social situations is the therapeutic agent that actually produces change, the teaching of such skills needs to be compared with a treatment that includes exposure to the nonspecific factors of therapy but no exposure to problem-solving strategies.

Nondirective therapies, largely based on methods employed in play therapy, include these nonspecific factors without teaching the child specific skills, like problem solving. Axline's (1982) outline of the central tenants of play therapy are illustrative of a nondirective approach to treatment. These central tenants include: (a) the therapist develops a warm, friendly relationship with the child in which good rapport is established as soon as possible; (b) the therapist unconditionally accepts the child; (c) the therapist establishes a feeling of permissiveness in the relationship so that the child feels free to express his feelings completely through play; (d) the therapist recognizes feelings the child is expressing and interprets those feelings for the child to help them gain insight; (e) the therapist respects the child's ability to solve problems once given an opportunity to do so—it is the child's responsibility to make choices and to institute change; (f) the therapist does not attempt to direct the child's actions or conversation in any manner—the child leads the way and the therapist follows; and (g) the therapist

establishes only those limitations that are necessary to ensure the child and therapist's safety. As can be deduced from this brief description, play therapy exposes the child to the nonspecific factors without teaching explicit skills. Consequently, it represents a comparable "placebo" treatment that can be used when trying to ascertain the effect of more technique- or skill acquisition-driven psychotherapies like PSST. A variant of play therapy, referred to as nondirective therapy, will be used in the current study and is described later in the methods section of this paper.

*Purpose and Objectives*

This study was designed to fill significant gaps in the literature. No study has compared PSST with another form of treatment when both treatments also include PT. Consequently, it is impossible to tell if treatment outcomes are a function of PT and PSST or PT and exposure to the nonspecific factors found during the course of individual psychotherapy in general. Comparing PSST with a nonspecific form of treatment after participating families have received PT will allow us to isolate the effect of general therapeutic factors, like empathy and individualized attention, to see if PSST adds anything "extra" to outcomes. Second, cognitive theorists believe that teaching children problem-solving skills will improve social skills *and* decrease the frequency of oppositional behaviors. While some researchers have noted a relationship between PSST and an improvement in social skills, few studies have demonstrated that an increase in social skills translates into a reduction of acting out behaviors. Perhaps specific training in problem-solving skills is unnecessary. After families have gone through behavioral PT, children may simply exhibit greater social skills if they

experience a warm therapeutic relationship. Again, it is difficult to answer such questions without directly comparing PSST and other forms of treatment that do not include training in problem-solving skills.

In the present study, PT was provided to families with children exhibiting oppositional behaviors (ages 7-12). Children of these families were then randomly assigned to one of two treatment conditions: PSST or nondirective treatment. Parents completed 6 weeks of group PT, and then the children completed 6 weeks of individual therapy in one of the two conditions. Assessments were conducted at four time intervals: pretreatment, post-PT, postindividual therapy, and 6-week follow-up. If cognitive processes underlie disruptive behaviors, as theorized, then children in the PSST group should demonstrate a greater decrease in oppositional behaviors and a greater increase in social skills than those in the nondirective group, who will be exposed to general therapeutic factors but will not be taught specific problem-solving skills. Therefore, the following research questions were of primary interest in this study.

1. At the conclusion of individual therapy and at follow-up, do the children of families involved in PT + PSST demonstrate a greater improvement in social skills than children of families involved in PT + nondirective therapy?

2. At the conclusion of individual therapy and at follow-up, do the children of families involved in PT + PSST demonstrate a greater decrease in oppositional behaviors and parental stress than children of families involved in PT + nondirective therapy?

Regarding the first research question, it is theorized that PSST targets specific cognitive processes (problem solving); therefore, it was hypothesized that children in the PT + PSST group would demonstrate a greater improvement in social skills than those involved in the PT + nondirective group at both postindividual therapy and follow-up assessment intervals. Regarding the second research question, it is theorized that targeting both parenting skills and child cognitive skills will lead to greater reductions in parent-reported oppositional behaviors and stress. It was hypothesized that, while children in both treatment conditions would demonstrate a decrease in oppositional behaviors following treatment, children in the PT + PSST group would demonstrate a greater decrease in oppositional behaviors at postindividual therapy and follow-up than children in the PT + nondirective condition. It was further hypothesized that the parents of the children in the PT + PSST condition would report a greater corresponding decrease in parental stress at these same time intervals.

CHAPTER III

METHODS

Participants

Parents and children from 26 families participated in this study. In these

families, 13 children were randomly assigned to the PSST condition, and 13 children

were assigned to the nondirective condition. In all families except one, mothers

attended the PT sessions. Mothers were required to complete all assessment measures

at each of the four time intervals (described below). Thirteen of the fathers attended

three or more of the PT sessions (seven in PSST and six in nondirective group), while

the rest of the fathers either attended only one session (usually the first session) or none

at all.

The child participants consisted of 9 girls and 17 boys whose mean age was 8.27

($SD = 1.9$) and mean grade was 2.9 ($SD = 1.2$). The majority of the children were

Caucasian ($n = 23$), with one child being of Asian descent (in PSST group) and two

children being of "mixed" ethnicity (one in the PSST group and one in the nondirective

group). Only one of the children came from a single-parent home (assigned to the

nondirective group), with most of the parents ($n = 24$) reporting that they lived with

their child "full-time" over the previous 12 months. Education levels of mothers were

evenly distributed with approximately one third of mothers reporting a high school

education, one third reporting "some college/technical degree," and one third reporting

a college degree. Table 1 summarizes the demographic data for the entire sample by

Table 1

*Demographic Characteristics*

| Variable | Total sample ($n = 26$) | | PSST group ($n = 13$) | | Nondirective group ($n = 13$) | |
|---|---|---|---|---|---|---|
| | $n$ | % | $n$ | % | $n$ | % |
| Gender | | | | | | |
| Male | 17 | 65.4 | 10 | 76.9 | 7 | 53.8 |
| Female | 9 | 34.6 | 3 | 23.1 | 6 | 46.2 |
| Ethnicity | | | | | | |
| Caucasian | 23 | 88.5 | 11 | 84.6 | 12 | 92.3 |
| Asian | 1 | 3.8 | 1 | 7.7 | 0 | 0 |
| Biracial | 2 | 7.7 | 1 | 7.7 | 1 | 7.7 |
| # of parents in the home | | | | | | |
| Two-parent household | 25 | 96.2 | 13 | 100.0 | 12 | 92.3 |
| One-parent household | 1 | 3.8 | 0 | 0.0 | 1 | 7.7 |
| Grade | | | | | | |
| First | 3 | 11.5 | 1 | 7.7 | 2 | 15.4 |
| Second | 7 | 26.9 | 2 | 15.4 | 5 | 38.5 |
| Third | 10 | 38.5 | 7 | 53.8 | 3 | 23.1 |
| Fourth | 3 | 11.5 | 1 | 7.7 | 2 | 15.4 |
| Fifth | 3 | 11.5 | 2 | 15.4 | 1 | 7.7 |
| # of months in past year where parents lived with the child "full time" | | | | | | |
| 11-12 months | 24 | 92.3 | 13 | 100.0 | 11 | 84.6 |
| 9-10 months | 1 | 3.8 | 0 | 0.0 | 1 | 7.7 |
| 7-8 months | 1 | 3.8 | 0 | 0.0 | 1 | 7.7 |
| # of other children in the home | | | | | | |
| 0 | 2 | 7.7 | 0 | 0.0 | 2 | 15.4 |
| 1 | 11 | 42.3 | 6 | 46.2 | 5 | 38.5 |
| 2 | 5 | 19.2 | 1 | 7.7 | 4 | 30.8 |
| 3 | 2 | 7.7 | 2 | 15.4 | 0 | 0.0 |
| 4 | 4 | 15.4 | 3 | 23.1 | 1 | 7.7 |
| 5 | 2 | 7.7 | 1 | 7.7 | 1 | 7.7 |
| Adopted | 2 | 7.7 | 0 | 0.0 | 2 | 15.4 |
| Currently taking medications? | | | | | | |
| Yes | 3 | 11.5 | 2 | 15.4 | 1 | 7.7 |
| No | 23 | 88.5 | 11 | 84.6 | 12 | 92.3 |

*(table continues)*

| Variable | Total sample ($n = 26$) | | PSST group ($n = 13$) | | Nondirective group ($n = 13$) | |
|---|---|---|---|---|---|---|
| | $n$ | % | $n$ | % | $n$ | % |
| Comorbid for ADHD, LD, or health problems? | | | | | | |
| Yes | 8 | 30.8 | 4 | 30.8 | 4 | 30.8 |
| No | 18 | 69.2 | 9 | 69.2 | 9 | 69.2 |
| Comorbid for depression or anxiety? | | | | | | |
| Yes | 11 | 42.3 | 7 | 53.8 | 4 | 30.8 |
| No | 15 | 57.7 | 6 | 46.2 | 9 | 69.2 |
| Yearly income: | | | | | | |
| $15,000 - $19,999 | 2 | 7.7 | 2 | 15.4 | 0 | 0.0 |
| $20,000 - $24,999 | 3 | 11.5 | 2 | 15.4 | 1 | 7.7 |
| $25,000 - $29,999 | 4 | 15.4 | 1 | 7.7 | 3 | 23.1 |
| $30,000 - $34,999 | 2 | 7.7 | 0 | 0.0 | 2 | 15.4 |
| $35,000 - $39,999 | 2 | 7.7 | 0 | 0.0 | 2 | 15.4 |
| $40,000 - $49,999 | 5 | 19.2 | 2 | 15.4 | 3 | 23.1 |
| $50,000 - $59,999 | 3 | 11.5 | 2 | 15.4 | 1 | 7.7 |
| $60,000 and over | 5 | 19.2 | 4 | 30.8 | 1 | 7.7 |
| Maternal education level | | | | | | |
| High School or GED | 6 | 23.1 | 4 | 30.8 | 2 | 15.4 |
| Some college/associates or tech. degree | 9 | 34.6 | 4 | 30.8 | 5 | 38.5 |
| College degree | 8 | 30.8 | 3 | 23.1 | 5 | 38.5 |
| Postcollege degree | 3 | 11.5 | 2 | 15.4 | 1 | 7.7 |
| Paternal education level | | | | | | |
| Grades 0-8 | 1 | 3.8 | 1 | 7.7 | 0 | 0.0 |
| Grades 9-11 | 1 | 3.8 | 0 | 0.0 | 1 | 7.7 |
| High School or GED | 5 | 19.2 | 4 | 30.8 | 1 | 7.7 |
| Some college/associates or tech. degree | 7 | 26.9 | 3 | 23.1 | 4 | 30.8 |
| College degree | 4 | 15.4 | 1 | 7.7 | 3 | 23.1 |
| Postcollege degree | 7 | 26.9 | 4 | 30.8 | 3 | 23.1 |
| Dad attended 3 or more PT sessions | 13 | 50.0 | 7 | 53.9 | 6 | 46.2 |

treatment group. A chi-square analysis was performed comparing demographic

characteristics between groups. No statistically significant differences were found.

Several families, who initially expressed interest in participating, did not attend

any portion of treatment ("Declined Treatment" group, $n = 10$). Additionally, several

families attended only part of the treatment before prematurely terminating ("Premature

Termination" group, $n = 6$). These groups are described further in the procedures section of this document.

Measures

*Demographics Form*

Mothers completed a demographic form at the beginning of the study (included in Appendix A). Mothers were asked to provide information about the child, including age, grade, ethnicity, and medication status. Mothers were also asked how long the child lived in the home and if the child exhibited symptoms of any comorbid conditions, such as attention deficit hyperactivity disorder (ADHD), a learning disability, anxiety or depression. Mothers also provided general information about the family, such as the ethnicity of the parents, household income, maternal education level, paternal education level, martial status, and whether or not the parents shared custody of the child.

*Parent Checklist*

This 20-item checklist was designed for this study to help identify any children demonstrating significant symptoms of pervasive developmental disorders such as Aspergers or Autism (included in Appendix B). The checklist was a list of specific symptoms commonly associated with these disorders, which was constructed by reviewing symptoms mentioned in the *DSM-IV* (APA, 1994). Items included, "my child avoids playing with other children"; "my child shows limited facial expressions"; "my child plays with the same kind of toys or engages in the same type of activity over and over again"; and "my child avoids eye contact." Mothers were asked to place a

check next to any symptom that described their child "usually—not just during tantrums or while he or she is misbehaving." If the mother endorsed more than three symptoms, the principal investigator called the mother before treatment to conduct a more thorough interview over the phone to rule out the presence of Autism or Asperger's disorder.

*Parent Questionnaire*

A parent survey consisting of nine items was adapted from the *Therapy Attitude Inventory* (TAI; Eyberg, 1992b) for use in the current study (included in Appendix C). The TAI has demonstrated high Cronbach's alpha level (.91) and reliability across a 4-month interval (.85). It also has adequate construct validity as demonstrated by moderate correlations (.36 - .45) between it and assessed behavioral change after treatment (Brestan, Jacobs, Rayfield, & Eyberg, 1999). It should be noted, however, that these psychometrics may not apply to the current questionnaire as it was altered from its original form for use in the current study. For instance, parents rated the extent to which they believed the individual therapy their child participated in was helpful. Because parental perception of treatment quality can influence outcomes, two questions were specifically used to assess parental perception regarding the treatment modality to which their child was assigned ("Regarding techniques for teaching my child new skills, I feel the individual therapy he/she participated in helped him/her learn…" : "no new skills," "a few new skills," "some new skills," "a reasonable amount of new skills," "or "many new skills"; "Overall, I feel the individual therapy my child participated in was…:" "not helpful at all," "a little helpful," "somewhat helpful," "helpful," or "very helpful"). Responses to these questions were converted to a score between 1 and 5 and

summed across both questions for a score ranging between 2 and 10, with a greater

score indicating a more positive perception of treatment quality. The rest of the items

on the questionnaire were more specific to the skills parents had learned in behavioral

PT, such as the quality of the parent-child relationship, the parent's confidence in

disciplining the child, and the extent to which the child's oppositional behaviors had

changed.

*Child Behavior Checklist/6-18.* Parents completed the CBCL for ages 6 to 18

(Achenbach & Rescorla, 2001), which includes 113 items rated on a 0-2-point scale.

Factor analyses of these items for separate age groups (ages 6 to 11 and 12 to 18) were

used to identify multiple behavior problem scales (first-order factors). Two broad-band

behavior problem scales (second-order factors) are the internalizing and externalizing

behavior problems scales, which reflect inwardly directed (e.g., depression, anxiety)

versus outwardly directed (aggression, delinquency) problems, respectively. In the

present study, the externalizing behavior problems score was one of the primary

measures used to assess oppositional behaviors, and Cronbach's alpha for this score

among participants of the current study was .85, demonstrating good internal

consistency. The Externalizing Behavior Problems score has also been found to

correlate highly with other measures of childhood conduct problems, such as the

Connors Behavior Rating Scale, and has high levels of reliability over two years ($r =$

.82; Achenbach & Rescorla). Similarly, the Total Score on the CBCL moderately

correlates (.49) with measures that assess how much a child's symptoms impacts his/her

functioning (Bastiaansen, Koot, & Ferdinand, 2005). The Internalizing Score on the

CBCL correlates significantly with the diagnoses of separation anxiety disorder (.22), avoidant disorder (.17), overanxious disorder (.35), simple phobia (.33), and social phobia (.21) among clinically referred children between the ages of 6 and 16 (Edelbrock & Costello, 1988). The CBCL is one of the earliest developed measures of childhood oppositional behavior (Achenbach, 1979). It is also one of the most frequently employed measures of childhood oppositional behavior and was used in the majority of the treatment studies cited in the literature review previously (Kazdin et al., 1987a, 1987b, 1992; Kazdin & Wassell, 2000; Webster-Stratton & Hammond, 1997).

Another important feature of the CBCL (as with other instruments used in this study) is that the composite scores significantly discriminate between referred and nonreferred children (Achenbach & Rescorla, 2001). Therefore, the Externalizing Behavior Composite has cutoff points that can be used to determine if a child is in the clinical, borderline, or nonclinical range regarding the extent to which they demonstrate oppositional behaviors. For instance, the cut-off range to be considered "borderline" on the composite scales used in the current study is between 60 and 63, with scores higher than 63 falling in the clinical range. This feature is clinically useful in the context of the current study because the percentage of children in each group that fall below the borderline cut-off point posttreatment are important in determining clinical significance.

*Parent Daily Reports (PDR).* The PDR (Chamberlain & Reid, 1987) consists of a list of negative behaviors commonly exhibited by children. The administration of the PDR requires parents of referred children to go over the entire list of negative behaviors at an orientation session and indicate which of the behaviors their child has

demonstrated. Parents are told that they will be called on a frequent basis and asked to go over the behaviors and indicate if any of them occurred during the previous 24 hours. The authors of this measure indicate that parents should be called no less than six times to achieve adequate split-half reliability ($r = .82$; Chamberlain & Reid). Other investigators have also had parents follow a similar procedure from a list of prosocial behaviors, which many parents generally want to see increase in frequency (Patterson, Chamberlain, & Reid, 1982; Webster-Stratton & Hammond, 1997). Although the prosocial behaviors were not included in the original development of the PDR, allowing parents to report on positive behaviors they have seen their child demonstrate allows a Total Positive Behavior Score to be developed. For the purposes of the current study, one of the positive behaviors included was the child's demonstrated ability to "stop and think when interacting with others." The rest of the positive items for the PDR were taken directly from the study by Patterson and colleagues.

The resulting measure had 23 items on the total negative behavior score and 29 items on the total positive behavior score. These two summary scores were used to assess if treatment impacted the frequency of a child's externalizing behaviors and prosocial problem solving skills. The inclusion of this measure was important because it has been noted that global measures of childhood behavior (like the CBCL) are susceptible to systematic bias and may have limited utility for the investigation of short-term changes (Achenbach, 1979; Chamberlain & Reid, 1987; Schelle, 1974); however, the PDR does not have a clinical cutoff score as does the CBCL.

The Total Negative Problem Behavior Score has good inter-parent reliability

($r$ = .89; Chamberlain & Reid, 1987). In a study using an earlier version of the PDR

(Patterson, 1976) adequate concurrent validity with the rates of aversive child behaviors

recorded by home observers ($r$ = .69) was reported. The positive behavior total score

also has high internal consistency with Cronbach alphas between .51 and .74 for "high

risk" oppositional youth. In the current study there was excellent internal consistency

for both the Total Negative Problem Behavior Score (Cronbach's alpha = .92) and Total

Positive Behavior Score (alpha = .96). A moderately high degree of correlation with

clinician observations of prosocial behaviors during parent-child interactions has also

been reported, demonstrating evidence of construct validity (Hurley, 2000; Webster-

Stratton & Spitzer, 1991). Hence, there is some support for the assertion of

Chamberlain and Reid (1987) that the PDR is a "low-cost compromise between global

parent reports and independent observations of child behavior" (p. 98).

When the measure was administered to parents in the current study, a research

assistant called mothers six times within 2 weeks at each data collection period. During

these calls, the mothers were not asked to provide frequencies, only occurrence or

nonoccurrence. The occurrences of these behaviors were summed across each time

mothers were called in order to calculate a total negative problem behavior score and

total positive behavior score. A copy of the PDR is included in Appendix D.

*Parental Stress Index, Short Form (PSI/SF) –3$^{rd}$ edition.* The PSI/SF (Abidin,

1995) was included as the primary assessment measure used to determine if treatment

had an influence on parental stress levels. The PSI/SF is a parent self-report, 36-item

questionnaire, designed to identify potentially dysfunctional parent-child systems. The

PSI/SF contains three subscales derived through factor analysis: Parental Distress (PD; alpha reliability $r$ = .87), Parent-Child Dysfunctional Interaction (P-CDI; alpha = .80), and Difficult Child (DC; alpha = .85). A Total Stress Score (alpha = .91) is comprised of each of these factors and was used as a primary outcome measure in this study. The Total Stress Score and subscales of the PSI/SF have moderate to good test-retest reliability ranging from .68 to .85 (Abidin). Internal consistency for the Total Stress Score was very good based on data from participants of the current study (Cronbach's alpha = .94).

There are also data to support the construct validity of the PSI-SF. Haskett, Ahern, Ward, and Allaire (2006) found that the total score on the PSI-SF was correlated with measures of parent psychopathology, parent perceptions of child adjustment, parent reports of child behavior 1 year later, and observed parent and child interactions. McKay and Pickens (1996) found a significant negative correlation between the PSI and a behavioral rating system: the more stress the parents endorsed the more negative parent-child interactions tended to be. Anastopoulos, Guevremont, and Shelton (1992) found that mothers with higher psychopathology and health problems reported higher scores on the PSI. In general, the PSI has been found to discriminate between groups of families with normally developing children, gifted children, and children with emotional or developmental problems (Abidin, 1995). The measure appears to be sensitive to treatment, as several successful treatment interventions have demonstrated lower scores on the PSI following treatment (Anastopoulos et al.; DeGangi, Wietlisbach, & Goodin, 1993; Spaccarelli, Cotler, & Penman, 1992). On the PSI-SF

the cutoff score between the clinical and nonclinical range is 90.

*Social Skills Rating System (SSRS)*. The SSRS (Gresham & Elliott, 1990) is a comprehensive measure of social skills for children from preschool through secondary school, which includes multiple domains and raters. There are parent forms (elementary and secondary grades), self-report measures for children to complete (Grades 3-6 and the secondary grades), and teacher report forms. Participant families completed the parent (elementary grades) and self-report forms (Grades 3-6). Because the SSRS self-report version was normed on a 3rd grade reading level and some of the children in the current study were in either the first or second grade ($n = 10$), a research assistant read each item to all children at each assessment period. Both parent and self-report forms ask respondents to rate the frequency of behavior on a 3-point scale ("never," "sometimes," and "often"). The measure assesses social skill behavior across various domains, including cooperation, assertion, self-control, and empathy. A Social Skills Composite represents the summation of these domains. The parent version of the SSRS also assesses other problem areas (e.g., hyperactivity, externalizing problems, internalizing problems), which can be used to produce a Total Problem Behaviors score. Thus, a Social Skills Total score was derived from the self-report form, and a Social Skills Total score and Total Problem Behavior score were derived from the parent-report form. Both Social Skills Total scores were used to estimate change in social skill ability.

There is high congruence between mother and father reports of social skills on the SSRS (Fagan & Fantuzzo, 1999). Adequate internal consistency (Social Skills-

Parent: $r$ = .87 to .90; Social Skills self-report: $r$ = .83) and moderate test-retest

reliability (Social Skills- Parent: $r$ = .87; Social Skills self-report: $r$ = .68) have also

been reported by the scale's authors (Gresham & Elliot, 1990). Similarly, in the current

study there was adequate internal consistency for the Total scores of both the self-report

(Cronbach's alpha = .84) and parent-report (alpha = .85) forms. In comparison, the

reliability of the Total Problem Behavior score has been reported to be considerably

smaller ($r$ = .43), warranting some authors to conclude that the Problem Behavior score

should be used as a screening assessment only (Demaray, Ruffalo, & Carlson, 1995).

Regarding construct validity, the SSRS system has been cross validated to at

least a moderate degree with a host of instruments typically used to measure social

skills or social competency, including the Harter Teacher Rating Scale, Piers-Harris

Self-Concept Scale, and Walker-McConnell Scale (Gresham & Elliot, 1990). Some

believe that while the SSRS has some psychometric limitations (namely low reliability

coefficients on some of the self-report scores), it is far superior to other measures of

social skills and may become the criterion for establishing the validity of other social

skill measures (Schroeder & Gordon, 2002). It should be noted that neither the self-

report nor the parent-report versions of the SSRS provide a clinical cutoff point between

"normal" and "clinical" groups. However, raw scores on this measure can be converted

to standard scores, with a mean of 100 and a standard deviation of 15. Consequently,

for the purpose of this study, children were considered to be in the normal range if their

standard score on either index was within one standard deviation from the mean,

borderline range if their standard score was greater than one standard deviation but not

more than two standard deviations from the mean in a direction indicating problematic

functioning, and clinical range if their standard score was greater or equal to two

standard deviations from the mean in a direction indicating problematic functioning.

Procedures

*Recruitment*

Local pediatricians, elementary schools, and newspapers were notified of a free

12-week treatment program for families with children who were exhibiting "acting out

and impulsive" behaviors and social skills deficits. Pediatricians were given flyers that

could be passed on to families who might be interested in the study. These flyers

contained a brief description of the study and information on how those interested could

contact the principal investigator by phone (recruiting materials are found under

Appendix E). School principals and counselors were given identical flyers to pass on to

interested families, and the principal investigator posted several of these flyers in places

were they could be viewed by the general community (e.g., athletic clubs, laundry

facilities). Finally, several ads were run in a local newspaper notifying the community

about the study and providing the same contact information. Between the fall of 2004

and fall of 2005, a total of 52 families contacted the principal investigator inquiring

about the study. Twenty-four families were recruited through newspaper postings, 14

through schools, 5 through pediatricians, 5 via word-of-mouth from graduate students at

Utah State University, and 3 from community postings.

*Inclusion/Exclusion Criteria*

The principal investigator initially screened families by phone to see if they met inclusion/exclusion criteria. Exclusion criteria included: (a) the target child was not between the ages of 7 and 12; (b) the target child had a diagnosis of a pervasive developmental disorder, such as mental retardation, Autism, or Asperger's (the last two conditions were ruled out by an additional discussion over the phone with the principal investigator after the child's mother endorsed more than three items on the Parent Checklist at intake); (c) parents of the child did not endorse at least four of the eight symptoms of oppositional defiant disorder (APA, 1994); and (d) the parents or child did not speak English (a separate study provided a Spanish-speaking alternative).

Parents were informed that they would undergo PT before their children were seen individually for treatment. Consequently, families were excluded if they refused to participate (or failed to complete) the PT component of treatment. Failure to complete PT was operationalized as the same parent missing more than one session of the PT component of treatment. However, individual make-up sessions were offered to the families, as needed. Approximately five families participated in a make-up session. No family participated in more than one make-up session. It was also planned that families would be excluded and referred for more immediate treatment should the child demonstrate more severe symptomology indicative of bipolar disorder or another serious mental health condition (other than ODD, CD, and ADHD); however, no child had to be prematurely terminated from the study due to this criterion. It was also planned that families would be excluded if the target child received additional

psychological treatment or changed psychotropic medications during the course of the study (both variables were assessed at each data collection point by having the families check a box "Yes" or "No" if either occurred during the assessment period). Only one family had to be excluded due to a change in medications (see below).

Of the 52 families that contacted the principal investigator by phone, seven were excluded because they failed to meet the inclusion/exclusion criteria (two each for a parent-identified diagnosis of pervasive developmental disorder, age, and receiving other treatment criteria, one for not meeting ODD criteria). An additional two families did not return the primary investigator's phone calls. Finally, one family was excluded from participating because the parents of the child did not speak English. This family was referred to a Spanish-speaking alternative treatment. Several mothers ($n = 5$) checked more than three symptoms on the Parenting Checklist (used to rule out Asperger's or Autism). The principal investigator contacted the mothers before the beginning of PT to conduct a more thorough interview over the phone. The principal investigator made a judgment call concluding that none of these children exhibited significant symptoms of either Autism or Aspergers disorder; therefore, none of these families were dropped from the study.

*Intake*

Prior to the beginning of treatment, families attended an intake session with an undergraduate research assistant who had families complete the measures and the treatment consent form (see Appendix F), which included a child component. During the intake interview, the research assistant privately read to the child the items of the

SSRS self-report form. The child was reminded that his or her answers would remain confidential and was told to "make a best guess" in responding to the items if he or she requested help from the research assistant. The research assistant then scheduled the first PDR with the child's mother. All PDRs were completed only with the child's mother. The research assistant was trained to complete all six PDRs within a 14-day time period. All PDRs were completed within this timeframe.

*Parent Training*

Thirty-two parents completed the PT component of the study. To accommodate these families, six different parenting groups were conducted, on a weekly basis, by the principal investigator between fall of 2004 and fall of 2005. Group sizes ranged from four to eight families. Parents were requested to come without their children so that behavioral principles could be discussed and questions/experiences could be shared freely. Fathers, stepfathers, or significant male figures in the child's life were also encouraged to attend.

Given that many families drop out of treatment after 10 sessions of therapy (Weisz et al., 1997), the PT component of treatment was condensed into six sessions. Parents were encouraged to ask questions and engage in discussion during each session. Parents were also given homework assignments based on behavioral principles, with the first 10-15 minutes of the following session spent processing the homework assignment. The principal investigator conducted follow-up calls during the week to brainstorm with the parents any problems they were having implementing treatment recommendations.

Three of the outcome measures (PSI, CBCL, and SSRS parent form) were

completed by the child's parent(s) at the conclusion of the sixth session of PT. Parents were advised to fill out the measures as the child had been "over the past week." The same research assistant that was originally assigned to the family then contacted the child's mother to complete another six PDRs. The PDRs were completed, once again, within a 14-day timeframe. A few families attended the first session of individual therapy before the PDRs were completed. While administering the PDR, the research assistant also assisted the child in completing another SSRS, reading each item to the child over the phone. The SSRS child form was generally completed during the same phone call where the first PDR was completed; however, there was some variability (second, third, or fourth administration of the PDR) based on the child's availability.

*Individual Child Therapy*

Families were assigned to either PSST or nondirective conditions after the completion of PT. A stratified, random assignment method was used for group assignment. Each child was paired with a similarly aged child and a coin flip determined which child in the pair was assigned to PSST, with the other child being assigned to the nondirective condition. Determining group assignment in this manner provided some advantages, in addition to the use of randomization. These advantages included: (a) ensuring that the two groups had similarly aged children, and (b) preventing the primary investigator from influencing the study's results because he had no contact with the families after group assignment had been determined. Families were instructed not to contact each other during the next phase of treatment so as to not influence treatment outcomes.

Individual therapy began within 2-3 weeks of the conclusion of PT. The children were assigned to work with a graduate student enrolled in either the Ph.D. or M.S. psychology programs at Utah State University. Children were assigned to therapists based on schedule availability; however, each therapist had to take on an even number of study participants (one participant in each treatment condition). In this way, the study was counterbalanced for therapist experience and proficiency. Nine different student therapists participated, with most taking on two clients. Most of the therapists, with the exception of two, were either second- or third-yr graduate students who had not yet received their master's degree. The two exceptions were (a) a Ph.D. student who was in her $4^{th}$ year and had already received her M.S., and (b) the primary investigator (in his $5^{th}$ year and having already received his M.S.) who had to treat one client (in the nondirective condition) because another student therapist was unable to meet with his assigned client. All therapists had received at least one course covering the treatment of childhood psychopathology. All therapists attended a 2-hour workshop, conducted by the primary investigator, before meeting with participants. (The workshop outline is contained in Appendix G.) This workshop was designed to train therapists in the theory and techniques used in each treatment. None of the therapists (with the exception of the principal investigator) were aware of the study's hypotheses.

If a child missed or cancelled an appointment during the week, the therapist attempted to schedule two appointments with the family on the following week. Administration of the six individual therapy sessions was not to last longer than 3

months. None of the child-therapist dyads that completed treatment took longer than this time requirement.

During the sixth and last individual therapy session, the student therapists had the parents complete the study's pencil-and-paper parent-report measures (SSRS-parent version, CBCL, and PSI-SF), while the child and therapist wrapped up. Parents were once again advised to complete the measure as the child had been "over the last week." The parents also completed the parent questionnaire. The student therapist then reviewed with the parent the child's progress and (if needed) discussed with the parent ongoing treatment options for the child. The family's assigned research assistant then called the family to complete another six PDRs with the child's mother and another SSRS self-report form with the child on the phone.

*Follow-up*

Six weeks after completing the last individual therapy session, outcome measures (with the exception of the child SSRS and the PDR) were mailed to families with a postage-paid, return envelope. Instructions were included reminding the families to complete the measures as the child had been "over the last week." Some families needed reminder phone calls to return the assessment measures, as some measurement packets took several months to be completed ($M = 8.9$ weeks with a range of 5.1 to 17.1 weeks).

*Participant Enrollment, Allocation,*
*and Drop-Out*

Of the 42 families that were scheduled for an intake, 10 families either did not

show-up for the intake session ($n = 3$) or did not come back to participate in PT after completing the intake ($n = 7$). Although two of these ten families did not return for treatment or intake due to sudden changes in family circumstances (e.g., moving, divorce), it is unclear why the remaining eight did not return. Demographic data and baseline data (where available) for this group, designated as the "Declined Treatment" group, are included in Tables 2 and 3.

Of the 32 families who completed the group PT component of treatment, one family completed PT but did not return for any sessions of individual therapy (assigned to nondirective condition); four completed PT but did not complete individual therapy (two assigned to the PSST condition and two assigned to the nondirective condition); and one family completed the entire treatment but had to be excluded from data analysis because the child changed medication during the course of treatment (assigned to the nondirective treatment). The demographic and baseline data (where available) for this group, designated as the "premature termination" group, are also included in Tables 2 and 3.

Analyses of variance were conducted to determine if children in the premature termination and declined treatment groups were statistically significantly different from those who completed treatment on the baseline assessment data. These groups were combined for analyses because the size of the premature termination group ($n = 6$) was considered too small to be analyzed independently. No statistically significant differences were found on baseline assessment data between those who completed treatment and those who did not. Chi-square analyses were performed to determine if

Table 2

*Demographic Data for Declined Treatment and Premature Termination Groups*

| Variable | Declined treatment ($n = 7$) | | Premature termination ($n = 5$) | |
|---|---|---|---|---|
| | $n$ | % | $N$ | % |
| Gender | | | | |
|     Male | 3 | 42.9 | 4 | 80.0 |
|     Female | 4 | 57.1 | 1 | 20.0 |
| Ethnicity | | | | |
|     Caucasian | 7 | 100.0 | 4 | 80.0 |
|     Latino | 0 | 0.0 | 1 | 20.0 |
| # of parents in the home | | | | |
|     Two-parent household | 4 | 57.1 | 3 | 60.0 |
|     One-parent household | 3 | 42.9 | 2 | 40.0 |
| Grade | | | | |
|     First | 1 | 14.3 | 3 | 60.0 |
|     Second | 1 | 14.3 | 0 | 0.0 |
|     Third | 1 | 14.3 | 0 | 0.0 |
|     Fourth | 2 | 28.6 | 1 | 20.0 |
|     Fifth | 1 | 14.3 | 0 | 0.0 |
|     Sixth | 1 | 14.3 | 1 | 20.0 |
| # of months in past year where parents lived with the child "full time" | | | | |
|     11-12 months | 6 | 85.7 | 5 | 100.0 |
|     9-10 months | 0 | 0.0 | 0 | 0.0 |
|     7-8 months | 0 | 0.0 | 0 | 0.0 |
|     0-2 months | 1 | 14.3 | 0 | 0.0 |
| # of other children in the home | | | | |
|     1 | 0 | 0.0 | 3 | 60.0 |
|     2 | 1 | 14.3 | 1 | 20.0 |
|     3 | 3 | 42.9 | 0 | 0.0 |
|     4 | 3 | 42.9 | 1 | 20.0 |
| Adopted | 0 | 0.0 | 0 | 0.0 |
| Currently taking medications? | | | | |
|     Yes | 0 | 0.0 | 1 | 20.0 |
|     No | 7 | 100.0 | 4 | 80.0 |

(*table continues*)

| Variable | Declined treatment ($n = 7$) | | Premature termination ($n = 5$) | |
|---|---|---|---|---|
| | $n$ | % | $N$ | % |
| Comorbid for ADHD, LD, or health problems? | | | | |
| Yes | 2 | 28.6 | 2 | 40.0 |
| No | 5 | 71.4 | 3 | 60.0 |
| Comorbid for depression or anxiety? | | | | |
| Yes | 1 | 14.3 | 2 | 40.0 |
| No | 6 | 85.7 | 3 | 60.0 |
| Yearly income: | | | | |
| $5,000 - $9,999 | 1 | 14.3 | 0 | 0.0 |
| $10.000 - $14,999 | 1 | 14.3 | 2 | 40.0 |
| $15,000 - $19,999 | 0 | 0.0 | 1 | 20.0 |
| $20,000 - $24,999 | 0 | 0.0 | 0 | 0.0 |
| $25,000 - $29,999 | 0 | 0.0 | 0 | 0.0 |
| $30,000 - $34,999 | 1 | 14.3 | 0 | 0.0 |
| $35,000 - $39,999 | 1 | 14.3 | 0 | 0.0 |
| $40,000 - $49,999 | 0 | 0.0 | 0 | 0.0 |
| $50,000 - $59,999 | 1 | 14.3 | 1 | 20.0 |
| $60,000 and over | 2 | 28.6 | 1 | 20.0 |
| Maternal education level | | | | |
| Grades 9-11 | 1 | 14.3 | 0 | 0.0 |
| High School or GED | 1 | 14.3 | 2 | 40.0 |
| Some college/associates or tech. degree | 2 | 28.6 | 2 | 40.0 |
| College degree | 3 | 42.9 | 1 | 20.0 |
| Paternal education level | | | | |
| Grades 9-11 | 1 | 14.3 | 0 | 0.0 |
| High School or GED | 0 | 0.0 | 1 | 20.0 |
| Some college/associates or tech. degree | 2 | 28.6 | 0 | 0.0 |
| College degree | 1 | 14.3 | 2 | 40.0 |
| Not recorded | 3 | 42.9 | 1 | 2010 |

there were any statistically significant differences between participants in these two groups and the final clinical sample regarding demographic characteristics. Two differences were noted: (a) children of families who either declined treatment or prematurely terminated were in higher grades ($\chi^2 =11.40$, $df = 5$, $p \leq .05$); and (b) children

Table 3

*Baseline Data for Declined Treatment and Premature Termination Groups*

| Variable | Declined treatment ($n = 7$) | | Premature termination ($n = 5$) | |
|---|---|---|---|---|
| | M | SD | M | SD |
| Parent Daily Report | | | | |
| Maladaptive | 45.7 | 20.6[a] | 46.80 | 17.4 |
| Adaptive | 115.0 | 33.2[a] | 97.00 | 19.6 |
| Social Skills Rating Scale | | | | |
| Parent report social skills total score | 42.86 | 13.6 | 33.40 | 9.6 |
| Parent report total problem behaviors score | | | | |
| Self-report social skills total score | 60.00 | 7.5 | 51.40 | 18.5 |
| Parenting Stress Index-Short Form | 84.29 | 13.7 | 105.80 | 17.7 |
| Child Behavior Checklist | | | | |
| Internalizing total score | 5.86 | 3.6 | 16.2 | 12.6 |
| Externalizing total score | 19.14 | 12.3 | 28.40 | 11.3 |
| Total behavior problem score | 41.57 | 23.0 | 73.40 | 41.6 |

[a] $n = 3$

of families who either declined treatment or prematurely terminated were more likely to come from single-parent households ($x^2 = 8.83$, $df = 1$, $p \leq .01$). A summary of participant enrollment, allocation, and drop-out over the course of the entire study is captured in Figure 1.

*Summary*

In summation, families were assessed at four time intervals: baseline (time interval #1), post-PT (time interval #2), postindividual therapy (time interval #3), and 6-week follow-up (time interval #4). The PDR and the child SSRS were not completed at follow-up because of a lack of resources. The primary outcome measures were based

Recruitment: # of families who contacted the investigator (n = 52)

Phone Screen: Screened for inclusion/ exclusion criteria (n = 42)

Excluded (n = 10): (1) Didn't meet inclusion criteria (n= 7); (2) didn't return calls (n=2); (3) didn't speak English (n=1)

Enrollment

Intake: Attended intake session (n = 39)

Excluded (n=3): Did not show for intake and did not call back to reschedule

T1

Baseline (T1): Completed all intake measures before PT (n = 35)

Excluded (n=4): Did not complete PDRs and did not attend any PT sessions- part of **declined treatment** group

T2

Post-PT (T2): Attended 5 out of 6 PT groups and complete all T2 measures (n = 32)

Excluded (n=3): Did not attend any PT sessions—part of declined treatment group

Experimental Conditions Begin

Random Assignment

_CBT Condition_

_Non-Directive Condition_

T3

-Allocated to CBT (n = 15)
-Did not finish sessions (n=2)[a]
-Completed Post-Individual (T3) measures (n = 13)

-Allocated to Control (n= 17)
-Never attended sessions (n=1)[a]
-Did not finish sessions (n = 2)[a]
-Completed T3 measures (n=14)

Allocation

T4

Follow-up: # of families lost at follow-up (n = 1): family moved

Follow-up: # of families lost at follow-up (n = 0)

Follow-Up

Analyzed*:
 - T1– T3 comparisons (n=13)
 - T1– T4 comparisons (n=12)

Analyzed**:
 - All T comparisons (n =13)
 - Excluded from analysis (n=1) because changed meds

Analysis

Notes: [a] =part of **premature terminator** group (n = 5). * = One mother did not complete the SSRS at T1; therefore, data dropped for this measure. ** = One mother did not complete the PSI-SF at T1; therefore, data dropped for this measure. One mother failed to complete SSRS correctly (social skills scale) at T4 – data dropped.

_Figure 1._ Participant enrollment, allocation, follow-up, and analysis.

on the child's mother because this was generally the parent who attended the PT sessions. Only one family proved an exception to this rule. In this family, the father attended all of the PT sessions and the mother did not; however, mother reported data were still used as the primary outcome measure for this child because it was believed that switching to father data for this one participant would be a significant variation from the rest of the dataset. Clients were excluded from data analysis if the child's mother was not available. One of the 26 families (assigned to PSST condition) failed to return 6-week follow-up measures. One mother in the PSST group and one mother in the nondirective group failed to complete the entire SSRS at baseline and follow-up, respectively. Finally, one mother in the nondirective group failed to fill out the PSI-SF completely at baseline. Consequently, the data sets are lower for these particular measures. Every attempt was made to encourage fathers to participate in PT and several fathers completed outcome measures. However, because a relatively low number of fathers participated in assessment, these data were not used.

This study used a relatively low sample size for a number of reasons. First, there is a great deal of logistical difficulty in getting a large number of participants to complete a 12-week treatment protocol. Furthermore, each semester a new group of student therapists and research assistants needed to be trained so the study could be completed as outlined. As such, the study depended on the generosity and time of an already busy graduate student population to function as student therapists. Second, the study's repeated-measures design allows participants to act as their own controls, thus reducing the required sample size. Finally, several measures of clinical significance

(e.g., mean standard difference effect size) were used, which, in contrast to tests of statistical significance, do not depend on large sample sizes.

Treatment Descriptions

*Parent Training (Problem-Solving Skills Training and Nondirective Conditions)*

The PT sessions were held on a weekly basis, with each session lasting approximately one and a half hours. This form of therapy was based on the Parent-Child Interaction Therapy (PCIT) program described by Hembree-Kigin and McNeil (1995), which emphasizes parental responsiveness and improving the quality of the parent-child relationship through the use of behavior techniques. In this two-part program, the first part focused on strengthening the parent-child relationship (and changing any coercive interaction patterns) by training parents how to attend to their child's appropriate behavior. Specifically, parents were taught how to conduct what is referred to as "The Child's Game," which is a specific time where the parent plays with the child without the use of questions, commands, or instructions. Instead, parents "over-learned" how to positively reinforce their child through the constant use of reflection, description, and praise. Once parents had learned this component, they were taught the second component of treatment: appropriate discipline strategies. These strategies included: (a) how to give the child simple and clear commands, (b) how to ignore minor misbehaviors, and (c) how to use contingencies (e.g., such as a token system or timeout) to discipline children. Consequently, the second phase of treatment emphasized improving parental expectations, helping parents set limits, and providing

the child with consistently applied discipline practices. Because the therapy was

conducted in a group format, the group leader (primary investigator) called the parents

to help them brainstorm any problems they were having in implementing the treatment

recommendations. Throughout treatment role-plays and videotaped modeling were

used to demonstrate the application of techniques. A session-by-session outline of the

concepts discussed (and handouts used in the condition) is provided in Appendix H.

*Problem-Solving Skills Training Condition*

Therapists followed a strict outline to facilitate reliable administration of the

treatment. Sessions were approximately 50-minutes in length. The child's parent or

parents were invited to participate for the last 10-minutes of the session. During this

time period, the student therapists reviewed the session content with the parents, talked

to the parents about any homework the child had been assigned over the coming week,

and answered any questions the parent had related to ongoing behavior problems. In

this way, parents could receive individualized feedback and there could be a follow-up

component to PT. Because the PSST condition utilized rewards for completing therapy

tasks, student therapists in the PSST condition also instructed parents regarding how

many rewards the child had earned during the session. At the conclusion of each

session, student therapists privately ranked the child and family on a scale of 1 to 10

(with 10 being the highest) regarding the following dimensions: (a) to what extent the

child seemed to cognitively understand the session's content, (b) to what extent the

child seemed engaged during the session, and (c) to what extent the parents were

following through on the recommendations made during treatment.

The PSST treatment outlines were adapted from Kendall and Braswell's *Cognitive-Behavioral Therapy for Impulsive Children* program (Kendall & Braswell, 1985), which was the basis for the PSST programs used in several of the outcome studies cited previously (Kazdin et al., 1987a, 1987b, 1992). During the first part of treatment, the child was taught problem-solving steps and was helped to apply such steps to unthreatening stimuli such as basic games, like checkers. Through problem-solving steps, children were taught how to generate alternative solutions and engage in means-end thinking to manage interpersonal situations. During subsequent sessions, the child was instructed in how to use the same steps during social interactions. The final two sessions focused on helping the child apply these steps to situations identified by the child's parents as being particularly problematic for the child. The child completed out-of-therapy assignments to facilitate the generalization of behavior. The child received small reinforcers from his or her parents for completing these "homework" assignments. The child was given tokens at the beginning of each session. A child could loose tokens for: (a) going too fast, (b) forgetting to use one of the problem-solving steps, (c) getting the wrong answer on the tasks worked on in session, and (d) general misbehavior. The parents were instructed to reward their child (through the mechanisms emphasized during PT) if the child had any tokens remaining at the end of the session. During an end-of-session "wrap up," the parents were given an overview of the session content and were asked to reinforce their child whenever he/she demonstrated certain target behaviors over the week. During all treatment sessions, modeling, role-playing, corrective feedback, and social and token reinforcement were

used to develop the problem-solving skills. A session-by-session outline of the

concepts discussed (and handouts used in the condition) is provided in Appendix I.

*Nondirective Therapy*

Similar to the PSST condition, nondirective therapy was conducted in weekly,

50-minute sessions for 6-weeks. It was also organized similar to the PSST condition in

that the last 10-minutes the parents were invited into the session to review session

content and help the parent brainstorm any ongoing behavior problems. It differed,

however, from the PSST condition in the following ways: (a) parents were instructed to

reward their child simply for participating (tokens were not used in this form of

therapy), (b) children were not assigned homework between sessions, (c) instead of

rating the child and family on how much the child "understood the concepts" taught in

session, the therapists rated the extent to which they had formed a "warm and trusting

relationship" with the child, and (d) the sessions contained no explicit instruction in

problem-solving skills.

The sessions were based on the concepts and techniques of play therapy

described by Mader (2000), which include: (a) developing a warm, friendly relationship

with the child where the child is exposed to unconditional acceptance and feels he or

she can express feelings completely, (b) avoiding the use of questions or commands so

that the child's actions or conversations are not directed in any manner, and (c)

reflecting and interpreting feelings and play themes the child is manifesting throughout

the course of treatment. Despite the utilization of these general play therapy principles,

it should be noted, that this treatment was not a true play therapy treatment. The

techniques from play therapy that seemed to best reflect the nonspecific factors of therapy were incorporated to create this nondirective intervention condition. As defined in the current study, this nondirective treatment had many overlapping features with the child's game mentioned in association with PT; however, it emphasized a deeper type of reflection. The only type of specific social-skill training the child received was when the therapist reflected his or her own feelings regarding what the child was doing or talking about. In this manner, the children, in theory, learned how their actions impacted others; however, this learning was not made an explicit component of the treatment. In place of specific skill building, the therapist provided the child with a great deal of individualized attention and did not attempt to direct the child's actions. In theory, it was the child's responsibility to make choices and institute change. The therapist only provided limits when: (a) the child may have hurt him- or herself, (b) the child may have hurt the therapist, or (c) the child may have damaged toys or items in the therapy room. A session-by-session outline of the concepts discussed in this condition (and parent/child handouts used in the condition) is provided in Appendix J.

CHAPTER IV

RESULTS

Treatment Integrity and Quality

When investigating treatment programs, several factors, other than the

interventions under scrutiny, might influence outcomes. Such factors include changes

in psychotropic medications, participation in outside therapy, treatment protocol

adherence by therapists, level of child participation in the treatments, family adherence

to treatment recommendations, parental perception regarding the quality of treatment,

and a differential influence of time (e.g., length of time for individual therapy varies by

treatment). In the current study attempts were made to control for many of these

influences. For instance, children who changed medications or participated in

additional therapy at any point during data collection were excluded from data analysis

(one participant family was excluded due to a change in medications). Additionally,

participating therapists had to follow a specific outline each session to facilitate

treatment reliability and protocol adherence (see Appendices F and G).

The other threats to treatment integrity are more difficult to control and can only

be "ruled out" by providing data demonstrating that the two treatments are comparable

to each other. To assess child involvement and parent adherence to treatment

recommendations, at the end of each session participating therapists rated on a scale of

1 to 10 the following: (a) to what extent the child participated in the session ("Average

Participation"; 1 = "disengaged or defiant throughout the session," to 10 = "extremely

engaged in session tasks or play"); and (b) to what extent parents followed through on the recommendations made during treatment ("Average Treatment Compliance"; 1 = "child inappropriately reinforced/continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations"). Therapist ratings were averaged across all six sessions. None of the participating therapists (other than the principal investigator who provided individual child services to one family) were aware of the hypotheses of the study; thus, providing an "outside perspective." Thus, Average Treatment Compliance assessed the extent to which parents complied with treatment recommendations (both in individual therapy and PT), while Average Participation assessed how much the child was involved in individual psychotherapy. Parental perceptions of therapy were assessed via two survey questions on the parent questionnaire, which asked the parents to rate the extent to which they believed the treatment their child participated in was helpful. Total scores varied from 2 to 10, with higher scores indicating greater perceived helpfulness ("parental perception").

While all participant families completed PT during the same time interval, the length of individual therapy varied between families. Consequently, time intervals (in weeks) were calculated for: (a) the average number of weeks between conclusion of PT and the beginning of individual therapy, (b) the average number of weeks between beginning of individual therapy and end of individual therapy, and (c) the average number of weeks between the end of individual therapy and when follow-up measures were completed. Time intervals were calculated using the start dates and end dates

recorded by student therapists and families on study related materials (e.g., session-by-session outlines, study measures).

Participants in the PSST and nondirective conditions were compared on these variables. Based on these data, participants in both groups were comparable on all the variables in question, with the exception of a statistically significant difference on the Parental Perception variable ($F = 11.720$, $df = 1, 24$, $p < .01$). Parents of children in the PSST group perceived therapy as being more helpful. See Table 4 for means, standard deviations, and $F$ statistics for all variables.

In the PSST condition, therapists were also asked to rate (on a scale of 1-10) the extent to which the child seemed to understand session content (1 = "seemed confused throughout the session," to 10 = "seemed to understand content well"). In the nondirective condition, this question was changed so that the therapists were asked to rate the extent to which the child and therapist formed a warm, close relationship (1 = "child resistant to talk or share personal information," to 10 = "child talks freely about his or her life, strong sense of trust formed with therapist"). These two questions were added to assess the therapists' perspectives regarding the presence or absence of constructs that seemed integral to both forms of treatment. In other words, comprehension of the problem- solving steps and the formation of a warm, trusting relationship seem to be the primary therapeutic agents of change for these treatments, respectively. While these two constructs are so different as to make statistical comparison meaningless, the mean therapist rating of comprehension in the PSST condition was 8.98 ($SD = 1.07$), and the mean therapist rating of the quality of the

Table 4

*Descriptive and ANOVA Data for Child Participation, Family Treatment Compliance,*

*Parental Expectation, and Time Variables*

| | PSST | | Nondirective | | | |
|---|---|---|---|---|---|---|
| Variable | Mean | SD | Mean | SD | F | p |
| Average participation | 9.18 | .69 | 9.02 | 1.05 | .215 | .647 |
| Average treatment compliance | 7.87 | 1.49 | 8.37 | 1.25 | .858 | .368 |
| Average parental perception | 7.88 | 1.63 | 5.40 | 2.35 | 11.720 | .002 |
| Average weeks between conclusion of PT and beginning on individual therapy | 2.95 | 1.97 | 2.73 | 1.14 | .119 | .733 |
| Average weeks between beginning of individual therapy and end of individual therapy | 7.52 | 2.61 | 7.57 | 1.74 | .003 | .958 |
| Average weeks between end of individual therapy and when follow-up measures were completed | 8.58 | 2.64 | 9.29 | 3.56 | .308[a] | .584 |

*Notes.* In all analyses, $n = 13$ for both groups. Unless otherwise noted, $df = 1, 24$ for all $F$.
[a] $df = 1, 23$

relationship in the nondirective condition was 8.05 ($SD = 1.56$). Based on therapist

perspective, children in both groups were exposed to the primary therapeutic agent of

their respective treatments.

Preliminary Data Analysis

Before data relating to the main research questions are presented, preliminary

data are presented to ascertain whether or not participants as a whole changed across

time. Preliminary analyses were also conducted to determine if PT, which parents in

both groups received, was as effective as one would expect based on the results cited in

the literature review. Table 5 contains means and standard deviations for each outcome

Table 5

*Means and Standard Deviations for Child / Parent Measures for Complete Sample*

| | T1 | | T2 | | T3 | | T4 | |
|---|---|---|---|---|---|---|---|---|
| Measure | *M* | *SD* | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| CBCL | | | | | | | | |
|    Externalizing score (*n* = 25) | 21.7 | 8.0 | 16.4 | 6.4 | 14.2 | 6.9 | 11.3 | 7.2 |
| PDR | | | | | | | | |
|    Negative behavior score (*n* = 26) | 44.8 | 15.3 | 31.5 | 15.1 | 26.8 | 13.3 | -- | -- |
|    Positive behavior score (*n* = 26) | 104.8 | 26.0 | 131.4 | 21.8 | 138.3 | 24.0 | -- | -- |
| PSI | | | | | | | | |
|    Total score (*n* = 24) | 98.1 | 21.4 | 89.3 | 20.3 | 86.1 | 18.3 | 82.0 | 23.7 |
| SSRS (child report) | | | | | | | | |
|    Social skills score (*n* = 26) | 54.0 | 13.4 | 58.0 | 8.9 | 60.0 | 8.4 | -- | -- |
| SSRS (parent report) | | | | | | | | |
|    Social skills score (*n* = 23) | 40.5 | 7.4 | 44.4 | 10.1 | 49.6 | 10.0 | 52.0 | 10.6 |

*Notes.* T1 = Baseline assessment interval; T2 = Post-PT assessment interval; T3 = Postindividual therapy assessment interval; T4 = Follow-up assessment interval.

measure across the treatment intervals for the entire clinical sample. Based on these data, cumulative effect size calculations for the entire clinical sample are presented as part of Table 6. It should be noted that all reported means, tests of statistical significance, effect size calculations, and estimates of reliable change (all referenced below) were calculated using raw scores. *T* scores or standard scores were only used to determine the percentage of participants in each group who were either recovered or were in the clinical, borderline, or nonclinical ranges (also referenced below). According to Cohen (1988), effect sizes of .20 to .49 are considered small, .50 to .79 are medium, and .80 and above are large. Between baseline and the end of PT (T1 and T2, respectively), small (.36) to large (1.11) mean effect size changes

Table 6

*Effect Size Calculations for Dependent Measures at Each Assessment Interval*

*for Entire Clinical Sample*

| Measure | T1 to T2 | T1 to T3 | T1 to T4 |
|---|---|---|---|
| CBCL | | | |
| Externalizing score (*n* = 25) | -.74 | -1.00 | -1.37 |
| PDR | | | |
| Negative behavior score (*n* = 26) | -.88 | -1.26 | -- |
| Positive behavior score (*n* = 26) | 1.11 | 1.34 | -- |
| PSI | | | |
| Total score (*n* = 24) | -.42 | -.60 | -.71 |
| SSRS (child report) | | | |
| Social skills score (*n* = 26) | .36 | .55 | -- |
| SSRS (parent report) | | | |
| Social skills score (*n* = 23) | .44 | 1.05 | 1.28 |

*Notes.* T1 = Baseline assessment interval; T2 = Post-PT assessment interval;
T3 = Postindividual therapy assessment interval; T4 = Follow-up assessment interval.


were noted. Moderate or large changes were obtained (*ES* > .50) on 3 of 6 measures

from baseline to the end of PT. Participants continued to demonstrate positive change

upon completion of individual therapy as indicated by large or moderate changes (*ES* >

.50) on all 6 measures from baseline at T3. These gains were maintained at T4 for the

measures assessed at the follow-up interval. These results are briefly mentioned to

highlight the fact that treatment appeared to be largely beneficial for all participants

who continued throughout the entire treatment protocol. Based on the results at T2, it

would also appear that PT in isolation effected substantial change for participant

families.

*Research Question #1*

Research question #1 asked, "*At the conclusion of individual therapy and at follow-up, do the children of families involved in PT + PSST demonstrate a greater improvement in social skills than children of families involved in PT + nondirective therapy?* " The dependent measures for this question were: the total social skill scores on the parent and youth self-report versions of the SSRS and the total positive behavior score on the PDR. The means and standard deviations of all outcome measures by treatment condition are reported in Table 7; however, only the measures pertaining to this particular research question are discussed in this section. It should be noted that between-groups ANOVAs were conducted to determine if there were any statistically significant differences between groups at baseline. No statistical differences between groups were indicated for any of the measures used in the study.

*Tests of statistical significance.* A repeated measures ANOVA was conducted with time as the repeated variable (with three or four levels corresponding to the number of assessment intervals) and group (PSST or nondirective group) as the between subjects variable. Of primary interest was the group by time interaction. There was a statistically significant effect for time and no significant effect for group across all outcome variables (see Table 8). There were no significant group-by-time-interaction effects. These findings indicate that children improved over time, regardless of treatment condition. The lack of statistically significant interaction effects indicate that neither treatment proved more beneficial than the other regarding the assessed variables.

*Tests of clinical significance.* Analysis of data also included tests of clinical

Table 7

*Means and Standard Deviations for Child/Parent Measures by Treatment Condition*

| | T1 | | T2 | | T3 | | T4 | |
|---|---|---|---|---|---|---|---|---|
| Measure | *M* | *SD* | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| Problem-Solving Skills Training | | | | | | | | |
| CBCL | | | | | | | | |
| Externalizing score ($n = 12$) | 22.4 | 9.2 | 15.5 | 5.1 | 14.8 | 6.5 | 11.7 | 7.6 |
| PDR | | | | | | | | |
| Negative behavior score ($n = 13$) | 44.7 | 18.1 | 35.5 | 16.1 | 24.3 | 12.1 | -- | -- |
| Positive behavior score ($n = 13$) | 104.7 | 26.0 | 125.9 | 23.6 | 139.5 | 24.3 | -- | -- |
| PSI | | | | | | | | |
| Total score ($n = 12$) | 94.8 | 17.7 | 86.4 | 14.6 | 82.8 | 16.0 | 80.7 | 21.7 |
| SSRS (child report) | | | | | | | | |
| Social skills score ($n = 13$) | 51.3 | 8.5 | 56.5 | 7.9 | 62.8 | 8.4 | -- | -- |
| SSRS (parent report) | | | | | | | | |
| Social skills score ($n = 11$) | 41.6 | 7.9 | 42.6 | 11.1 | 49.1 | 8.7 | 53.0 | 7.5 |
| Nondirective therapy | | | | | | | | |
| CBCL | | | | | | | | |
| Externalizing score ($n = 13$) | 21.0 | 6.8 | 17.2 | 7.7 | 13.6 | 7.3 | 10.9 | 6.7 |
| PDR | | | | | | | | |
| Negative behavior score ($n = 13$) | 44.9 | 12.4 | 27.5 | 14.0 | 29.3 | 14.5 | -- | -- |
| Positive behavior score ($n = 13$) | 104.8 | 25.9 | 136.9 | 19.9 | 137.0 | 23.7 | -- | -- |
| PSI | | | | | | | | |
| Total score ($n = 12$) | 101.3 | 25.0 | 92.2 | 25.9 | 89.3 | 20.5 | 83.3 | 25.7 |
| SSRS (child report) | | | | | | | | |
| Social skills score ($n = 13$) | 56.6 | 18.2 | 59.5 | 9.8 | 57.1 | 8.3 | -- | -- |
| SSRS (parent report) | | | | | | | | |
| Social skills score ($n = 12$) | 39.3 | 6.8 | 46.2 | 9.1 | 50.0 | 11.2 | 51.0 | 13.6 |

*Notes.* T1 = Baseline assessment interval; T2 = Post-PT assessment interval; T3 = Postindividual therapy assessment interval; T4 = Follow-up assessment interval.

Table 8

*Time, Group, and Interaction Statistics for Two-Group, Repeated Measure ANOVA (T1, T2, T3, and T4—Where Applicable)*

| | Time | | | Group | | | Interaction | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | $F$ | $df$ | $p$ | $F$ | $df$ | $p$ | $F$ | $df$ | $p$ |
| CBCL | | | | | | | | | |
| Externalizing score | 21.22 | 3, 69 | <.000 | .03 | 1, 23 | .863 | .57 | 3, 69 | .636 |
| PDR | | | | | | | | | |
| Negative behavior | 29.66 | 2, 48 | <.000 | .04 | 1, 24 | .848 | 3.73 | 2, 48 | .031 |
| Positive behavior | 45.86[a] | 1.6, 38.4[a] | <.000[a] | .12 | 1, 24 | .737 | 1.89[a] | 1.6, 38.4[a] | .172[a] |
| PSI | | | | | | | | | |
| Total score | 12.47 | 3, 66 | <.000 | .47 | 1, 22 | .501 | .18 | 3, 66 | .913 |
| SSRS (Child report) | | | | | | | | | |
| Social skills score | 3.29[a] | 1.7, 40.1[a] | .056[a] | .07 | 1, 24 | .796 | 2.97[a] | 1.7, 40.1[a] | .071[a] |
| SSRS (Parent report) | | | | | | | | | |
| Social skills score | 22.48 | 3, 63 | <.000 | .00 | 1, 21 | .988 | 1.55 | 3, 63 | .211 |

[a] According to Mauchly's test, sphericity could not be assumed; therefore, the Huynh-Feldt test was used to estimate $F$, $df$, and $p$-values for the designated calculations.

significance. First, mean standard difference effect sizes were calculated (see Table 9) to capture the change on each dependent variable between time intervals. The effect sizes in Table 9 are *cumulative* across time intervals. As a way to clarify results, Figures 2 through 7 graphically demonstrate the change for each outcome measure over assessment intervals. The *incremental* effect size between assessment intervals can be found in each figure on the line between assessment intervals.

To further evaluate clinical significance, the percentage of children in each group that demonstrated a reliable change on the dependent measures was calculated. Reliable change was defined as more than a 30% change (in the expected direction) for

Table 9

*Effect Size Calculations for Dependent Measures at Each Assessment Interval by*

*Treatment Condition*

| Measure/treatment condition | T1 to T2 | T1 to T3 | T1 to T4 |
|---|---|---|---|
| CBCL: Externalizing total score | | | |
| PSST (*n* = 12) | -.97 | -.98 | -1.28 |
| Nondirective (*n* = 13) | -.52 | -1.05 | -1.50 |
| PDR: Total negative behavior score | | | |
| PSST (*n* = 13) | -.54 | -1.35 | -- |
| Nondirective (*n* = 13) | -1.32 | -1.16 | -- |
| PDR: Total positive behavior score | | | |
| PSST (*n* = 13) | .85 | 1.39 | -- |
| Nondirective (*n* = 13) | 1.40 | 1.30 | -- |
| PSI: Parental stress score | | | |
| PSST (*n* = 12) | -.52 | -.71 | -.71 |
| Nondirective (*n* = 12) | -.36 | -.53 | -.69 |
| SSRS: Child report, social skills total score | | | |
| PSST (*n* = 13) | .64 | 1.36 | -- |
| Nondirective (*n* = 13) | .20 | .03 | -- |
| SSRS: Parent report, social skills total score | | | |
| PSST (*n* = 11) | .12 | .91 | 1.49 |
| Nondirective (*n* = 12) | .86 | 1.18 | 1.14 |

*Notes.* T1 = Baseline assessment interval; T2 = Post-PT assessment interval; T3 = Postindividual therapy assessment interval; T4 = Follow-up assessment interval.

scores from one time interval to the next (see Jacobsen et al., 1984; Webster-Stratton et al., 1989, for other investigators who used a similar procedure to calculate reliable change). Data regarding reliable change are reported in Table 10. For outcome measures that have a normative standard, a comparison was made regarding the percentage of children in each condition that fell within the clinical, borderline, and
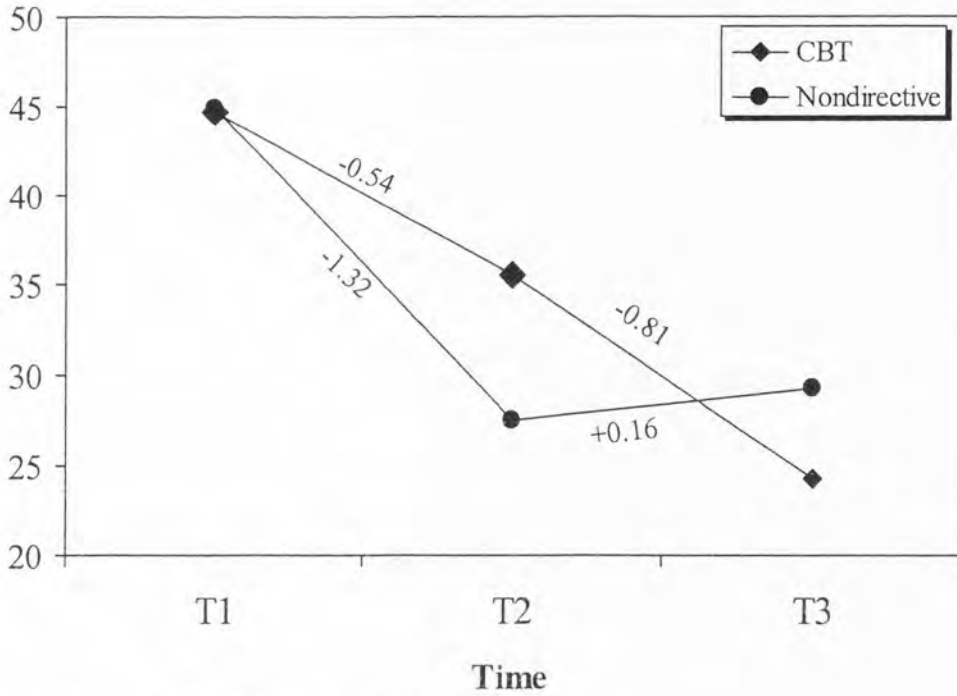
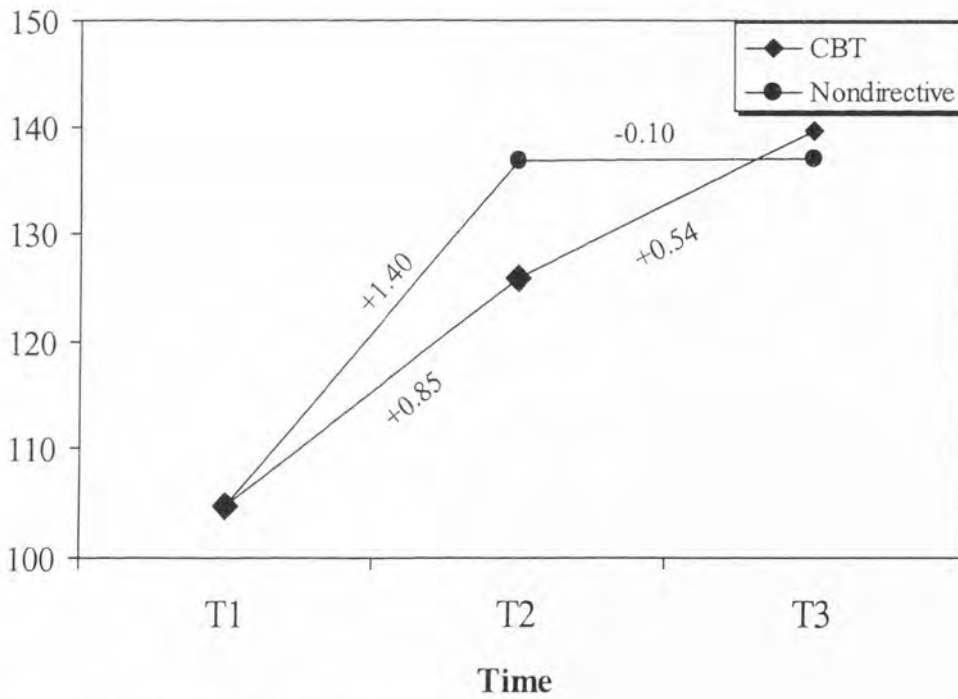*Figure 2*. PDR: Total negative behavior score.



*Figure 3*. PDR: Total positive behavior score.
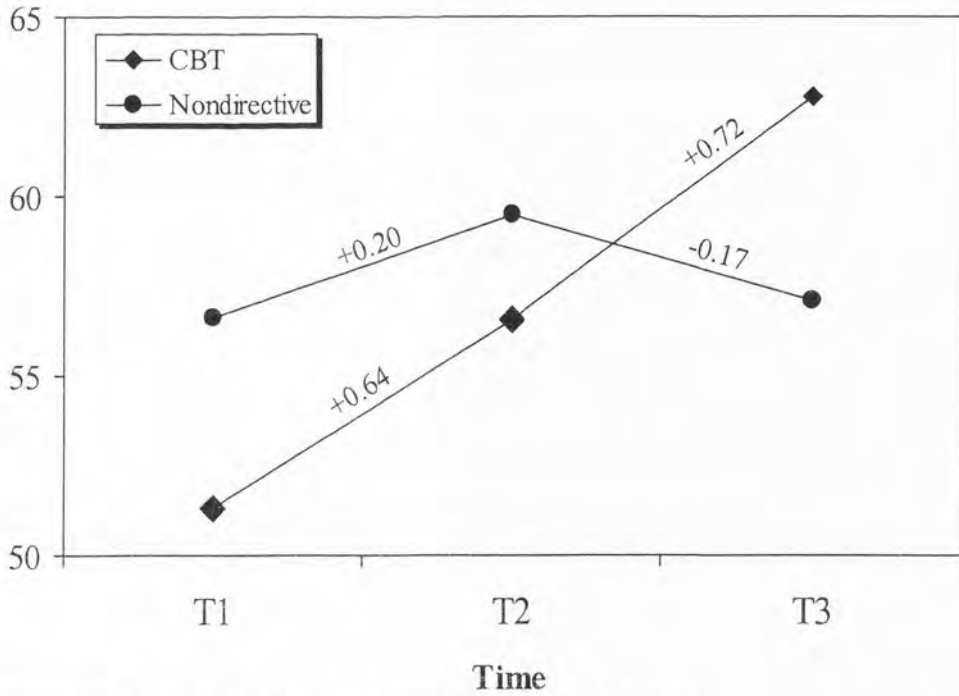
*Figure 4.* SSRS: Child report, social skills total score.
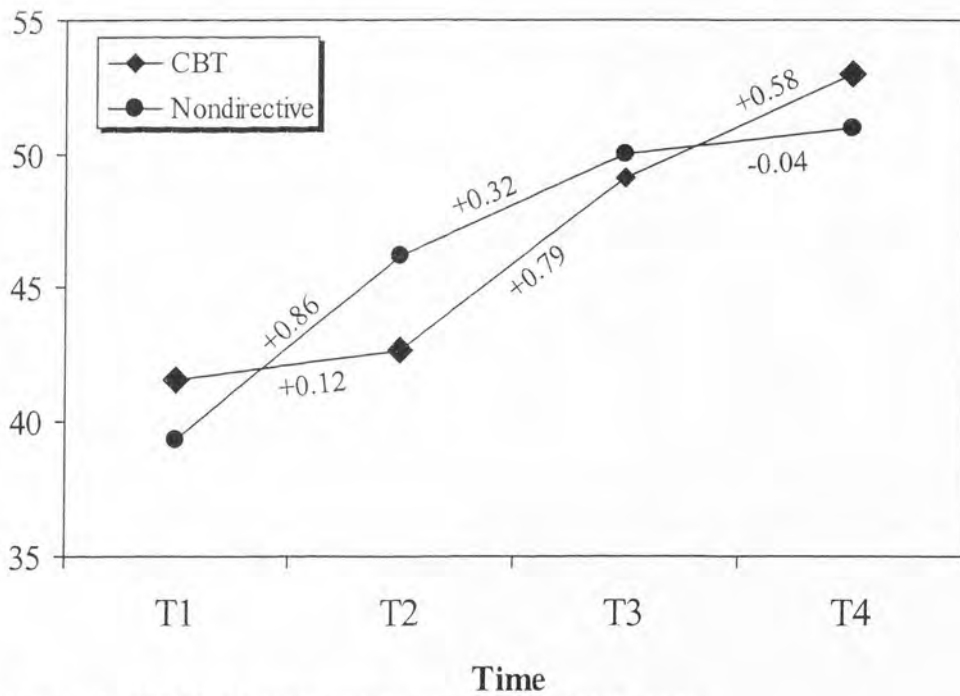


*Figure 5.* SSRS: Parent report, social skills total score.
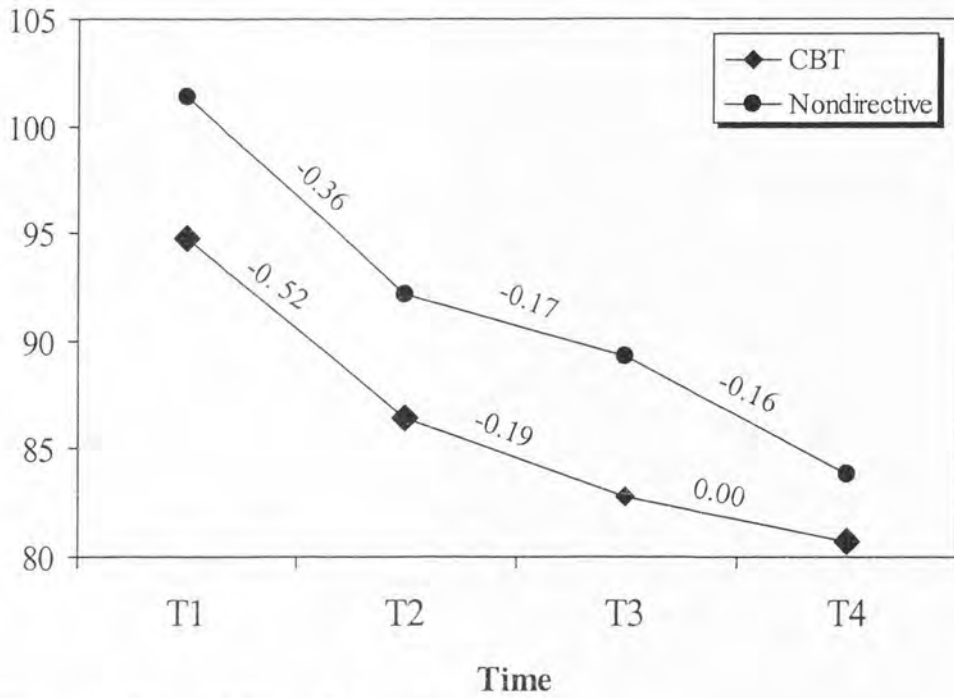
*Figure 6.* Parental Stress Index: Total score.
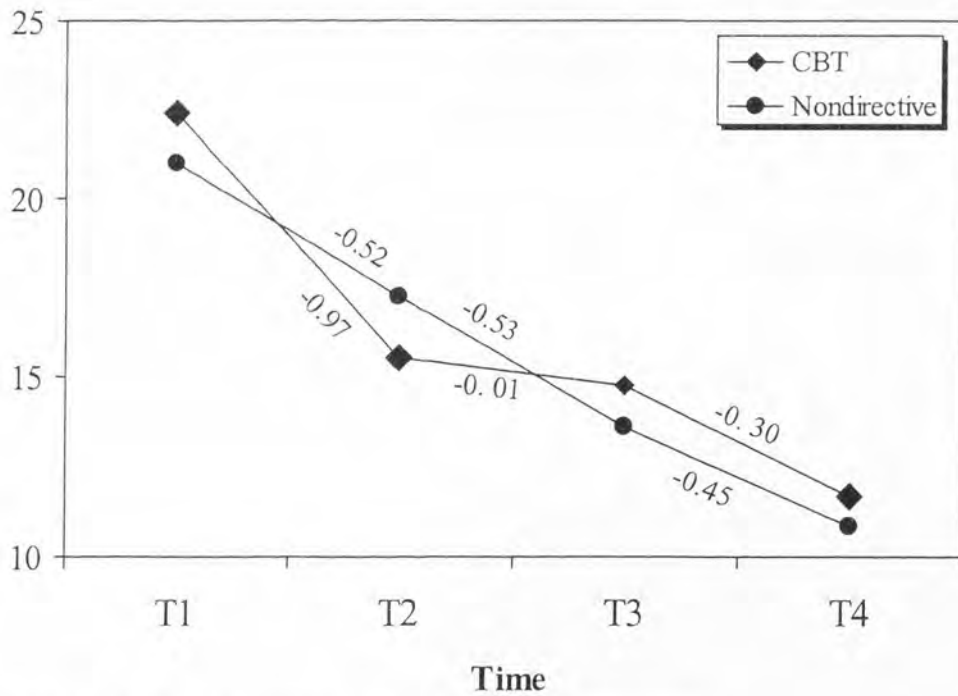


*Figure 7.* CBCL: Externalizing behavior problems score.

Table 10

*Percentage of Participants Demonstrating a Reliable Change or Recovery at Each*

*Assessment Interval by Treatment Condition*

| Measure/treatment condition | | T2 | T3 | T4 |
|---|---|---|---|---|
| CBCL: Externalizing total score | | | | |
| PSST: | % reliable change | 46 | 31 | 67[a] |
| | % "recovered" | 8 | 23 | 58[a] |
| Nondirective: | % reliable change | 31 | 38 | 46 |
| | % "recovered" | 15 | 31 | 46 |
| PDR: Total negative behavior score | | | | |
| PSST: | % reliable change | 38 | 77 | -- |
| Nondirective: | % reliable change | 69 | 62 | -- |
| PDR: Total positive behavior score | | | | |
| PSST: | % reliable change | 31 | 62 | -- |
| Nondirective: | % reliable change | 46 | 54 | -- |
| PSI: Parental stress score | | | | |
| PSST: | % reliable change | 8 | 0 | 8[a] |
| | % "recovered" | 8 | 0 | 8[a] |
| Nondirective: | % reliable change | 8[a] | 15 | 15 |
| | % "recovered" | 8[a] | 15 | 15 |
| SSRS: Child report, social skills total score | | | | |
| PSST: | % reliable change | 15 | 31 | -- |
| Nondirective: | % reliable change | 23 | 38 | -- |
| SSRS: Parent report, social skills total score | | | | |
| PSST: | % reliable change | 8[a] | 33[a] | 45[b] |
| | % "recovered" | 0[a] | 33[a] | 36[b] |
| Nondirective: | % reliable change | 31 | 38 | 58[a] |
| | % "recovered" | 17 | 31 | 42[a] |

*Notes.* All *n* =13, except [a] which = 12, and [b] which = 11.

Reliable change = the participant demonstrated 30% or greater change in scores in the expected direction. Recovered = the participant's scores demonstrated both a reliable change and fell in the nonclinical range.

T2 = Post-PT assessment interval. T3 = Postindividual therapy assessment interval. T4 = follow-up assessment interval.

nonclinical range at each assessment interval. Table 11 contains the change in percentage across all four time intervals for the CBCL, SSRS (parent form), and PSI (the basis of classification for each measure can be found in this table and under the description of each measure found earlier in the methods section). Finally, a comparison was made regarding the proportion of children in each group considered to be "recovered." A child was classified as recovered if his or her score on the dependent measure in question demonstrated both a reliable change *and* was in the normal range (see also Table 10). For the last three analyses, a Pearson chi-square test was used to evaluate whether the differences between percentages at each assessment interval were large enough to be considered statistically significant; however, there were no

Table 11

*Percentage of Participants in Normative Categories Across Treatment Intervals*

| Measure | PSST | | | | Nondirective | | | |
|---|---|---|---|---|---|---|---|---|
| | T1 | T2 | T3 | T4 | T1 | T2 | T3 | T4 |
| CBCL: Externalizing total score | | | | | | | | |
| % Nonclinical ($< 60$) | 8 | 15 | 31 | $67^a$ | 15 | 23 | 38 | 46 |
| % Borderline (60-63) | 0 | 31 | 0 | $17^a$ | 0 | 0 | 15 | 31 |
| % Clinical ($\geq 64$) | 92 | 54 | 69 | $17^a$ | 85 | 77 | 46 | 23 |
| PSI: Total score | | | | | | | | |
| % Nonclinical ($< 60$) | 38 | 54 | 69 | $83^a$ | 23 | $42^a$ | 46 | 54 |
| % Clinical ($\geq 64$) | 62 | 46 | 31 | $17^a$ | 77 | $58^a$ | 54 | 46 |
| SSRS: Parent report, social skills total score | | | | | | | | |
| % Nonclinical ($< 60$) | $42^a$ | $50^a$ | $67^a$ | $91^b$ | 31 | 46 | 62 | $67^a$ |
| % Borderline (60-63) | $42^a$ | $25^a$ | $25^a$ | $9^b$ | 54 | 46 | 38 | $17^a$ |
| % Clinical ($\geq 64$) | $17^a$ | $25^a$ | $8^a$ | $0^b$ | 15 | 8 | 0 | $17^a$ |

*Notes.* All $n = 13$, except [a] which = 12, and [b] which = 11.

T1 = Baseline assessment interval. T2 = Post-PT assessment interval. T3 = Postindividual therapy assessment interval. T4 = follow-up assessment interval.

statistically significant differences. Variations of these procedures have been used in several previous studies as a way of evaluating clinical significance (Kazdin, 1992; Kazdin et al., 1987a, 1987b; Kazdin & Wassell, 2000).

Regarding the PDR total positive behavior score, tests of clinical significance demonstrate several interesting findings. As was shown in Table 9, parents of children in the PSST group reported a smaller increase in positive behaviors than parents of children in the nondirective group at post-PT (T2; .85 to 1.40, respectively); however, at postindividual therapy (T3) the PSST group demonstrated more improvement than the nondirective group (1.39 and 1.30, respectively). As seen in Figure 3, following individual therapy, children in the PSST group demonstrated a moderate increase in positive behaviors from post-PT (*ES* = .54), while children in the nondirective group demonstrated no change during the same time interval (*ES* = .10). Regarding reliable change, more participants in the PSST group demonstrated reliable change between T2 and T3 (31% to 62%) than participants in the nondirective group (46% to 54%; see Table 10). Because the PDR does not provide a normative standard, there is no way to calculate the last two estimates of clinical significance for this particular measure.

On the total social skills score of the child version of the SSRS, children in the PSST group reported a greater improvement in social skills than children in the nondirective group, with children in the PSST group demonstrating a moderate change (*ES* = .64) and children in the nondirective group demonstrating a small change (*ES* = .20). As shown in Figure 4, the children in the PSST group also perceived that their social skill abilities moderately improved during individual therapy (*ES* = .72),

while the children attending nondirective therapy perceived their social skill abilities

stayed largely the same ($ES = -.17$). Similar to the PDR positive behavior scores, the

percentage of children in the PSST group who demonstrated a reliable change on this

measure between T2 and T3 doubled (15% to 31%), while there was a more modest

increase in the percentage of children who changed in the nondirective group during the

same assessment intervals (23% to 38%). Of course, social desirability may have

influenced these findings because the children doubtlessly perceived that they were

working on social skills during PSST.

On the social skills total score of the SSRS (parent version), parents of children

in the PSST group reported a greater increase in their children's social skills between

T2 and T3 than did parents of children in the nondirective group. As seen in Figure 5,

children in the PSST group demonstrated a moderate increase in social skills ($ES = .79$)

following individual therapy and children in the nondirective condition demonstrated a

small increase in social skills ($ES = .32$). In addition, at the 6-week follow-up (T4),

children in the PSST condition continued to make improvements ($ES = .58$) whereas

children in the nondirective condition did not ($ES = -.04$). Regarding reliable change,

the percentage of participants in the PSST condition demonstrating reliable change went

from 8% to 33% between T2 and T3. In the nondirective group, there was only a small

increase between T2 and T3 in the percentage of children who were reliably changed.

By the follow-up interval, outcomes between groups on reliable change were

comparable (PSST: 45%, nondirective: 58%; see Table 10). As seen in Table 11, there

was an increase in the percentage of participants that were in the nonclinical range

across treatment intervals, with the exception of the follow-up interval, in both treatment conditions. At follow-up, 91% of the children in the PSST group were in the nonclinical range, while 67% of the nondirective participants were in the nonclinical range. Finally, the trend of an increasing percentage of "recovered" participants was comparable between the treatment groups (see Table 10).

*Summary of Question #1.* The first research question was whether children receiving PSST in addition to PT would exhibit greater social skills after treatment compared with children receiving nondirective therapy in addition to PT. Based on statistical significance testing, there was a significant effect for time but no group by time interaction effect. Children demonstrated improved social skills over the assessed treatment intervals in both conditions. However, the majority of the tests of clinical significance demonstrated the superiority of the PSST treatment over the nondirective treatment. First, a similar pattern was noted across parent-observational, child-report, and parent-report data. Between T2 and T3, children in the PSST group improved to a greater extent than children in the nondirective therapy group. Children in the PSST condition, on average, scored in a more symptomatic range than children in the nondirective condition on all three measures at post-PT. However, by the end of individual therapy, children in the PSST condition demonstrated greater improvement than children in the nondirective condition on all three measures. Additionally, a greater percentage of children in the PSST treatment demonstrated reliable change on all outcome measures following active treatment (between T2 and T3) than children in the nondirective group. Finally, results comparing average scores on the SSRS parent

version at follow-up demonstrate that treatment gains were either maintained or improved 6-weeks after the conclusion of therapy, with a higher percentage of children in the PSST group being in the nonclinical range at follow-up compared to children in the nondirective condition.

*Research Question #2*

Research question #2 asked, *"At the conclusion of individual therapy and at follow-up, do the children of families involved in PT + PSST demonstrate a greater decrease in oppositional behaviors and parental stress than children of families involved in PT + nondirective therapy?"* The dependent measures were: the PDR negative total behavior score, the externalizing behavior score on the CBCL, and the total score on the PSI-SF.

*Tests of statistical significance.* As with research question #1, a repeated measure ANOVA was conducted. There was a statistically significant effect for time on all three measures and no significant effect for group (see Table 8). Once again, participant children improved across all outcome measures over time regardless of treatment condition. A significant group by time interaction effect was found on the PDR negative total behavior score ($F = 3.73$, $df = 2, 48$, $p = .031$). As can be seen in Figure 2, children in the PSST condition improved to a greater extent than children in the nondirective condition. However, the interaction effects for the externalizing behavior score of the CBCL and the total score of the PSI were not statistically significant (see Table 8).

*Tests of clinical significance.* Similar to many of the findings related to the first

research question, participants in the PSST group demonstrated a moderate decrease in negative behaviors ($ES = -.54$) at post-PT, while children in the nondirective group demonstrated a large decrease in negative behaviors ($ES = -1.32$) on the total negative behavior score of the PDR; however, by end of individual therapy, participants in both groups demonstrated a large improvement on this measure (see Table 9; $ES$ of -1.35 for PSST and ES of -1.16 for nondirective). As shown in Figure 2, participants in the PSST group demonstrated a large decrease in negative behaviors ($ES = -.81$) between T2 and T3, while participants in the nondirective group demonstrated no meaningful change in negative behaviors during this same time interval ($ES = .16$). This trend can also be seen using the concept of reliable change. In the PSST condition, the percentage of participants demonstrating a reliable change on the PDR Negative Behavior Score almost doubled between T2 and T3 (see Table 8, 38-78%), while the percentage of participants in the nondirective group who demonstrated reliable change remained largely unchanged from T2 to T3 (69-62%).

On the Externalizing Score of the CBCL, children in the nondirective condition demonstrated a moderate decrease in oppositional behaviors at T2 ($ES = -.52$), while children in the PSST group demonstrated a large decrease in oppositional behaviors post-PT ($ES = .97$). At the end of individual therapy (T3), however, children in both conditions demonstrated large decreases in oppositional behaviors (PSST $ES = -.98$, nondirective $ES = -1.05$). As illustrated in Figure 7, children in the nondirective condition had a moderate decrease in oppositional behaviors ($ES = -.53$) between post-PT and postindividual therapy, while children in the PSST condition demonstrated no

change during this same interval ($ES = -.01$). Children in both conditions demonstrated moderate improvement during the interval between postindividual therapy and follow-up (PSST $ES = -.30$; nondirective $ES = -.45$). The trend of an increasing percentage of "recovered" participants was comparable between the treatment groups (see Table 10). The percentage of children who demonstrated "reliable change" on the CBCL remained stable between T2 and T3 in both conditions (see Table 10); however, by T4 more children in the PSST group demonstrated reliable change (67%) than in the nondirective group (46%).

On the PSI mothers in both conditions demonstrating a moderate decrease ($ES$ range of $-.52$ to $-.71$) in parental stress across treatment intervals (see Table 9). As illustrated in Figure 6, there were comparable ES decreases in parental stress across all treatment points for the two conditions. The percentage of reliable change and recovery (Table 10) is similar for both groups, with little percentage change being demonstrated by parents in either condition (8-15% change across assessment intervals). Finally, the trend of mothers who scored in the nonclinical range on this instrument was similar in both groups; however, at follow-up a greater percentage of mothers in the PSST group (83%) were in the nonclinical range compared to mothers in the nondirective group (54%). This last result needs to be interpreted with caution, however, because such a small percentage of mothers demonstrated reliable change on the measure, regardless of treatment condition.

*Summary of Question #2.* Similar to the first research question, the largest effect was for time across all outcome measures. Children improved across time regardless of

the treatment condition. Regarding the time by treatment interaction effects, findings related to this research question are contradictory. Based on parent observational data (as measured by the PDR), both tests of clinical significance and statistical significance indicated that children in the PSST group had greater reduction in oppositional behaviors than children in the nondirective group. However, parent-report regarding externalizing behaviors (as measured by the CBCL) demonstrated the opposite effect. On the CBCL, children in the PSST condition showed little to no reduction of oppositional behaviors following individual therapy, while children in the nondirective condition demonstrated a substantial decrease on the same measure. Finally, it seems that parental stress (as defined by the PSI) was the construct least responsive to treatment (only a moderate improvement indicated across assessment intervals) and few mothers reported reliable change, regardless of the treatment intervention.

## Follow-Up Analyses

As mentioned above, the primary purpose of this study was to examine the effect of the individual therapies (T3 and T4). Given that the study suffered from low power relating to a small sample size, a follow-up analysis was conducted using the same statistical applications mentioned previously; however, baseline data (T1) were excluded. Limiting the number of data points, in this manner, increases the overall power of the design. Excluding baseline data can also be perceived as an appropriate course of action because we are primarily interested in what happens *after* PT. Thus, post-PT data (T2) becomes the new baseline from which the effect of the treatments can

be examined. Table 12 contains information concerning statistical significance for

time, group, and interaction effects for repeated measures ANOVA conducted with time

as the repeated variable (with three or two levels corresponding to the number of

assessment intervals) and group (PSST or nondirective group) as the between subject

variable.

These results demonstrate no group effect and a statistically significant time

effect for all variables, with the exception of the child form of the SSRS. It appears

that, for the most part, participants in both conditions demonstrated improvement over

time even when baseline data were factored out of the analysis, again demonstrating

Table 12

*Time, Group, and Interaction Statistics for Two-Group, Repeated Measure ANOVA (T2,*

*T3, and T4—where applicable)*

| | Time | | | Group | | | Interaction | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | $F$ | $df$ | $p$ | $F$ | $df$ | $p$ | $F$ | $df$ | $p$ |
| CBCL | | | | | | | | | |
|    Externalizing score | 8.57 | 2, 46 | .001 | .001 | 1, 23 | .975 | .805 | 2, 46 | .453 |
| PDR | | | | | | | | | |
|    Negative behavior | 4.36 | 1, 24 | .048 | .091 | 1, 24 | .766 | 8.46 | 1, 24 | .008 |
|    Positive behavior | 6.29 | 1, 24 | .019 | .244 | 1, 24 | .626 | 6.02 | 1, 24 | .022 |
| PSI | | | | | | | | | |
|    Total Score | 3.96 | 2, 44 | .026 | .397 | 1, 22 | .535 | .244 | 2, 44 | .785 |
| SSRS (Child report) | | | | | | | | | |
|    Social skills score | 1.38 | 1, 24 | .252 | .218 | 1, 24 | .645 | 6.92 | 1, 24 | .015 |
| SSRS (Parent report) | | | | | | | | | |
|    Social skills score | 15.24 | 2, 44 | .000 | .008 | 1, 22 | .932 | 2.39 | 2, 44 | .104 |

[a] According to Mauchly's test, sphericity could not be assumed; therefore, the Huynh-Feldt test was used to estimate $F$, $df$, and $p$-values for the designated calculations.

that the effect for treatment in general was robust. However, a greater number of

significant group by time interaction effects were found. For instance, children in the

PSST group improved more over time than children in the nondirective group on both

the positive total behavior score and the negative behavior score of the PDR. There was

also an advantage for PSST on the child form of the SSRS. The total social skills score

for the parent version of the SSRS approached statistical significance ($p = .104$). These

findings indicate that children in the PSST group demonstrated a greater decrease in

parent-observed oppositional behaviors and a greater increase in parent- and child-

reported social skills at postindividual therapy and follow-up than children involved in

the nondirective treatment. However, on parent-report measures of oppositional

behaviors (CBCL, externalizing score) there was no indicated advantage for children

involved in PSST.

The measures employed by the current allowed for the calculation of three other

total scores: the CBCL, Internalizing Behavior Total Score; the CBCL, Total Behavior

Problem Score; and the SSRS, Total Problem Behavior Score. None of these scores

were thought to directly pertain to the research questions under investigation. However,

for the purpose of scientific discovery, outcomes related to these scores are reported in

Appendix K.

CHAPTER V

DISCUSSION

The purpose of this study was to evaluate the effectiveness of two different

forms of individual psychotherapy (problem-solving skills training and nondirective

therapy) for children after participant families in both conditions received behavioral

PT. In this study, treatment effectiveness was evaluated based on the following

variables: child oppositional behaviors, parental stress, and child prosocial behaviors or

social skills. Few researchers have systematically evaluated individual therapy

treatments using the methodology employed by the current study. As reviewed

previously the majority of researchers have compared behavioral PT plus PSST with

behavioral PT in isolation. Such designs fail to provide conclusive evidence that

another form of individual therapy would not be equally beneficial to the child and

family. Until different forms of individual psychotherapy are systematically evaluated,

it is difficult to determine what components of comprehensive treatment (here defined

as behavioral PT plus individual therapy) provide the most benefit to youth

demonstrating oppositional behaviors and social skill deficits.

Two primary research questions were evaluated in the current study. First, at

the conclusion of individual therapy and at follow-up, would the children of families

involved in PT + PSST demonstrate a greater improvement in social skills than children

of families involved in PT + nondirective therapy? Second, at the conclusion of

individual therapy and at follow-up, would the children of families involved in PT +

PSST demonstrate a greater decrease in oppositional behaviors and parental stress than

children of families involved in PT + nondirective therapy? For both questions, it was hypothesized that families who received the PT + PSST treatment would demonstrate more positive outcomes than families in the PT + nondirective treatment. Various tests of statistical and clinical significance were conducted to answer these research questions.

Data Supporting the Hypotheses

Before examining data supporting a differential effect for treatment, it should be noted that the effect for time was the most robust finding across outcomes measures. This indicates that children improved on all outcome variables regardless of their assigned treatment condition after PT. Thus, data indicating the superiority of one treatment over the other should *not* be interpreted to mean that one treatment demonstrated a therapeutic effect while the other did not. "Superiority of treatment" is defined here in relative terms, with an acknowledgment that both individual treatment therapies appeared beneficial to children and families.

Bearing this in mind, several pieces of data supported the study's hypotheses. Regarding the first research question, although no significant group by time interaction effects were obtained when using all data points, when baseline scores were excluded from the analyses to increase the power of the design given the low sample size, there were statistically significant group by time interaction effects on both the positive behavior total score of the PDR and the child self-report total score of the SSRS. Additionally, the interaction effect for the parent-report SSRS social skills total score

also approached statistical significance when baseline data were excluded—a noteworthy finding given the low sample size. These data indicate that children in the PSST condition demonstrated and reported greater improvement in prosocial behaviors and social skills than children in the comparison condition.

Tests of clinical significance were also noteworthy. For instance, immediately after PT, parents of children in the PSST group observed their children to demonstrate less improvement in prosocial behaviors than parents of children in the nondirective condition (PDR-positive behavior total score). However, by the time both groups completed the individual therapy portion of treatment, children in the PSST group surpassed children in the nondirective condition as measured by both the percentage of children demonstrating reliable change and ES calculations. Furthermore, children in the PSST condition demonstrated twice as much improvement (based on ES calculations) in social skills as measured by parent-report than those in the nondirective therapy group immediately after individual treatment.

This trend continued into the 6-week follow-up interval, with 91% of the children in the PSST group being in the nonclinical range compared to 67% of the children in the nondirective treatment on parent-reported social skills (SSRS, total social skill score), indicating that gains were not only maintained but improved for families in the PSST condition—contrasting a finding in the research literature that treatment effects quickly revert to baseline after the conclusion of therapy (Lochman & Lampron, 1988). For instance, in two different reviews of the literature the authors report a significant decrease in effect sizes at follow-up (Beelmann et al., 1994;

Gresham, 1998). Of course, there are some significant problems with such a comparison. Many literature reviews, for instance, mainly reported only on PT treatments in isolation and the current study only followed children for 6 weeks posttherapy (as compared to 6 months to 1 year after therapy; see Kazdin & Wassell, 2000; Lochman & Lampron, 1988; Serketich & Dumas, 1996).

Children in the PSST group also reported an improvement in social skills (child-report version of SSRS), while children in the nondirective condition reported little change in social skills in the current study. Admittedly social bias may have influenced the latter finding because children in the PSST condition could have easily surmised they were being taught social skills and, therefore, how they "should" respond to items on the self-report version of the SSRS.

Regarding the second research question, a statistically significant group by time interaction effect was noted on parent observational data of oppositional behaviors (PDR negative behavior total score) even when baseline data were included in the analysis. Tests of clinical significance indicated that children in the PSST group demonstrated only a moderate reduction in oppositional behaviors after PT ($ES = -.54$), compared to the large reduction demonstrated by children in the nondirective condition at the same time interval ($ES = -1.34$). Nevertheless, at the end of individual therapy (T3), children in the PSST condition had a greater decline in oppositional behaviors than children in the nondirective group ($ES = -1.35$ and $ES = -1.16$, respectively). The percentage of children demonstrating reliable change on this variable also demonstrated superiority for the PSST treatment. Finally, at the follow-up interval more children in

the PSST group were in the nonclinical range on the externalizing scale of the CBCL (67%) than children in the nondirective group (46%).

These findings demonstrate that PSST may be more effective in teaching children positive social skills than behavior management techniques alone. Child-report, parent-report, and parent observational data all indicate that children in the PSST condition demonstrated more improvement in social skills or prosocial behavior than their counterparts in nondirective therapy. Parent observational data also indicated that children in the PSST condition demonstrated a greater reduction in oppositional behaviors after individual therapy than children in the nondirective treatment. As mentioned earlier, these conclusions are tempered by the fact that children seemed to improve regardless of the treatment condition to which they were assigned.

Nevertheless, the current study supports the previous literature that problem solving skills training produces improved social skills as assessed by direct observation and standardized measures (Kolko et al., 1990; Prinz et al., 1994). While children in the nondirective condition did demonstrate substantial change in social skills, PSST treatment impacted social skills to a greater extent, just as some have theorized (Brestan & Eyberg, 1998; Kazdin & Weisz, 1998).

Data Refuting the Hypotheses

Although many of the findings do support the study's hypotheses, several pieces of data do not support the hypotheses. When baseline data were included in the analysis, few group-by-time-interaction effects were statistically significant, with the

exception of parent-observed negative behavior cited earlier. These findings may be due to a lack of statistical power or a lack of differential treatment effect between the treatment conditions. Because most of the statistical significance tests of interaction effects for social skill outcome measures either were statistically significant or approached statistical significance when baseline data were factored out, the latter theory seems to pertain more to findings related to the CBCL and PSI-SF. In other words, statistically speaking, there is no reason to believe that either treatment produced a greater impact on parental stress or parent perception of childhood oppositional behaviors. The only notable exception seems to be parental observations of negative behavior; on this variable the parents of children in the PSST group reported greater improvement than parents of children in the nondirective group.

Perhaps the largest piece of disconfirming evidence came from tests of clinical significance regarding parent-report oppositional behaviors (Externalizing scale of the CBCL). At the conclusion of PT, children in the PSST condition demonstrated a large decrease in oppositional behaviors ($ES = -.97$) compared to a moderate decrease in oppositional behaviors for children in the nondirective condition ($ES = -.52$). However, by the conclusion of individual therapy, children in the nondirective condition surpassed children in the PSST condition regarding this same outcome measure (PSST $ES = -.98$ and nondirective $ES = -1.05$), indicating that PSST treatment did not produce any additional effect beyond behavioral PT for this particular assessment measure.

Another early study paralleled the current study's findings. Kendall and Braswell (1982) found that the inclusion of PSST (compared to behavioral treatment

alone) was associated with a larger decrease in observations of problem behaviors (e.g., talking in class, getting up, running around in class, harassing others verbally). Nevertheless, these authors noted that parental ratings of problem behaviors did not improve, although the youth who participated in PSST were more improved on a self-concept rating scale. Similarly, the current study found that children in the PSST treatment did improve more than their peers on the observational measures (PDR) and an index that may have assessed some aspects of self-concept (SSRS child self-report total score). It would appear that a demonstrated change in social skills is often independent of a change in parental report of oppositional behaviors, an idea that was expressed approximately 30 years ago (Spivak et al., 1976). Finally, parental stress seemed particularly resistant to change, with parents in both conditions only demonstrating, at most, a moderate decrease in stress across the time intervals and no differential effect for treatment condition.

## Summary

So does PSST improve outcomes when combined with PT to a greater extent than nondirective therapy? It appears that the answer depends largely on the assessment method employed. Parent observational data more strongly supports the greater efficacy of PSST when combined with behavioral PT than nondirective treatment combined with PT. These conclusions, however, become less clear when utilizing global paper-and-pencil measures of pathology, like the CBCL. While tests of statistical significance do not support nondirective therapy, tests of clinical significance

(for at least the CBCL) demonstrate a greater efficacy for nondirective treatment than PSST. Although the preponderance of evidence demonstrates more of an advantage to the PSST treatment, the fact that the data from the CBCL, which is probably one of the most reliable and widely used diagnostic measures of oppositional behaviors, did not support this finding is contradictory.

Admittedly there are some noteworthy problems with using the CBCL as an outcome measure. For instance, global measures, like the CBCL, are often believed to be insensitive to change because they are too broad and not specific enough to the behaviors most likely to change. Although parents in the current study were instructed to complete the CBCL as the child's behavior had been in the previous week, overall perception of a child may, nevertheless, "overshadow" small, appreciable changes occurring in the child's behavior. In contrast, measures requiring parents to endorse the occurrence or nonoccurrence of specific behaviors may be more sensitive to change because they are theorized to be relatively independent of a general perception of the child. For these reasons, the PDR was employed as another measure of change. However, in the current study, the CBCL clearly demonstrated some sensitivity to change—just not in the way expected.

The reader is left to surmise which outcome measure more accurately measures change in oppositional behavior. If we are primarily interested in reducing negative behaviors or increasing positive behaviors, then a clear advantage seems to be with the PSST treatment. However, if we wish to integrate parent perception of the level of oppositional behaviors, then things become more difficult to explain. These data

highlight the importance of selecting appropriate outcome measures with clinically referred children.

Given that the main point of this study was to evaluate differential effectiveness of the therapies, these conflicting findings do not evoke a sense of resolution. How do we best explain them? While more children in the PSST group were in the nonclinical range at follow-up compared to children in the nondirective group, effect size calculations based on the CBCL seem to demonstrate that parents of children in the nondirective group noted a greater reduction in externalizing behaviors during individual treatment than parents of children in PSST, who noted almost no change in oppositional behaviors during the same time interval. Social expectancy also does not explain these findings because many of the parents in the study clearly preferred the PSST form of treatment and seemed to question whether or not the nondirective form of therapy was doing any good. Finally, it does not seem that we are justified in concluding that PSST is "better" at teaching social skills while the nondirective condition is more adept at decreasing oppositional behaviors because of the discrepant findings between the PDR and CBCL.

A few theories are worthy of consideration. First, children in the PSST treatment did improve their social skills to a greater extent than children in the nondirective group; however, the comparatively large improvement in prosocial behavior may have made parents more sensitive to the fact that there was not an equally large decrease in oppositional behaviors—hence potentially inflating the scores on the CBCL but not on the PDR. A related idea is that the PSST treatment, with its emphasis

on homework assignments and in-home teaching, made parents in the PSST treatment more sensitive to how their children either were or were not completing such assignments—again inflating scores on the CBCL. There is some support for this latter theory because children in the PSST and nondirective conditions were largely equivalent on CBCL at follow-up—a time period where parents were not responsible for following up with homework assignments. Nevertheless, these theories are largely speculative and further research is needed to interpret the current findings.

In either case, results from the current study did not support the notion that relationship focused therapies have little or no effect on problematic behaviors (Alexander & Parsons, 1973; Feldman et al., 1983). As noted in the literature review, many authors suggest relationship or play therapy techniques do not provide as solid of prosocial outcomes as PSST (Borduin et al., 1995; Brestan & Eyberg, 1998; Kazdin & Weisz, 1998; Weiss et al., 1999). While it is true that children in the PSST condition demonstrated more improvement on the PDR than children in the nondirective condition, children in the nondirective condition still demonstrated a sizeable amount of change. In defense of the authors cited above, little systematic effort was made to combine relationship based therapies with PT and compare outcomes with an alternative form of individual treatment. It is possible the outcomes for nondirective forms of treatment are more positive when the child's parents have first been taught some basic behavior management techniques.

## Study Limitations

There were several noteworthy limitations of the current study. The low number of study participants in each group was made even lower due to incomplete measures and drop-out at follow-up. It would also be preferable to run a large enough study that issues related to power were minimized and inferences did not need to be based on dropping baseline data from the analysis. Furthermore, the low sample size did not allow us to draw any inferences about the characteristics of children who failed to benefit from treatment (other than perhaps those who dropped out prematurely or declined treatment initially).

Some assessment limitations are also notable. Social skills, for instance, is a complex and multifaceted construct to measure. Although the SSRS is considered one of the best pencil-and-paper report measures and the PDR also taps some aspects of this construct (e.g., helping behavior, being polite, accepting disappointment well), it would have been preferable if direct observational measures of social skills deficits could have been included. The SSRS may not have been sensitive enough to pick up on problematic behaviors in this domain, and the positive behavior total score of the PDR includes only behaviors that parents observed. The study is also limited due to a lack of follow-up assessment for some measures (e.g., PDR) because of a lack of resources. Given that the PDR seemed like a critical measure of change for participant families, the lack of data at this time interval is a serious limitation. Specifically, it would have been valuable to determine if the change demonstrated by children in the PSST treatment at the end of individual therapy would have continued at follow-up (especially

because more children in the PSST group, compared to the nondirective group, were in the nonclinical range on the CBCL at follow-up). There also seems to be a general finding in the literature that PSST treatments demonstrate more efficacy initially than other treatments, then tend to perform comparatively at follow-up analyses. Including the PDR at T4 would have allowed us to evaluate if this trend was present with the current data set.

Although attempts were made to recruit a diverse population of families, some problems regarding generalizability were noteworthy. Participants were largely Caucasian and from dual-parent households. Statistical analysis indicated that parents of older children and single parents were less likely to stay enrolled in the study. It is theorized that the group PT format may not have fit the schedules of these busy and often overly cumbered families because no child care was provided while the parents attended group. This seems like a significant oversight because other investigators have found that single-parent status is one of the best predictors of poor treatment outcomes (Webster-Stratton, 1985). In the current study there was a noteworthy degree of attrition from initial contact to attendance at the first PT meeting (10 of 42 families or 23%). Dropout decreased after PT began (5 of remaining 32 families or 11%); however, these rates are favorable compared to the dropout rates typically found in parent-skills training programs (between the 40% and 60% based on a meta-analysis by Wierzbicki & Pekarik, 1993). One also has to consider how the age of the children may have limited the clinical utility of the treatments and resulting generalizability of the findings. Approximately 75% of participant children were in the third grade or

younger. It could be argued that many of the children were simply not old enough to gain value from the PSST form of individual therapy. Such a statement, however, does not explain why a difference was found regarding social skills and parent observational data. Nevertheless, generalizability is impacted because we are not justified in making inferences from the study to older children, including preteens.

Some logistical concerns are also important considerations. Although a specific outline was provided for student therapists to follow, there is no way of telling if therapists actually followed such outlines as the current study did not have the resources to do treatment reliability checks (e.g., videotape verifications). This could be a significant issue because the PSST treatment was a more complex treatment to administer and some student therapists may not have been able to administer the treatment in its entirety. Furthermore, training in each condition was minimal (one 2-hour seminar). Although attempts were made to control for therapist experience by having each therapist take an even number of cases (one participant in each condition), it can be argued that the findings may have been differentially influenced by the lack of training needed to "correctly" administer the PSST treatment given its complexity.

Finally, the current study did not include a waitlist control group or a group that was only exposed to PT. While there is a great deal of literature documenting the superiority of intervention to waitlist control groups (see Kazdin et al., 1987a), the current study participants may simply have improved due to the passage of time after exposure to PT. Future researchers should include a "PT only" group to ensure that the effects observed in the current study are related to individual therapy and are not simply

a reflection of PT over time. To the author's knowledge, only two studies have employed such an approach (Kazdin et al., 1992; Webster-Stratton & Hammond, 1997).

Current Findings in Relation to the Scientific Literature

In the literature review provided in Chapter II of this dissertation, many of the studies pertaining to this area of investigation were discussed. Several of the findings mentioned earlier appear to be supported by the current study's data. First, the current study demonstrated that PT in isolation (assessed by T2 data) led to large changes on outcome measures regarding oppositional behaviors (average ES for entire sample: PDR total negative behavior score = -.88; CBCL, externalizing total score = -.74) and more moderate changes on measures of parental stress (average ES for entire sample: PSI-SF = -.42). These findings are very similar to what is found in the literature. Serketich and Dumas' (1996) meta-analysis regarding the efficacy of PT, for instance, found that the average change from pre- to posttreatment across all studies was .84 on the CBCL and .73 for observer report data. Kazdin and Wassell (2000) found similar effect size changes when using the CBCL as an outcome measure (> .7) and smaller changes for parental stress (<.4; a similar *ES* change in parental stress was found in Weinberg, 1999). It should be remembered that the effect size changes in the current study occurred after only six sessions of behavioral PT. Such findings confirm the conclusions of Nixon and colleagues (2003), who stated that PT can be effectively administered over a shorter treatment duration. Additionally, they provide some evidence that a short-term, group approach to treatment can be used effectively with

grade school children (Nixon and colleagues' study was conducted with preschool children).

Unfortunately, the less optimistic findings regarding behavioral PT were also confirmed. Namely, children are often still considered to be in the "clinical" or severely problematic range immediately after PT (Jacobsen et al., 1984; Webster-Stratton, 1990a). After PT approximately 65% of the children enrolled in the current study still scored in the clinical range on the externalizing total score of the CBCL. However, by the follow-up interval, this percentage had dropped so that only 20% scored in the clinical range. Either children continued to improve simply as a passage of time, or the combination of PT and individual therapy produced better outcomes. Without employing a PT-only group in the study, it is difficult to conclusively determine which theory is correct, although many would argue in favor of the former (Kazdin, 2002; Kazdin et al., 1992; Webster-Stratton & Hammond, 1997).

Some findings from the current study are at variance with previous findings in the literature. Many have assumed, for instance, that children with oppositional behaviors necessarily demonstrate negative social skills. It has been theorized that children with oppositional behaviors are different from their peers on a number of cognitive dimensions: attributing hostile intent from others when situations are ambiguous, assuming positive consequences for aggressive acts, difficulty reading facial cues, and difficulty problem solving (Crick & Dodge, 1994; Dodge, 1993; Walker et al., 1995). Consequently, some have suggested that such deficits must be specifically addressed for treatment to reach maximum efficacy (Taylor & Biglan, 1998).

Nevertheless, a relatively low percentage of children (an average of 16%) enrolled in the current study scored in the clinical range at baseline on the parent-report version of the SSRS. Perhaps the measures employed by the current study were not sensitive enough to pick up on such deficits. Findings from the current study seem to confirm that there are two different types of children who demonstrate oppositional behavior: children who have the capacity for social skills but do not utilize them due to a lack of motivation, and children who simply do not possess the skills. The current study did not try to make such a differentiation; however, based on the relatively high percentage of participant children that scored in the normal range on the SSRS prior to treatment, it seems unlikely that all children with oppositional behavior necessarily demonstrate social skills deficits.

## Summary and Clinical Implications

Integrating the current findings into the literature enables the reader to draw some conclusions: (a) PT can produce change when administered in groups over a short treatment duration; (b) parental stress seems less likely to change that childhood oppositional behaviors or social skills; (c) there is some evidence that PSST can improve social skills; however, a change in social skills seems relatively independent of change regarding parent-reported oppositional behaviors; and (d) not all children classified as "oppositional" or "disruptive" demonstrate social skills deficits. It is also believed that the current study added to the literature in several ways. It provided some evidence that nondirective forms of individual therapy may be an effective strategy in

treating acting out behaviors when they are first combined with PT. Of course, the current study could not rule out the passage of time as an explanation for treatment effects during individual therapy because there was not a PT-only group. Nevertheless, such methods are an important step in demonstrating what components of therapy are beneficial and which are ancillary.

There are several clinical implications of these findings. It appears that if a parent is mainly concerned with reducing oppositional or defiant behaviors (as opposed to increasing social skills), one cannot persuasively argue that one form of individual treatment is superior to the other. However, a few caveats are important to mention. First, it is important to consider parental perception of effectiveness. Because many parents clearly preferred the PSST form of individual therapy, many clinicians may want to consider the PSST form of therapy because parental perception may contribute to early drop-out from treatment. Second, the study highlights the importance of how we choose to measure change. Perhaps if families were allowed to see the change demonstrated on the PDR, some may have changed their perception of the child's overall level of oppositional behaviors. In applied clinical practice it may be futile to try to determine which assessment method is more accurate. Rather clinicians are advised to combine both assessment methods to advise and guide their clinical practice. Over-reliance on either parent-report or observational data will likely exclude one piece of the puzzle when it comes to clinical change.

Future Directions

The current study is clearly in need of replication, with specific attention paid to issues related to clinical sample size (low $n$), generalizability (other ethnicities, single-parent households), and increasing the amount of data (PDR) collected at follow-up. However, rather than repeat the flaws of the current study, time will be spent emphasizing the importance of constructing the most efficacious treatment possible for oppositional youth. As such, future researchers can expand on what this study has attempted to do in several ways. Because the nondirective approach to individual therapy seemed useful to a sizeable percentage of children in the study, it remains for studies with larger number of children to evaluate what type of children respond positively to which kinds of treatment. Future researchers could use regression analysis techniques, for instance, to determine which type of child (e.g., those who score high on the CBCL externalizing scale vs. those who score high on both the CBCL externalizing and internalizing scale) responds to which type of individual therapy modality (nondirective vs. PSST). Other variables that may be of interest include the child's age and gender and the parent's marital and SES. The effect of gender on treatment seems especially pertinent given that a higher percentage of females in the current study were randomly assigned to the nondirective group (46.2%) compared to the PSST group (23.1%). It would be interesting to determine, for instance, if females were more likely to respond positively to one therapeutic approach over the other. Such speculation seems beyond the current body of research literature, however, given that the majority

of the studies mentioned in the literature review made little attempt to evaluate treatment efficacy by gender.

Clinicians should also be advised when assessing social skills deficits in oppositional children. Current pencil-and-paper assessment methods may not be sensitive enough to pick up on social skill deficits. Future researchers, for instance, may want to employ measures that specifically test a child's ability to generate alternative solutions to problematic situations (Webster-Stratton & Lindsay, 1999). Nevertheless, researchers may want to keep in mind that social skill deficits may be relatively independent of oppositional behaviors: changing one does not necessarily mean there will be a change in the other, as the current study seems to suggest.

Finally, future researchers may want to consider if there are distinct "varieties" of oppositional children: the haves and the have nots. The "haves" are theorized to already possess good problem-solving and social skills, yet contingencies in their environment (home, school) do not motivate the children enough to use them. The "have nots" may lack the skill necessary for adaptive problem-solving completely. Referred to as "explosive children" by some, such children are theorized to possess lagging skills in the global domains of flexibility, frustration tolerance, and problem solving due to a host of executive processing deficits (Greene & Ablon, 2006).

There has been some theoretical support in the literature for such a distinction. For instance, some would theorize that the "have nots" would demonstrate difficulties with executive cognitive functioning (Giancola et al., 1996; Lochman et al., 2000). Similarly, Kendall (1993) indicated that many children who demonstrate oppositional

behavior also demonstrate an insufficient amount of cognitive activity in social situations where forethought and planning in reaction to subtle behavioral cues is often necessary. However, such constructs might be too diffuse and nonspecific to impact clinical practice because many children (specifically those with ADHD) are theorized to demonstrate difficulties with insufficient cognitive activity and executive cognitive functioning (Barkley, 1996).

In contrast, the transactional information processing model proposed by Crick and Dodge (1994) may be more helpful in making clinically useful distinctions among referred children. According to this model, in the early stages of information processing the child encodes and interprets social cues and begins to form goals for the social interaction. During intermediate stages, the child begins constructing potential responses. During final stages, the child enacts his or her chosen solution and deals with the consequences thereof (Crick & Dodge). The PSST intervention evaluated by the current study focused more on intermediate (solution generation) and latter stages (behavioral enactment) than on the earliest stages (encoding/interpreting social cues and goal development). This may have been an oversight because some have hypothesized a difference between children who demonstrate "early-stage" and "late-stage" deficits, with late-stage children employing strategies that are more instrumental and early-stage children employing strategies that are more reactive in nature (Hinshaw & Anderson, 1996).

If such theories are correct, future clinicians may want to first categorize oppositional children before treatment begins into one of several categories. The first

category may be for children who have social skills but who are not motivated to use them because of environmental contingencies. These children may be assessed by their demonstration of average social functioning in some settings (home) but not in others (school). The second category may be for children who are observed to have late-stage deficits relating to solution generation and behavioral enactment. These children may be assessed via a thorough functional behavioral analysis, with the child demonstrating more instrumental rather than purely reactive behavioral responses. It is theorized that this second category of children will likely be the ideal candidates for treatments similar to the PSST treatment evaluated in the current study: a structured problem-solving approach that teaches children skills regarding solution generation and helps them role play behavioral enactment. The third category of children may demonstrate early-stage deficits related to encoding and interpreting social cues. Such children may be assessed by a more reactive social interaction style that tends to occur across settings. Regardless of how a child is categorized, clinicians would be wise to also assess a child's general level of emotional arousal. Dodge and colleagues have observed that a high level of emotional arousal negatively influences a child's interpretation of social cues and accessibility and selection of response options (Dodge, 1980; Dodge & Coie, 1987; Dodge, Prince, Bachorowski, & Newman, 1990) and may quickly render a child who has cognitive skills into reacting in a way similar to a child who possesses early-stage cognitive deficits.

Clearly research must expand to examine other treatment models for disruptive children, especially children who are identified as demonstrating early-stage cognitive

deficits and/or extreme emotional reactivity. Greene and Ablon's (2006) *Collaborative Problem Solving* (CPS) approach has been offered as a distinct form of treatment for such youth. Future researchers may wish to compare families treated with behavioral PT plus PSST with families treated with the CPS model, as both models propose to treat disruptive children by teaching cognitive skills. For instance, the CPS approach helps parents: (a) identify pathways and triggers that are generally problematic for the child, (b) employ skills in reflective listening and empathy that may reduce emotional responding, and (c) teach children to label and identify their experience in such a way that facilitates adaptive encoding of social information.

Evidently, teaching children to solve social problems is a complex affair that depends on temperament, emotional arousal level, cognitive ability, and consistent use of behavioral contingencies. While the current study could not possibly account for all of these factors in its treatment design, it is an initial step in trying to provide empirical support for comprehensive treatment. Finding which components of treatment work for which children based on the unique capacities and circumstances of the child and family is clearly an endeavor worthy of further scientific investigation.

REFERENCES

Abidin, R. (1995). *Parenting Stress Index: Professional manual* (3<sup>rd</sup> ed.). Odessa, FL: Psychological Assessment Resources.

Achenbach, T.M. (1979). *Child Behavior Checklist.* Bethesda, MD: National Institute of Mental Health.

Achenbach, T.M., & Edelbrock, C. (1981). Behavioral problems and compentencies reported by parents of normal and disturbed children aged 4 through 16. *Monographs of the Society for Research in Child Development, 46* (1, Serial No. 188).

Achenbach, T.M., & Rescorla, L.A. (2001). *Manual for ASEBA school-age forms & profiles.* Burlington: University of Vermont, Research Center for Children, Youth, and Families.

Adams, J.F. (2001). Impact of parent training on family functioning. *Child and Family Behavior Therapy, 23*(1), 29-42.

Alexander, J.F., Barton, C., & Schiaro, R.S. (1976). Systems-behavioral intervention with families of delinquents: Therapist characteristics, family behavior, and outcome. *Journal of Consulting and Clinical Psychology, 44*(4), 656-664.

Alexander, J.F., & Parsons, B.V. (1973). Short-term behavioral intervention with delinquent families: Impact on family process and recidivism. *Journal of Abnormal Psychology, 81,* 219-225.

American Psychological Association. (1994). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC: Author.

Anastopoulos, A.D., Guevremont, D.C., & Shelton, T.L. (1992). Parenting stress among families of children with attention deficit hyperactivity disorder. *Journal of Abnormal Child Psychology, 20*(5), 503-520.

Angold, A., Costello, J., Farmer, E.M.Z., Burns, B.J., & Erkanli, A. (1999). Inpaired but undiagnosed. *Journal of the American Academy of Child and Adolescent Psychiatry, 38,* 129-137.

Arbuthnot, J., & Gordon, D.A. (1986). Behavioral and cognitive effects of a moral reasoning development intervention for high-risk behavior disordered adolescents. *Journal of Consulting and Clinical Psychology, 54,* 208-216.

August, G.J., Realmuto, G.M., MacDonald, A.W., Nugent, S.M., & Crosby, R. (1996). Prevalence of ADHD and comorbid disorders among elementary school children screened for disruptive behavior. *Journal of Abnormal Child Psychology, 24,* 571-595.

Axline, V.M. (1955). Nondirective play therapy procedures and results. In G. Landreth (Ed.), *Play therapy: Dynamics of the process of counseling with children* (pp. 120-129). Springfield, IL: Charles C. Thomas.

Axline, V.M. (1982). Entering the child's world via play experiences. In G. Landreth (Ed.), *Play therapy: Dynamics of the process of counseling with children* (pp. 47-57). Springfield, IL: Charles C. Thomas.

Bank, L., Patterson, G.R., & Reid, J.B. (1987). Delinquency prevention through training parents in family management. *Behavior Analyst, 10,* 75-82.

Barkley, R.A. (1996). Attention-deficit/hyperactivity disorder. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (pp. 63 -122). New York: Guilford.

Barkley, R.A., Edwards, G.H., & Robin, A.L. (1999). *Defiant teens: A clinician's manual for assessment and family intervention.* New York: Guildford.

Bastiaansen, D., Koot, H.M., & Ferdinand, R.F. (2005). Psychopathology in children: Improvement of quality of life without psychiatric symptom reduction? *European Child & Adolescent Psychiatry, 14, 7,* 364 – 370.

Beelmann, A., Pfingste, U., & Losel, F. (1994). Effects of training social competence in children: A meta-analysis of recent evaluations studies. *Journal of Abnormal Child Psychology, 5,* 265-275.

Bierman, K.L., Miller, C.L., & Stabb, S.D. (1987). Improving the social behavior and peer acceptance of rejected boys: Effects of social skills training with instructions and prohibitions. *Journal of Consulting and Clinical Psychology, 55, 2,* 194-200.

Block, J., Block, J.H., & Keys, S. (1988). Longitudinally foretelling drug usage in adolescence: Early childhood personality and environmental precursors. *Child Development, 59,* 336-355.

Borduin, C.M., Mann, B.J., Cone, L.T., Henggeler, S.W., Fucci, B.R., Blaske, D.M., et al. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology, 63,* 569-578.

Brestan, E.V., & Eyberg, S.M. (1998). Effective psychosocial treatment of conduct-disordered children and adolescents: 29 years, 82 studies, 5275 children. *Journal of Clinical Child Psychology, 27,* 180-189.

Brestan, E.V., Jacobs, J.R., Rayfield, A.D., & Eyberg, S.M. (1999). A consumer satisfaction measure for parent-child treatments and its relation to measures of child behavior change. *Behavior Therapy, 30*(1), 17-30.

Campbell, S.B., March, C.L., & Pierce, E.W. (1991). Hard to manage preschool boys: Family context and the stability of externalizing behavior. *Journal of Abnormal Child Psychology, 19,* 301-318.

Capaldi, D.M., & Patterson, G.R. (1994). Interrelated influences of contextual factors on antisocial behavior in childhood and adolescence for males. In D.C. Fowles, P. Sutker, & S.H. Goodman (Eds.), *Progress in experimental personality and psychopathology research* (pp. 165-198). New York: Springer.

Caspi, A., Morritt, T.E., Newman, K.L., & Silva, P.A. (1996). Behavioral observations at age 3 predict adult psychiatric disorders: Longitudinal evidence from a birth cohort. *Archives of General Psychiatry, 53,* 1033-1039.

Chamberlain, P., & Reid, J.B. (1987). Parent observation and report of child symptoms. *Behavioral Assessment, 9,* 97-109.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Coie, J.D. (1990). Toward a theory of peer rejection. In S.R. Asher & J.D. Coie (Eds.), *Peer rejection in childhood* (pp. 365-398). Cambridge, England: Cambridge University Press.

Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin, 115,* 74-101.

DeGangi, G.A., Wietlisbach, S., & Goodin, M. (1993). A comparison of structured sensorimotor therapy and child-centered activity in the treatment of preschool children with sensorimotor problems. *American Journal of Occupational Therapy, 47,* 777-786.

Demaray, M.K., Ruffalo, S.L., & Carlson, J. (1995). Social skills assessment: A comparative evaluation of six published rating scales. *School Psychology Review, 24*(4), 648-671.

Dishion, T.J., & Andrews, D.W. (1995). Preventing escalation in problem behaviors with high-risk young adolescents: Immediate and 1-year outcomes. *Journal of Consulting and Clinical Psychology, 63,* 538-548.

Dodge, K.A. (1980). Social cognition and children's aggressive behavior. *Child Development, 51,* 162-170.

Dodge, K.A. (1993). Social-cognitive mechanisms in the development of conduct disorder and depression. *Annual Review of Psychology, 44,* 8-22.

Dodge, K.A., & Coie, J.D. (1987). Social information processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology, 53,* 1146-1158.

Dodge, K.A., Pettit, G.S., & Bates, J.E. (1994). Socialization mediators of the relation between socioeconomic status and child conduct problems. *Child Development, 65,* 649-665.

Dodge, K.A., & Prince, J.M. (1994). On the relation between social information processing and socially competent behavior in early school-aged children. *Child Development, 65,* 1385-1397.

Dodge, K.A., Prince, J.N., Bachorowski, J., & Newman, J.P. (1990). Hostile attributional biases in severely aggressive adolescents. *Journal of Abnormal Psychology, 99,* 385-392.

Dumas, J.E., & Wahler, R.G. (1983). Predictors of treatment outcome in parent training: Mother insularity and socioeconomic disadvantage. *Behavioral Assessment, 5,* 301-313.

Durlak, J.A., Fuhrman, T., & Lampman, C. (1991). Effectiveness of cognitive-behavioral therapy for maladapting children: A meta-analysis. *Psychological Bulletin, 110,* 204-214.

Edelbrock, C., & Costello, A. (1988). Convergence between statistically derived behavior problem syndromes and child psychiatric diagnoses. *Journal of Abnormal Child Psychology, 16,* 219- 231.

Eron, L.D. (1990). Understanding aggression. *Bulletin of the International Society for Research on Aggression, 12,* 5-9.

Esser, G., Schmidt, M.H., & Woerner, W. (1990). Epidemiology and course of psychiatric disorders in school age children: Results of a longitudinal study. *Journal of Child Psychology and Psychiatry, 31,* 243-263.

Eyberg, S.M. (1992a). Assessing therapy outcome with preschool children: Progress and problems. *Journal of Child Psychology and Psychiatry, 21,* 306-311.

Eyberg, S.M. (1992b). Consumer satisfaction measures for assessing parent training programs. In L.VandeCreek, S. Knapp, & T.L. Jackson (Eds.), *Innovations in clinical practice: A source book* (Vol. 11, pp. 377-382). Sarasota, FL: Professional Resource Exchange.

Eyberg, S.M., Edwards, D., Boggs, S.R., & Foote, R. (1998). Maintaining the treatment effects of parent training: The role of booster sessions and other maintenance strategies. *Clinical Psychology: Science and Practice, 5,* 544-554.

Fagan, J., & Fantuzzo, J.W. (1999). Multirater congruence on the social skills rating system: Mother, father, and teacher assessments of urban head start children's social competencies. *Early Childhood Research Quarterly, 14*(2), 229-242.

Feldman, R.A., Caplinger, T.E., & Wodarski, J.S. (1983). *The St. Louis conundrum: The effective treatment of antisocial youths.* Englewood Cliffs, NJ: Prentice Hall.

Feldman, M.A., & Werner, S.E. (2002). Collateral effects of behavioral parent training on families with developmental disabilities and behavior disorders. *Behavioral Interventions, 17*(2), 79-84.

Forehand, R., & Long, N. (1986, November). *A long-term follow up of parent training participants.* Paper presented at the Association for the Advancement of Behavior Therapy, Chicago.

Frick, P.J. (1998). Conduct disorders. In T.H. Ollendick & M. Hersen (Eds.), *Handbook of child psychopathology* (3rd ed., pp. 213-238). New York: Plenum.

Giancola, P.R., Moss, H.B., & Martin, C.S. (1996). Executive cognitive functioning predicts reactive aggression in boys at high risk for substance abuse: A prospective study. *Alcoholism: Clinical and Experimental Research, 20*(4), 740-744.

Greene, R.W., & Ablon, S.J. (2006). *Treating explosive kids: The collaborative problem-solving approach.* New York: Gilford.

Gresham, F.M. (1998). Social skills training: Should we raze, remodel, or rebuild? *Behavioral Disorders, 24,* 19-25.

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

Griest, D.L., Forehand, R., & Wells, K.C. (1981). Follow-up assessment of parent behavioral training: An analysis of who will participate. *Child Study Journal, 11*(4), 221-229.

Gross, D., Fogg, L., & Webster-Stratton, C. (2003). Parent training of toddlers in day care in low-income urban communities. *Journal of Consulting and Clinical Psychology, 71*(2), 261-278.

Guerra, N.G., & Slaby, R.G. (1990). Cognitive mediators of aggression in adolescent offenders: 2. Intervention. *Developmental Psychology, 26,* 269-277.

Haskett, M.E., Ahern, L.S., Ward, C.S., & Allaire, J.C. (2006). Factor structure and validity of the Parenting Stress Index-Short Form. *Journal of Clinical Child and Adolescent Psychology, 3*(2), 302-312.

Hembree-Kigin, T.L., & McNeil, C.B. (1995). *Parent-child interaction therapy*. New York: Plenum.

Hinshaw, S.P., & Anderson, C.A. (1996). Conduct and oppositional defiant disorders. In E.J. Mash & R.A. Barkley (Eds.), *Child psychopathology* (pp. 113-149). New York: Guilford.

Holden, G.W., Lavigne, V.V., & Cameron, A.M. (1990). Probing the continuum of effectiveness in parent training: Characteristics of parents and preschoolers. *Journal of Clinical Child Psychology, 19*(1), 2-9.

Hudley, C., Britsch, B., Wakefield, W.D., Smith, T., Demorat, M., & Cho, S. (1998). An attribution retraining program to reduce aggression in elementary school students. *Psychology in the Schools, 35,* 271-282.

Hurley, S.M. (2000). *Parent daily report- child behavior items (Fast Track Project Technical Report)*. Retrieved on September 29, 2006, from http://www.fasttrackproject.org

Jacobsen, N.S., Follette, W.C., & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. *Behavior Therapy, 15,* 336-352.

Judge, S. (2003). Determinants of parental stress in families adopting children from Eastern Europe. *Family Relations: Interdisciplinary Journal of Applied Family Studies, 52*(3), 241-248.

Kazdin, A.E. (1990). Premature termination from treatment among children referred for antisocial behavior. *Journal of Child Psychology and Psychiatry, 3*, 415-425.

Kazdin, A.E. (1996). Problem solving and parent management in treating aggressive and antisocial behavior. In E.S. Hibbs & P.S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 377-408). Washington, DC: American Psychological Association.

Kazdin, A.E. (2002). Psychosocial treatments for conduct disorder in children adolescents. In P.E. Nathan & J.M. Gorman (Eds.), *A guide to treatments that work* (2nd ed., pp. 57-85). New York: Oxford University Press.

Kazdin, A.E., Esveldt-Dawson, K., French, N.H., & Unis, A.S. (1987a). Problem-solving skills training and relationship therapy in the treatment of anti-social child behavior. *Journal of Consulting and Clinical Psychology, 55*, 76-85.

Kazdin, A.E., Esveldt-Dawson, K., French, N.H., & Unis, A.S. (1987b). Effects of parent management training and problem-solving skills training combined in the treatment of antisocial child behavior. *Journal of the American Academy of Child and Adolescent Psychiatry, 26*, 416-424.

Kazdin, A.E., Siegel, T.C., & Bass, D. (1992). Cognitive problem-solving skills training and parent management training in the treatment of antisocial behavior in children. *Journal of Consulting and Clinical Psychology, 60*, 733-747.

Kazdin, A.E., & Wassell, G. (2000). Therapeutic changes in children, parents, and families resulting from treatment of children with conduct problems. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 414-420.

Kazdin, A.E., & Weisz, J.R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology, 66*, 19- 36.

Kendall, P.C. (1993). Cognitive-behavioral therapies with youth: Guiding theory, current status, and emerging developments. *Journal of Consulting and Clinical Psychology, 61* (2), 235- 247.

Kendall, P.C., & Braswell, L. (1982). Cognitive-behavioral self-control therapy for children: A components analysis. *Journal of Consulting and Clinical Psychology, 50*, 672-689.

Kendall, P.C., & Braswell, L. (1985). *Cognitive-behavioral self-control therapy for impulsive children.* New York: Guilford.

Kolko, D.J., Loar, L.L., & Sturnick, D. (1990). Inpatient social-cognitive skills training groups with conduct disordered and attention deficit disordered children. *Journal of Child Psychology and Psychiatry, 31,* 737-748.

Konstantareas, M.M., & Homatidis, S. (1989). Assessing child symptom severity and stress in parents of autistic children. *Journal of Child Psychology and Psychiatry, 30,* 459–470.

Lochman, J.E. (1985). Effects of different treatment lengths in cognitive behavioral interventions with aggressive boys. *Child Psychiatry and Human Development, 16,* 45-56.

Lochman, J.E., Burch, P.R., Curry, J.F., & Lampron, L.B. (1984) Treatment and generalization effects of cognitive-behavioral and goal-setting interventions with aggressive boys. *Journal of Consulting and Clinical Psychology, 52,* 915-916.

Lochman, J.E., & Dodge, K.A. (1998). Distorted perceptions in dyadic interactions of aggressive and nonaggressive boys: Effects of prior expectations, context, and boys' age. *Development and Psychopathology, 10*(3), 495-512

Lochman, J.E., & Lampron, L.B. (1988). Cognitive behavioral interventions for aggressive boys: Seven months follow-up effects. *Journal of Child and Adolescent Psychotherapy, 5,* 15-23.

Lochman, J.E., Whidby, J.M., & FitzGerald, D.P. (2000). Cognitive-behavioral assessment and treatment with aggressive children. In P.C. Kendall (Ed.), *Child and adolescent therapy: Cognitive-behavioral procedures* (2nd ed., pp. 31-87). New York: Guilford.

Loeber, R., & Farrington, D.P. (2000). Young children who commit crime: Epidemiology, developmental origins, risk factors, early interventions, and policy implications. *Developmental Psychopathology, 12,* 737-762.

Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology, 48,* 371-410.

Mader, C. (2000). Child-centered play therapy with disruptive school students. In H.G. Kaduson & C.E. Schaefer (Eds.), *Short-term play therapy for children* (pp. 53-68). New York: Guilford.

McKay, J.M., & Pickens, J. (1996). Inventoried and observed stress in parent-child interactions. *Current Psychology, 15*(3), 223-235.

Nixon, R.D.V., Sweeny, L., Erickson, D.B., & Touyz, S.W. (2003). Parent-child interaction therapy: A comparison of standard and abbreviated treatments for oppositional defiant preschoolers. *Journal of Consulting and Clinical Psychology, 71*(2), 251-260.

Nock, M.K., & Kazdin, A.E. (2001). Parent expectancies for child therapy: Assessment and relation to participation in treatment. *Journal of Child and Family Studies, 10,* 155-180.

Offord, D.R., Boyle, M.H., & Racine, Y.A. (1991). The epidemiology of antisocial behavior. In D.J. Pepler & K.H. Rubins (Eds.), *The development and treatment of childhood aggression* (pp. 31-54). Hillsdale, NJ: Erlbaum.

Patterson, G.R. (1976, July). *Treatment for children with conduct problems: A review of outcome studies.* Paper presented at the University of Warsaw, Poland.

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

Patterson, G.R. (1986). Performance models for antisocial boys. *American Psychologist, 41,* 432-444.

Patterson, G.R., Chamberlain, P., & Reid, J.B. (1982). A comparative evaluation of a parent-training program. *Behavior Therapy, 13*(5), 638-650.

Patterson, G.R., Reid, J.B., & Dishion, T.J. (1992). *Antisocial boys.* Eugene, OR: Castalia.

Persons, R.W. (1966). Psychological and behavioral change in delinquents following psychotherapy. *Journal of Clinical Psychology, 22,* 337-340.

Pierce, E.W., Ewing, L.J., & Campbell, S.B. (1999). Diagnostic status and symptomatic behavior of hard-to-manage preschool children in middle childhood and earlyadolescence. *Journal of Clinical Child Psychology, 28,* 44-57.

Prinz, R.J., Blechman, E.A., & Dumas, J.E. (1994). An evaluation of peer coping-skills training for childhood aggression. *Journal of Clinical Child Psychology, 23,* 193-203.

Quine, L., & Pahl, J. (1991). Stress and coping in mothers caring for a child with severe learning difficulties: A test of Lazarus' transactional model of coping. *Journal of Community and Applied Social Psychology, 1,* 57-70.

Redfering, D.L. (1972). Group counseling with institutionalized delinquent females. *American Corrective Therapy Journal, 26,* 160-163.

Reid, J.B. (1993). Prevention of conduct disorder before and after school entry: Relating interventions to development findings. *Journal of Development and Psychopathology, 5,* 243-262.

Richard, B.A., & Dodge, K.A. (1982). Social maladjustment and problem solving in school-aged children. *Journal of Consulting and Clinical Psychology, 50,* 226-233.

Robins, L.N. (1981). Epidemiological approaches to natural history research: Antisocial disorders in children. *Journal of the American Academy of Child Psychiatry, 20,* 566-580.

Safer, D.L., & Hugo, E.M. (2006). Designing a control for behavioral group therapy. *Behavior Therapy, 37*(2), 120- 130.

Schelle, J. (1974). A brief report on invalidity of parent evaluations of behavior change. *Journal of Applied Behavior Analysis, 7,* 341-343.

Schrepferman, L., & Snyder, J. (2002). Coercion: The link between treatment mechanisms in behavioral parent training and risk reduction in child antisocial behavior. *Behavior Therapy, 33,* 339-359.

Schroeder, C.S., & Gordon, B.N. (2002). *Assessment and treatment of childhood problems: A clinician's guide* (2$^{nd}$ ed.). New York: Guilford.

Schroeder, C.S., Gordon, B.N., Kanoy, K., & Routh, D.K. (1983). Managing children's behavior problems in pediatric practice. In M. Wolraich & D.K. Routh (Eds.), *Advances in developmental and behavioral pediatrics* (Vol. 4, pp. 25-86). Greenwich, CT: JAI.

Serketich, W.J., & Dumas, J.E. (1996). The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. *Behavior Therapy, 27*(2), 171-186.

Sloper, P., Knussen, C., Turner, S., & Cunningham, C. (1991). Factors related to stress and satisfaction with life in families of children with Down syndrome. *Journal of Child Psychology and Psychiatry, 32,* 655-676.

Snyder, H. (2001). Child delinquents. In R. Loeber & D.P. Farrington (Eds.), *Risk factors and successful interventions.* Thousand Oaks, CA: Sage.

Spaccarelli, S., Cotler, S., & Penman, D. (1992). Problem-solving skills training as a supplement to behavioral parent training. *Cognitive Therapy and Research, 16*(1), 1-17.

Spivak, G., Platt, J.J., & Shure, M.B. (1976). *The problem solving approach to adjustment.* San Francisco: Jossey-Bass.

Stormshak, E.A., Bierman, K.L., & McMahon, R.J. (2000). Parenting practices and child disruptive behavior problems in early elementary school. *Journal of Clinical Child Psychology, 29*(1), 17-29.

Taylor, T.K., & Biglan, A. (1998). Behavioral family interventions for improving child-rearing: A review of the literature for clinicians and policy makers. *Clinical Child and Family Psychology Review, 1,* 41-60.

Tremblay, R.E., Mass, L.C., Pagani, L., & Vitaro, F. (1996). From childhood physical aggression to adolescent maladjustment: The Montreal Prevention Experiment. In R.D. Peters & R.J. MacMahon (Eds.), *Preventing childhood disorders, substance abuse and delinquency* (pp. 268-298). Thousand Oaks, CA: Sage.

Walker, H.M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices.* Pacific Grove, CA: Brooks/Cole.

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

Webster-Stratton, C. (1990a). Long-term follow-up of families with young conduct-problem children: From preschool to grade school. *Journal of Clinical Child Psychology, 19,* 1344-1349.

Webster-Stratton, C. (1990b). Stress: A potential disruptor of parent perceptions and family interactions. *Journal of Clinical Child Psychology, 19,* 302-312.

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

Webster-Stratton, C., & Hammond, M. (1997). Treating children with early-onset conduct problems: A comparison of child and parent training interventions. *Journal of Consulting and Clinical Psychology, 65,* 93-109.

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

Webster-Stratton, C., & Lindsay, D.W. (1999). Social competence and early-onset conduct problems: Issues in assessment. *Journal of Child Clinical Psychology, 28,* 25-93.

Webster-Stratton, C., & Spitzer, A. (1991). Development, reliability, and validity of the Daily Telephone Discipline Interview. *Behavioral Assessment, 13,* 221- 239.

Weinberg, H.A. (1999). Parent training for attention-deficit hyperactivity disorder: Parental and child outcome. *Journal of Clinical Psychology, 55*(7), 907-913.

Weiss, B., Catron, T., Harris, V., & Phung, T.M. (1999). The effectiveness of traditional child therapy. *Journal of Consulting and Clinical Psychology, 67,* 82-94.

Weiss, G., & Hechtman, L.T. (1986). *Hyperactive children grown up.* New York: Guilford.

Weisz, J.R., Thurber, C.A., Sweeny, L., Proffit, V.D., & LeGagnoux, G.L. (1997). Brief treatment of mild-to-moderate child depression using primary and secondary control enhancement training. *Journal of Consulting and Clinical Psychology, 65,* 703-707.

Wells, K.C., Forehand, R., & Griest, D.L. (1980). Generality of treatment effects from treated to untreated behaviors resulting from a parent training program. *Journal of Clinical Child Psychology, 9*(3), 217-220.

Werry, J.S., Reeves, J.C., & Elkin, G.S. (1987). Attention deficit, conduct, oppositional, and anxiety disorders in children: I. A review of research on differentiating characteristics. *Journal of the American Academy of Child and Adolescent Psychiatry, 26,* 133-143.

Wierzbicki, M., & Pekarik, G. (1993). A meta-analysis of psychotherapy dropout. *Professional Psychology: Research and Practice, 24,* 190 - 195.

Zoccolillo, M. (1993). Gender and the development of conduct disorder. *Development and Psychopathology, 5,* 65-78.

APPENDICES

Appendix A

Demographics Form

## Demographic Form

<u>Instructions</u>: Please read and answer each item carefully. Remember that all information related to you and your child will be changed to a 5-digit number to ensure confidentiality.

Today's Date:_____

1. Mother/ Primary Caregiver Information

Name:_____

Relationship to child (check one):

    O Biological Mother  O Stepparent

    O Biological Father  O Foster Parent

    O Adoptive Mother  O Adoptive Father

    O Other (list):_____

2. Other Caregiver Information (in the home)

Name:_____

Relationship to child (check one):

    O Biological Mother  O Stepparent

    O Biological Father  O Parent's Partner (living in household)

    O Adoptive Mother  O Other Adult Relative: (list)_____

    O Adoptive Father  O Foster Parent

    O Other (list):_____

3. Other Parent/ Biological Parent (<u>not</u> in the home)

Name:_____

Relationship to child (check one):

    O Biological Mother  O Stepparent

    O Biological Father  O Parent's Partner (living in household)

    O Adoptive Mother  O Other Adult Relative: (list)_____

    O Adoptive Father  O Foster Parent

    O Other (list):_____

4. Child Information

Name:_____

Birth Date:_____/_____/_____

Sex of Child: O Male    O Female

How many months IN THE LAST YEAR have you lived with your child (check one)?

O 0-2 months     O 3-4 months     O 5-6 months     O 7-8 months
O 9-10 months     O 11-12 months

What grade is the child in school? _____
How many children live at home with the child? _____
What is your child's (in study) ethnic group or race?

O Mexican, Mexican-American     O American Indian
O Other Latino or Hispanic     O Asian
O African American     O Pacific Islander
O Caucasian     O Other: _____

Do you currently share custody of your child?:     Yes     No

Does your child (in the study) currently take any medications on a regular basis? If so, please list them:

_____     For what?_____   Dosage?_____   Year Prescribed?_____

_____     For what?_____   Dosage?_____   Year Prescribed?_____

_____     For what?_____   Dosage?_____   Year Prescribed?_____

_____     For what?_____   Dosage?_____   Year Prescribed?_____

Does your child (in the study) have any of the following?

|  | Yes | No |
|---|---|---|
| a. Language delay | O | O |
| b. Cognitive delay | O | O |
| c. Physical Disability (mobility) | O | O |
| d. ADHD/ ADD | O | O |
| e. Vision or hearing impairment | O | O |
| f. Learning problems | O | O |

     If yes, list which subjects are problematic:

| | | |
|---|---|---|
| g. Emotional problems (e.g., anxiety, depression) | O | O |

     If yes, list which ones.

5. Other Demographic Information

What is your gross (before taxes) annual household income (include child support and financial aid)?

| | | |
|---|---|---|
| O Less than $4,999 | O $20,000- $24,999 | O $40,000- $44,999 |
| O $5,000- $9,999 | O $25,000- $29,999 | O $50,000- $54,999 |
| O $10,000- $14, 999 | O $30,000- $34,999 | O $55,000- $59,999 |
| O $15,000- $19,999 | O $35,000- $39,999 | O $60,000 and over |

How old were you when the child (in the study) was born: _____

What is your current marital status (circle one)?

| | | |
|---|---|---|
| O Single, never married | O Separated | O Divorced/ not remarried |
| O Married | O Living together | O Widowed/ not remarried |

Please mark the HIGHEST level of education you have completed (circle one)?

| | | |
|---|---|---|
| O Grades 0-8 | O High School or GED | O College Graduate (bachelors degree) |
| O Grades 9-11 | O Some college/ associates or technical degree | O Postcollege degree (graduate degree) |

Are you working right now (circle all that apply)?

| | |
|---|---|
| O Yes, full-time | O Stay-at-home parent |
| O Yes, part-time | O Not working, but looking for employment |
| O In school full-time | O In school part-time |

What is your ethnic group or race (circle one)?

| | |
|---|---|
| O Mexican, Mexican-American | O American Indian |
| O Other Latino or Hispanic | O Asian |
| O African American | O Pacific Islander |
| O Caucasian | O Other: _____ |

What is the primary language spoken in your home (circle one)?

| | | |
|---|---|---|
| O English | O Spanish | O Other:_____ |

How many times have you moved in the past year?

O 1     O 2     O 3     O 4     O 5     O 6

6. Spouse Information: If you do not have a partner or spouse that you are living with, fill in bubble below and skip to "address / contact information" section

O     No live-in Spouse/ Partner currently

What is the HIGHEST level of school your spouse/partner has completed?

| | | |
|---|---|---|
| O Grades 0-8 | O High School or GED | O College Graduate (bachelors degree) |
| O Grades 9-11 | O Some college/assoc. | O Postcollege degree |

Demographic Form (continued)

Is your spouse/partner working right now (circle all that apply)?

O Yes, full-time         O Working at home (homemaker)
O Yes, part-time         O Not working, but looking for employment
O In school full-time
O In school part-time

What is your spouse/partner's ethnic group or race?

O Mexican, Mexican-American     O American Indian
O Other Latino or Hispanic        O Asian
O African American             O Pacific Islander
O Caucasian                  O Other: _____

7. Address/ Contact Information

_____

Street Address                  Apt #

_____

City         State         Zip

(     ) _____

Phone (with area code)

_____

e-mail (if applicable)

We would like to be able to contact you in case you move before the study is over. If this is okay with you, please list a contact person who would always know your whereabouts.

_____

First Name           Last Name

_____

Street Address                   Apt #

_____

City              State         Zip

( _____ ) _____

Phone (with area code)

_____

Your relationship to this person

Appendix B

Parent Checklist

## Parent Checklist

Name of Child: _____

Directions: Place a check mark next to each statement if it describes your child as they are usually- not just during a tantrum or while he or she is misbehaving.

_____ "My child shows no desire to interact or play with other children."

_____ "My child does not seem to pick up on social cues."

_____ "My child consistently demonstrates socially inappropriate behavior"

_____ "My child does not understand or takes literally common sayings that other children understand" (e.g., cat has got your tongue)

_____ "My child uses limited or inappropriate facial expressions."

_____ "My child does not use appropriate body language while communicating (e.g., hand gestures)."

_____ "My child demonstrates poor eye-contact."

_____ "My child is frequently uncoordinated."

_____ "My child is fascinated by a particular interest or activity that other children his or her age do not find interesting or appealing."

_____ "My child has few close friends."

_____ "My child only approaches other to have his or her own needs met."

_____ "My child demonstrates one-sided responses to peers and others."

_____ "My child has difficulty sensing others' feelings or seems detached from others' feelings."

_____ "My child seems unable to read emotion from facial expressions of other children."

_____ "My child talks too little or too much."

_____ "My child does not seem to be able to have a natural flow of conversation with others."

_____ "My child comes too close to others when they are speaking."

_____ "My child's gestures are large and clumsy."

_____ "My child plays with the same kind of toys or engages in the same type of activity over and over again"

_____ "My child avoids playing with other children."

Appendix C

Parent Questionnaire

Parent Questionnaire

Name: _____

I.     Regarding techniques of disciplining, I feel I have learned:
       A. Nothing                    D. Several useful techniques
       B. Very Little                E. Very many useful techniques
       C. A few new techniques

II.    Regarding techniques for teaching my child new skills, I feel I have learned:
       A. Nothing                    D. Several useful techniques
       B. Very Little                E. Very many useful techniques
       C. A few new techniques

III.   Regarding the relationship between myself and my child, I feel we get along:
       A. Much worse than before     D. Somewhat better than before
       B. Somewhat worse than before E. Very much better than before
       C. The same as before

IV.    Regarding my confidence in my ability to discipline my child, I feel:
       A. Much less confident        D. Somewhat improved
       B. Somewhat less confident    E. Greatly improved
       C. The same

V.     The major behavior problems that my child presented at home before the
       program started are at this time:
       A. Considerably worse         D. Somewhat improved
       B. Somewhat worse             E. Greatly improved
       C. The same

VI.    I feel that my child's compliance to my commands or requests is at this time:
       A. Considerably worse         D. Somewhat improved
       B. Somewhat worse             E. Greatly improved
       C. The same

VII.   Regarding the progress my child has made in his/her general behavior, I am:
       A. Very dissatisfied          D. Somewhat satisfied
       B. Somewhat dissatisfied      E. Very satisfied
       C. Neutral

VIII.  My general feeling about the program I participated in is:
       A. I disliked it very much    D. I liked it somewhat
       B. I disliked it somewhat     E. I like it very much
       C. I feel neutral

Parent Questionnaire (continued)

IX.  Regarding techniques for teaching my child new skills, I feel the individual therapy he/she participated in helped him/her learn
    A. No new skills             D. A reasonable amount of new skills
    B. A few new skills         E. Many new skills
    C. Some new skills

X.  Overall, I feel the individual therapy my child participated in was:
    A. Not helpful at all         D. Helpful
    B. A little helpful           E. Very helpful
    C. Somewhat helpful

Appendix D

Parent Daily Report

Parent Daily Report

Family ID: _____

Date: _____/_____/_____

Data collection Period (circle one):    Baseline        PostP.T.        PostTreatment

Call #:            .                         #1    #2    #3    #4    #5    #6

<u>Instructions</u>: To be administered to mothers only. "These questions are about the last 24 hours, so keep in mind what has happened since (__:__) yesterday. Remember to respond with 'yes' if your child demonstrated the behavior *at all* during the last 24 hours, and 'no' if your child *never* demonstrated the behavior during the last 24 hours." If the mother attempts to solicit help regarding whether or not a behavior occurred, be supportive yet help the mother understand that it is a judgment call that is left up to her.

"Thinking about the last 24 hours, did (name)…"

Check if target area

| | | | |
|---|---|---|---|
| 1. Abuse any animal? | Y | N | _____ |
| 2. Argue or talk back to you or another adult? | Y | N | _____ |
| 3. Wet the bed, wet their pants, or soil themselves? | Y | N | _____ |
| 4. Be overly competitive? | Y | N | _____ |
| 5. Complain, be negative or irritable? | Y | N | _____ |
| 6. Cry or whine (not due to physical injury)? | Y | N | _____ |
| 7. Refuse to eat, or overeat? | Y | N | _____ |
| 8. Be fearful or sad? | Y | N | _____ |
| 9. Hit, kick, or bite others? | Y | N | _____ |
| 10. Be hyperactive or noisy- run around excessively? | Y | N | _____ |
| 11. Interrupt adults or demand attention | Y | N | _____ |
| 12. Leave tasks half-done or poorly done | Y | N | _____ |
| 13. Lie, not tell the whole truth, or knowingly break a promise? | Y | N | _____ |
| 14. Be noncompliant or defiant towards a teacher or parent? | Y | N | _____ |
| 15. Quarrel, or teasing siblings excessively? | Y | N | _____ |
| 16. Resist being disciplined (e.g., get out of timeout prematurely)? | Y | N | _____ |
| 17. Mutilating self (pulling hair, banging head)? | Y | N | _____ |
| 18. Yell, have temper tantrums? | Y | N | _____ |
| 19. Not be home when should be? | Y | N | _____ |
| 20. Set fires intentionally? | Y | N | _____ |
| 21. Be destructive (damaging property)? | Y | N | _____ |
| 22. Steal? | Y | N | _____ |
| 23. Run away from home or school? | Y | N | _____ |

Parent Daily Report (continued)

"Okay, now we are moving on to the positive behaviors. Same rule applies: 'yes', if the behavior occurred at all, and 'no' if the behavior never occurred in the last 24 hours."

"Thinking about the last 24 hours, did (name)…"

Check if
target area

| | | | |
|---|---|---|---|
| 1. Accept disappointment well? | Y | N | _____ |
| 2. Accept punishment (e.g., did not resist being grounded)? | Y | N | _____ |
| 3. Offered gifts to others willingly? | Y | N | _____ |
| 4. Comply with all requests (minding)? | Y | N | _____ |
| 5. Say something to make another person feel good? | Y | N | _____ |
| 6. Do homework without prodding? | Y | N | _____ |
| 7. Have pleasant talks or share feelings with others? | Y | N | _____ |
| 8. Get chores done on time? | Y | N | _____ |
| 9. Tell parent or other adult where she/he will be? | Y | N | _____ |
| 10. Play nicely with brother(s), sister(s) or other children? | Y | N | _____ |
| 11. Be prompt, or get home on time? | Y | N | _____ |
| 12. Show happiness, smile a lot, or laugh? | Y | N | _____ |
| 13. Show affection, hug, or kiss? | Y | N | _____ |
| 14. Show enthusiasm about school | Y | N | _____ |
| 15. Be thoughtful or considerate of another person's feelings | Y | N | _____ |
| 16. Volunteer to help or work? | Y | N | _____ |
| 17. Wait for his/her turn to speak, or listening attentively? | Y | N | _____ |
| 18. Tell the truth when confronted? | Y | N | _____ |
| 19. Willingly sharing something? | Y | N | _____ |
| 20. Stay dry at night? | Y | N | _____ |
| 21. Keep pants clean? | Y | N | _____ |
| 22. Speak nicely? | Y | N | _____ |
| 23. Have a positive attitude? | Y | N | _____ |
| 24. Eat meals without picking or throwing food? | Y | N | _____ |
| 25. Be happy? | Y | N | _____ |
| 26. Be quiet at appropriate times or after being instructed once? | Y | N | _____ |
| 27. Go to bed without trouble? | Y | N | _____ |
| 28. Put toys away when asked the first time? | Y | N | _____ |
| 29. Show an ability to "stop and think" when interacting with others | Y | N | _____ |

**End: Thank the mother for her time and set up another time to call. Remind her of the number of times left to call for this round of data collection.**

Appendix E

Recruiting Materials

Physician Handout

*A study regarding the treatment of impulsive and acting-out behaviors in children.*

Free help for your child regarding........

       ....acting-out problems (e.g., disobedience, rule-breaking, tantruming)
       ... impulsive behaviors (e.g., acting without "thinking", difficulty in social situations)
       ...general difficulty solving problems effectively (e.g., often makes hasty decisions, does not "think through" his or her actions)

*What is the study about?*  Researchers in the psychology department at Utah State University are conducting a study to evaluate different methods to treat oppositional and impulsive behaviors in children. In this study, families and their children will receive 12-weeks of free therapy. Parents will participate in 6-weeks of group discussion designed to help teach them different techniques to manage their child's behavior. Children will then participate in 6-weeks of one-on-one therapy with a trained counselor.

*Who qualifies for the study?*  Children must be between the ages of 7 and 12 and have problems with oppositional / impulsive behaviors.

*When will the study happen?* Parents will be asked to attend group discussions once a week. These group discussions will be offered on Tuesday and Thursday nights at 6:30 pm. Parents can select which night works best for their schedules. The child's individual therapy sessions will also be held at a time convenient for the family.

*Where will sessions be held?* All study sessions and group discussions will be held on the 4th floor of the Education Building (Room 413) on the USU campus. The Education Building is located on the north side of 700 N. between the HPER building and Edith Bowen Elementary.

*Why should I participate?*  Qualifying families and their children will receive therapy free-of-charge. This therapy may help reduce your child's impulsive and acting-out behaviors.

*How do I get started?*  Interested families should contact Bryan Bushman, the study's director, to set up an initial one-on-one meeting with a research assistant. Bryan can be reached by phone or email. Phone Contact: (435) 787-8600, Email Contact: bbushman@cc.usu.edu.

Call now. The study is only accepting new participants for limited time!

Advertisement

## FREE THERAPY SERVICES FOR CHILDREN

<u>Description</u>:  Researchers in the Psychology Department at Utah State University are running a study evaluating treatment for childhood acting-out and impulsive behaviors. Children between the ages of 7 and 12 and their parents are can participate and receive 12-weeks of free therapy.  Interested families should contact Bryan Bushman, the study's director, to set up an initial meeting.  Phone Contact: (435) 787-8600, Email Contact: bbushman@cc.usu.edu.  Call now.  The study is only accepting new participants for limited time!

Appendix F

Treatment Consent Form

161

INFORMED CONSENT FORM

Teaching Children to Stop and Think: An experimental evaluation of the efficacy of problem solving skills training with behavioral parent training for the treatment of oppositional and impulsive behaviors in children.

Introduction

Bryan Bushman, a psychology graduate student, and Gretchen Gimpel, an associate professor in the Department of Psychology at Utah State University, are conducting a study to investigate how effective different treatments are in reducing impulsive and defiant behaviors in children. Children participating in the study will be between the ages of 7 and 12 and will be from the Cache Valley, Utah area.

Procedures

You will first complete 6-sessions in which you will learn different methods of how to reduce acting-out and impulsive behaviors in your child. This therapy will take place in groups of 5-10 families on a weekly basis. You must attend at least 5 of the 6 weeks of training in order for your child to continue to participate in the study. After these 6-weeks, children will be randomly assigned to one of two treatment groups. Children in both groups will receive treatment one-on-one for 6-weeks by a trained graduate student therapist. In one treatment group, children will be taught specific skills that can be used in social settings to reduce impulsive behaviors. In the other group, children will be given positive attention, which is frequently used in therapy. You and your child will complete assessment measures at five points in time: (1) before beginning the parent-focused sessions; (2) after the parent-focused sessions; (3) after the child-focused sessions; (4) approximately 6-weeks after finishing child-focused therapy; and (5) 3-months after finishing the child-focused therapy. All answers to assessment measures, and well as your identity and your child's identity, will be kept confidential.

Risks

There is little risk associated with participating in this study. There are no known negative outcomes of the treatments in which you and your children will be asked to participate. The questions on the measures you will complete are worded in a way that should cause little psychological distress to you or your child. All of the measures are commonly used in clinical settings. This study does require a fair amount of time and commitment from you to put in place the recommended treatment strategies and you may have a hard time finding the time to do this.

Voluntary Nature of Participation and Right to Withdraw

Participation in research is entirely voluntary. You or your child may refuse to participate or stop your participation in the study at any time without any negative consequences.

Date Prepared: August 17th, 2004
INFORMED CONSENT FORM (continued)
Teaching Children to Stop and Think: An experimental evaluation of the efficacy of problem solving skills training with behavioral parent training for the treatment of oppositional and impulsive behaviors in children.

## Confidentiality

Information related to you and your child will be kept in strict confidence. Your family will be assigned a code number instead of using your name. This number will be used for data storage so that your identity will always be kept in confidence. This code will be destroyed after the study is complete. Public presentations of this study will not identify you or your child. All data will be kept in a locked file cabinet that will be accessible only to the researchers (Bryan Bushman and Gretchen Gimpel) and their assistants.

## Benefits

As mentioned previously, the therapy being used in this study may result in decreased behavior problems in your child. You and your child will be offered these services free-of-charge for as long as you remain involved with the study (a maximum of 12-weeks participation).

## Explanation and Offer to Answer Questions

If you have other questions or research related problems you may contact either Bryan Bushman at (435) 787-8600 or Gretchen Gimpel at (435) 797-0721.

## IRB Approval Statement

The Institutional Review Board (IRB) at Utah State University has reviewed and approved this research project. The IRB is responsible for the safety of human subjects. You may call the IRB at (435) 797-1821 with any questions regarding the approval of this project.

## Copy of Consent

You have been given two copies of this Informed Consent Form. Please sign both, return one, and retain one copy for your files.

## Signature of Research Supervisor and Student Investigator

| | | | |
|---|---|---|---|
| Gretchen Gimpel, Ph.D. | (Date) | Bryan Bushman, M.S. | (Date) |
| Research Supervisor | | Student Investigator | |
| (435) 797-0721 | | (435) 787-8600 | |

INFORMED CONSENT FORM (continued)
Teaching Children to Stop and Think: An experimental evaluation of the efficacy of problem solving skills training with behavioral parent training for the treatment of oppositional and impulsive behaviors in children.

Signature of Parent/Guardian (if you wish to participate, please sign and date the blank areas listed below)

"By signing below, I am stating that I have read and understood this consent form and am willing, along with my child _____(please print child's name), to participate in this study."
Signature of Parent/Guardian:_____ Date:_____
*Parents: Please do not sign below this line*

-----------------------------------------------------------------------------------------------------------

Child Assent

I know that my parents have said it is okay for me to be in this study. I understand that it is up to me to participate even if my parents say "yes." If I do not want to participate, I do not have to. No one will be upset if I do not want to participate, or if I change my mind later and want to stop. I can ask questions about this study now or later. By signing below I agree to participate.

Name/Signature:_____ Date:_____

Appendix G

Workshop Materials for Student Therapist Training

Student Therapist Training Workshop

Rationale behind PSST Treatment:
- Main principles for the PSST program include: (1) a problem-solving approach, (2) self-instructional training, (3) behavioral contingencies, (4) modeling, and (5) role-play exercises. These are used throughout treatment
  - o Problem solving skills taught through:
    - ▪ (1) The therapist models task performance and talks out loud while the child observes.
    - ▪ (2) The child performs the task, instructing himself/herself out loud.
    - ▪ (3) The therapist models task performance while whispering the self-instructions.
    - ▪ (4) The therapist performs the task using covert self-instructions with pauses and behavioral signs of thinking (e.g., stroking chin)
    - ▪ (5) The child performs the task using covert self-instruction.

  - o Self-Instructional Training:
    - ▪ Child is taught to verbalize the problem solving steps in their own language
    - ▪ Following correct resolutions of problems the child is taught to self-reward for using the steps and coming up with correct answers.
    - ▪ Following incorrect resolutions of problems, the child is taught coping statements. This indicates that committing and error does not necessitate a disturbing outburst.

  - o Behavioral Contingencies:
    - ▪ Review with parents the session content. Encourage parents to reward child from grab-bag and specific praise whenever child performs the "target behavior" for the week. Idea is to "catch" the child being good.
    - ▪ Child gets a grab-bag for: (1) coming to sessions; (2) having tokens left over at the end of the session; and (3) completing the homework assignment for the previous week.
    - ▪ Response cost: child looses tokens in session for: (1) answering task questions incorrectly; (2) forgetting to use one of the problem solving steps; (3) going too fast; or (4) not participating in the session. Therapist provides explanation of why token was taken away. Therapist is generous during initial sessions but then takes away more as sessions progress (use clinical judgment regarding child temperament).

- Therapist provides lots of social praise for demonstrating any problems solving steps (in session or out of session). Remember to use specific praise: "Keep up the good work," "I can see you are trying hard," rather than confirming statements, "That's correct," "Right," or "Uh-huh."

- o Modeling:
    - During role-plays and at various times during the session, the therapist self-verbalizes by stating out-loud the problem-solving strategies.
    - Remember: first start with a "mastery" model when initially teaching the steps, then a "coping" model once the child has become accustomed to the steps. The therapist especially models coping statements once a mistake is made (e.g., "It is okay. I'll have to be more careful next time.")
    - At times, the child is encouraged to "catch" the therapist when he or she does not using each of the steps.
    - At times, the child sees a videotape of themselves using the steps and is asked to generate feedback about their use of the steps. At the review, parents are encouraged to model the problem solving steps to their children during the week.
- o Role-play Exercises:
    - Move from purely cognitive tasks to role-plays that mirror real-life social situations the child may encounter. Some of these role-plays will be general, some will be solicited directly from parents.
    - Therapist helps child generate 3 to 4 solutions (use paradox if necessary) and "think through" the consequences of each potential solution (e.g, "what would happen next?").
    - Children's choices should be respected (e.g, child may think it is still worth it to hit his or her little brother), although the therapist should say why he or she thinks another alternative would be better. This cuts down on resistance and power struggles. The important thing is that the child evaluates *all* solutions. We are not teaching *what* to think, but *how* to think.

Problem Solving Steps:
1. "What am I supposed to do?" (problem definition)
2. "I have to look at all the possibilities" (problem approach)
3. "I better stop and think through what will happen" Child pauses for few seconds or for two deep breaths (focusing of attention)
4. "This choice is best" (choosing an answer)
5. "How did I do?" (self-evaluation)

a. If outcome was positive: "I did a really good job." (self-reinforcement)
b. If outcome was negative: "oops, I made a mistake. Next time I'll concentrate and do better. It is okay." (coping statement)

Brief Program Outline

Session 1:  Child gets to know the therapist and is introduced to the problem-solving steps and rules of the sessions (tokens).  Parents are also introduced to the problem solving steps and asked to model them at home.

Session 2:  Child and therapist take turns using problem-solving steps on impersonal, cognitive tasks (e.g., pattern matching) and the "Cat and Mouse" Game.  Parents are asked to reinforce the child for pausing when reminded.

Session 3:  Child and therapist use steps on a game of checkers and some impersonal cognitive tasks.  The child is allowed to critique the therapist as to whether or not they are using the steps.  Therapist models coping statements when they make a "mistake" during checkers.  Parent now instructed to reinforce their child (grab-bag) when they observe the child using the steps without being reminded (catch the child being good).  The parents are also asked to generate 4-5 examples of social situations they child could use the steps in.

Session 4:  The therapist and child take turns applying the problem solving steps in generic social situations.  Special emphasis is placed on having the child generate multiple alternative responses and evaluating the potential consequence of each response.  Once these steps are mastered, the child and therapist practice using the steps in a covert or mental fashion.

Session 5:  Child and the therapist take turns roleplaying the use of the problem solving steps in actual situations that have been problematic for the child.  The child and therapist "act" out their responses for a video camera, and the child is responsible for reviewing the tape and telling the therapist how he or she used the problem solving steps.

Session 6:  Parents complete study measures during the last session.  The child and therapist repeat session # 5, with an emphasis on using the problem solving skills covertly.  The child also "teaches" the problem solving steps to the therapist, who is role-playing being another child.

General Therapy Checklist for PSST:

1. Begin each session by reviewing homework of how they used the steps. It is important that the child can brainstorm examples of how the steps could be used.
2. Fade from overt to covert speech over the course of treatment and occasionally during each session.
3. Use response-cost when the child (unless directed):
   a. Forgets a step
   b. Solves the task incorrectly
   c. Goes too fast
4. Label each response-cost. Be specific in the very beginning, but emphasize conceptual labeling in latter sessions. Model the task immediately following a response-cost- highlighting a coping statement for the child.
5. Watch for mechanical use of self-instructions
6. Therapist should use every opportunity to model coping statements for the child. This includes having the therapist "mess up" and giving the child an example of a "coping model." ("Oh, I'm so horrible at this....no wait, I made a mistake but that is okay I will do better next time.")
7. Be sure to follow up with parents so that the child is being rewarded accordingly (completing homework, having tokens left over, parent assignment to reinforce). Go over a homework handout with parents at the end of each session.

## Non-directive or Play Therapy

Rationale: Younger children may not be able to reveal or talk about their feelings. There are primarily two ways that a younger child (ages 7-9) can work through problems: the attitude of the counselor, and the play of toys. Play, as a means of self-expression, is an opportunity given to the child to "play out" feelings and problems just as an adult might "talk out" difficulties. The following description of a child's inner world (and how play may help) is described by Axline (1955):

When working with children in play therapy, the therapist must be able to accept the hypothesis that the child has reasons for what he does and that many things may be important to the child that he is not able to communicate to the therapist. It seems quite likely that the play therapy sessions offer the child the opportunity of experiencing affectively this relationship. Because of this present emotional experience, the child can gain much from it even though the therapist does not always know what is going on in the child's inner world- and is unable to find out. A therapist who is too literally minded and cannot tolerate a child's flight into fantasy without ordering it into adult meaningfulness might well be lost at times (p. 126-127).

Principles (Axline, 1982):
- The therapist develops a warm friendly relationship with the child, in which good rapport is established as soon as possible.
- The therapist unconditionally accepts the child.
- The therapist establishes a feeling of permissiveness in the relationship so that the child feels free to express his feelings completely
- The therapist recognizes feelings the child is expressing and interprets those feelings for the child to help them gain insight.
- The therapist respects the child's ability to solve problems once given an opportunity to do so. It is the child's responsibility to make choices and to institute change.
- The therapist does not attempt to direct the child's actions or conversation in any manner. The child leads the way and the therapist follows.
- The therapist establishes only those limitations that are necessary to ensure the child and therapist's safety.

Primary Skills Used in Session (note the variations in older and younger children):
- Structuring Play and Limit Setting (see Transcript #13)
- Empathetic Reflecting of Feeling (see Transcript # 14)
- Empathetic Reflecting of Content (see Transcript # 14)
- Reflecting Personal Feelings in a nonthreatening way (see Transcript # 15)
- Use of praise, reflection, and description as outlined in the "Paying Attention to your Child's Good-Play Behavior" handout.

Common "Play Therapy Games":
Note: You can use one of the "Play Therapy Games" discussed here during each session if you believe that the child's play or discussion is not really related to their problematic behaviors. You may suggest the game, but the decision is left up to the child. Make a note of which game you played on the child's treatment note under "Rate the child's participation level…"

Game 1: Draw a person, house, tree.
- The child is asked to draw a person. It is believed that the person is representative of the child.
- While the child draws, the therapist can praise the work and ask questions regarding the picture ("How old is this person?", "What is this person doing", "What does this person like to do best?", "What does this person like the least?")
- After the person is drawn the therapist asks the child to draw a house and a tree. These pictures are thought to represent the child's home life.
- The following types of questions are asked about these pictures:
    o What's the one special thing about this house?
    o What's the worst thing about this house?
    o What kind of tree is this?

- o What's the one thing you would change about the house?
- o Is there a scary place in this house?
- The child is now asked to draw a picture of a family (not their family). This picture is thought to represent what the child would like to see in their family.
- The following questions are asked about this picture:
  - o What is each family member's name?
  - o What is this family doing?
  - o What is the one best thing about this family?
  - o What is the one bad thing about this family?
  - o What kinds of things does this family do together?
  - o Who is the favorite person in this family?
  - o How does everyone get along?
- The child's responses will give the therapist information regarding the child's perceptions and relevant material for therapy.
- It is important to keep all questions in the third person, which is less threatening to the child. If there is no answer to a question, the therapist should just move on to the next question.

Game 2: The Puppet Sentence-Completion Test (for younger children):
- The therapist allows the child to choose a puppet. Then the therapist chooses two puppets, one for each hand. Puppet A and B are on the therapist's hands, and Puppet C is on the child's hands.
- After puppet A and B state their names, the child is prompted to have puppet C give it's name. After this several nonthreatening stems are presented:
  - o "My favorite food is…"
  - o "My favorite class in school is…"
  - o "My favorite color is…."
  The therapist models how to not only answer the stem but give details why they are choosing the answer.
- Once the child understands the task, more stems are presented to access the child's thinking on various issues:
  - o "I am saddest when…"
  - o "I am happiest when…"
  - o "The best thing about me is…."
  - o "A secret about me is…."
  - o "I feel bad when I…."
- The stems can be modified to fit each client's issues based on the initial intake from parents:
  - o "I get yelled at when…"
  - o "In need more self control when…."

Game 3: The Thinking, Feeling, Doing Game
- The child and the therapist take turns moving along the board and take turns from the "thinking", "feeling", and "doing" cards.
- The therapist and child each earn a token (red chip) for each response.
- The therapist should "milk" each response for all it is worth to help the child explore their answers. The therapist should provide appropriate modeling for the answers he or she draws.
- The person who gets to the "finished" section first gets 5 extra chips. Whoever has the most chips at the end of the game is the winner.

Game 4: The Color-Your-Life Technique
- Ask child if they can pair affect with a particular color:
    o T: "Can you tell me what feeling might go with the color red."
    o C: "I don't know"
    o T: "Can you think of a time when people get very red in the face? Think about cartoons you have seen. When do the characters scrunch up their faces and get red?"
    o C: "When they are mad!"
    o T: "That's right. Most people think that the color red goes along with being angry."
- This type of exchange continues as each color is associated with a particular affect: red (anger), purple (rage), blue (sad), black (very sad), green (jealousy), brown (bored), gray (lonesome), yellow (happy), orange (excited).
- It is helpful to discuss with the child the differences in emotion as concretely as possible (e.g. child knows the difference between anger and rage).
- The child is now given a piece of blank paper and told that this paper is going to be filled up with colors to show the feelings they have had in their lives. "If you have been happy about half the time in your life then half the picture should be yellow."
- The therapist adds that the child can complete the coloring in whatever way she chooses: using squares, circles, designs, or just scribbling.
- While the child colors, the therapist alternates between describing and praising the child's picture and wondering out-loud why the child chose that particular color. Therapist tries to engage the child in a discussion of what was going on in his or her life.

Game 5: Squiggles
- The child and therapist take turns in closing their eyes, and drawing at random on a piece of paper.
- The other participant may turn the paper any way he or she wishes, and discover pictures in the 'squiggle.'

- Theory states that the images seen by the child reflect issues that unconsciously worry him or her "interpretation of the pictures will lead to insight and relief."
- The therapist encourages the child to make up a story about one of the characters in the squiggle. The therapist reflects the affect of the story and potential solutions to the story.

Game 6: King or Queen of the Island
- The child is asked to imagine him or herself as king or queen of an island in the middle of the ocean. She or he can select those items (people, games, events) he or she wants with them and banish to another island all the things that he or she does not like.
- The therapist and the child draw two "islands" on a piece of paper. The therapist models what would be on his or her islands, and then the child is asked to draw the things they selected around their island.
- The therapist engages the child in a discussion of why they selected these things; being sure to reflect the child's affect.
- "The crux of this play technique is not that it must be interpreted but that it must be witnessed respectfully."

Game 7: The garbage bag technique (for concluding sessions only)
- The child is asked to write on 4 pieces of paper something that concerns him or her. The therapist does the same.
- The therapist and the child take turns drawing randomly from their piles of paper.
- The therapist and the child describe the emotions associated with the concern and each draw a picture using the "Color-your-life" technique mentioned above.
- The therapist and the child suggest ways to look at the situation so it is "not so bad."
- If the child is willing, the therapist and the child , once they have drawn their pictures and talked about other ways to look at it, take turns crumpling up or ripping up their pictures and throwing them "away" in the garbage bag in the clinic room.
- If the child is unwilling to rip up or throw away his or her picture, they should draw a new picture with new affects represented by the colors to demonstrate how the new perspective changes the situation.

Trouble shooting (for both treatments)
- Some children may get "out of control" during role-plays. If this happens, set up a "red-light/ green-light" game with the child. The child need to do a "freeze frame" where he or she acts like a statue when the therapist does a "stop sign" signal with hand or they loose one token.
- Facilitating Child Cooperation:

- o Turn taking
- o Solicit child's help in how role-plays should be done (who was there, what was going on)
- o Have child "evaluate" the therapist as to whether or not he or she is using the problem-solving steps
- o Do not be too rigid about taking away tokens or going over problem solving steps in particular sequence (particularly in later sessions). Use your clinical skills regarding what the child can tolerate and what will create a rupture in the therapeutic relationship.
- What if it is becoming too stagnant? After the steps are well-learned, the child just routinely goes through the steps without much thought.
    - o Have child come up with self-instructions in different words. "What is another way to say the step?"
    - o Model new variations of old statements: "Man, I'm starting to sound like a broken record...I'll come up with new ways to say the steps."
    - o Ask the child what steps "mean."
    - o Have the child "catch" you skipping one of the steps- chance to earn extra tokens

- What if the child is fearful or tense?
    - o Play the "Tense and Relax" game by demonstrating and asking the child the following:
        - ▪ "How do people look when they're tense and upset? (Contract all muscles and squeeze up your face.) And how do people look when they're relaxed? (Let out all the tension suddenly and let your body go limp.) Let's try this together: Tense (both together) and relax...tense...relax...tense...and relax."

- What if the child is too tense because tokens are being taken away?
    - o Consider moderating the number of tokens you take away, but do not abandon the procedure entirely.
    - o You may want to consider pausing the session and playing a "game" where the child can earn bonus tokens for answering correctly simple questions that review the steps and the events of the previous sessions.

- What if the child is acting defiantly in the session or refuses to participate?
    - o Always use redirection and differential reinforcement first.
    - o If this fails the child is given one warning that they may loose a token. Feel free to take away a token and then calmly continue on with the session as if nothing happened- even if the child "calls your bluff" ("I don't care")

If repeated offenses occur, give one warning about timeout. This is a last resort, however, and should not be used more than once. Contact the principle investigator if this occurs.

Appendix H

Parent Training Outline and Handouts

Parent Training Outline and Handouts
Parent Training Session #1


___ Introduction and Welcome
- Tell participants about my background (part of my dissertation)
- Have everyone introduce themselves
- Purpose of the group: discuss but I will keep us on track, don't have to share if you don't want to, confidentiality.
- Logistics of the treatment sessions (timeframe, breaks, missed sessions, etc...)
- Cover common parent concerns: (1) child abuse; (2) being told what to do in my home (e.g., consultant role- need your expertise); and (3) being judged as a bad parent.
- What contributes to childhood psychological problems (e.g, parenting, temperament, history, and environment). [use whiteboard]
- Review "Five Ideas about the Psychology of Children" handout


___ Give overview of treatment and rationale for this sequence of topics [whiteboard]:
- Ignoring appropriately, positive reinforcement, discipline techniques. and dealing with problem behaviors outside the home.
- Ordering this way intentionally
- Many parents or programs only institute one or two- not the full package
- Requires some patience on your part...


___ Go over "Behavior and Terminology" Handout
- Emphasize Differential Reinforcement and the "ABC"'s of behavior (immediate response better than responding later)
- Have parents discuss the triggers for their child's problematic behaviors (Group Discussion- "A"s and "C"s put on whiteboard)
- Emphasize Extinction Burst process


___ Talk about the importance of ignoring minor misbehaviors
- Have parents make list of behaviors that can and cannot be ignored
- Group discussion about the differences between these lists [whiteboard]
- Remind parents about the power they give their child when the child knows the parents buttons are being "pushed."


___ Go over "How to Ignore Minor Misbehavior" Handout
- I role play how to do this in the home (2 different reactions: ignoring and nonignoring)

- Have parents work out a "signal" they can use to help cue each other that their buttons are being pushed.
- Have parents continue to punish, as before, nonignorable behaviors-but emphasize doing this in a very "matter-of-fact" manner.
- Talk about the futility of lecturing. Lecturing is not disciplining. (2 different scenarios: (1) explaining; and (2) explaining after punishment)

_____ Teach parents how to operationalize 2-3 behaviors
- Throwing paper in the trash example
- Make sure parents have the same definition as to what constitutes the behavior
- Discuss how not having this leads to "loopholes"

_____ Homework
- Practice Ignoring behaviors listed as "ignorable" behaviors (include redirection of attention and talking to problem family members). Heads up: ignoring doesn't work by itself
- Brainstorm potential problems: extinction burst, walk away if possible.
- Pass around role and talk about calling them for one-one-one.

Needed items:
  Food, plates, cups, drink, napkins
  Pens and pencils
  Photocopies of handouts and Role
  Whiteboard markers and erasers

Parent Training Session #2

___ Review Homework
- Talk about solutions to common problems of ignoring
- Did parents use hand signals for each other when buttons were being "pushed"?

___ Introduce the importance of pairing praise and positive reinforcement with ignoring.
- Ignoring does not work without the consistent use of praise
- Introduce 3:1 ratio: "For every one time the child is ignored or punished, parents need to look for three opportunities to genuinely praise."
- Continue to emphasize the difference between lecturing and disciplining

___ Have parents brainstorm positive things their child is currently doing
- Include approximates of behaviors they are trying to control
- Have parents write down a list on the "3:1" handout- group discussion of potential ideas
- Brainstorm what to do if they act "rudely" to praise (ignore)

___ Introduce Child's Game
- Go over "Attending to your child's Good Play Behavior" handout
- Make modifications for age of child (e.g., less descriptions for older children)
- Help parents understand that this is an opportunity to "overlearn" praise, which will make them more likely to "catch the child being good" at other times.
- Show examples of child's game being done correctly and incorrectly.
- Have parents discuss the difference between the videos
- Have parents practice child's game in session with each other.

___ Homework:
- Begin practicing the 3:1 ratio using the praises that were discussed during the session
- Practice the "child's game" 4-5 times over the next week.

Parent Training Session #3

____ Review Homework
  - Review ignoring and 3:1 ratio, have you been able to do it each time you ignored or punished?
  - Follow up on ignoring (buttons still being pushed?)
  - Follow up on use of child's game: group discussion about success and failures.

____ Explain Rationale for Reward Program
  - Research demonstrates that many children who struggle with impulsivity are motivated by tangible reinforcers
  - Make comparison of an adult who has to work a job with no chance for promotion or achievement
  - Address difference between "bribing" and "rewarding". Bribing is when you are negatively reinforced to acquiesce to the child's demands. Rewarding is allowing the child to earn things for good behavior. Rewarding is setting up a positive consequence beforehand.

Parent Training Outline and Handouts (continued)

____ Have parents list small and large reinforcers that their child can earn
  - Go over "Common Rewards" handouts to help parents brainstorm
  - Parents should be able to brainstorm 5-6 small reinforcers, and 1-2 large reinforcers
  - Make sure parents understand that for a reinforcer to be effective: (1) the child should like it; (2) the parents provide it quickly; and (3) reinforcers should change frequently

____ Have parents make a list of things their child can do to earn small reinforcers
  - These behaviors should be the opposite of the 2-3 oppositional behaviors that were discussed in session #1.
  - Should have a list of 4-5 behaviors

____ Introduce concept of "Grab-bag" and "Connect-the-dots" programs
  - Go over the "Grab-bag and Connect-the-dots Program" handout
  - Talk about how to make adaptations for older children (e.g., contracting)
  - Emphasize that these programs will allow children to work towards long-term goals. If parents are being "pestered" for things, the child can have the choice to substitute the item for which they are begging for a "connect-the-dot" reward. Eliminates "freebees" so the child earns rewards

- Warning: Look for opportunities to do this so they get invested (1-2 times a day at first)
- Have parents write down rewards and what the child has to do to earn the rewards on the handout.
- Always pair the reward with your praise, maintains praises value, be specific about what you like- label it.

___ Role-play how to explain and set up reward program with child (include contracting if some children in the group are older).

___ Review "Giving Appropriate Commands" handout
- Group discussion about commonly made mistakes
- Talk about the importance of integrating choice into commands (where possible)
- Video presentation about "good" and "bad" examples of commands
- Group discussion about the difference

___ Homework:
- Parents should explain and begin the reward program to child by the next group meeting. Get child's suggestions about potential reinforcers.

Parent Training Outline and Handouts (continued)

- Continue to practice: (1) differential reinforcement- praising and ignoring; (2) Child's Game 3-4 times per week; and (3) 3:1 ratio.
- Watch the type of commands you do

Parent Training Session #4

___ Homework Review:
- Any problems setting up the Reward Program? How often has it been used?
- How often has appropriate ignoring and Child's Game been used?
- 3:1 ratio being used?
- Parents retain the right to change what behaviors receive reinforcers and how often they are given (whining about not getting a reinforcer is ignored).

___ Have parents brainstorm automatic privileges that their child typically enjoys
- Should be a list of at least 5 privileges
- Privileges should all be things parents have control over (e.g., parents can unplug it, put it away, supervise whether or not the child leaves the house).

___ Go over "Job-Card Grounding" handout
- No more than 2-3 privileges or job cards given, afterwards walk away
- Child is "grounded" (no access to privileges) until they complete the job-card

___ Role-play the implementation of Job Cards
- Command (wait 10-seconds), warning with a time limit (10-second wait), command with consequence attached (do not bargain with the child), either praise compliance of implement command.
- Once they have completed the assignment, ask the command again (if applicable)
- Brainstorm common problems: calling the child's bluff ("I don't care if I get a job-card"), ripping up the card.

___ Homework
- Explain job-card grounding to the child, but give the child 2-3 days before you implement it officially. Discipline as normal during this time; however, remind the child "that (the offense) will be (one or two) job cards when we start using it." This gives the child time to acclimate to the new system and gives parents time to brainstorm any problems with its implementation.
- Continue to practice child's game, 3:1 ratio, differential reinforcement, and the reward program.
Parent Training Outline and Handouts (continued)

Parent Training Session #5

____ Homework Review:
- Any potential problems with job-cards? Group discussion
- Still using the reward program? Child's Game? 3:1 ratio?

____ Go over "Attending to your Child's Compliance and Independent Play" handout
- Re-emphasize the importance of praise and positive reinforcement. "Without it no discipline system works."

____ Review the "Rewards and Punishments" handout
- Have the parents brainstorm "daily expectations" (what the child is expected to do everyday to maintain privileges) and "household rules" (behaviors that are not acceptable).
  o Have parents link "daily expectations" with one or more of the child's daily privileges. They loose one or more daily privileges for not completing one of their daily expectations
  o Have parents link "household rules" with immediate consequences (no warning), like using job-cards. "Noncompliance" is the only household rule the child can break where they are given a warning.
- Have parents list their answers on the handout so they can be reviewed easily with the child.

____ Review the "Managing Behaviors in Public Places" handout

____ Role-play how to explain to the child the "Rewards and Punishments" handout so the child understands the connection between pro-social behaviors (receiving a reward), actions of omission (loosing a privilege), and actions of commission (job-card grounding)

____ Role-play the "Managing Behaviors in Public Places" principles

____ Lying, tattling and fighting with siblings (tattling passes)

____ Homework:
- Explain to the child the Rewards and Punishment handout. Post these rules in the home so the child can refer to them often
- Continue using reward plan, job-card grounding, child's game, and 3:1 ratio

Parent Training Session #6

___ Homework Review:
- Any problems setting up the privileges as described in the last session

___ Trouble-shoot persistent problems
- Allow time for parents to talk about remaining problems. Group discussion about how to deal with these situations.
- Leave enough time for this discussion (approximately 30 to 45 minutes).

___ Go over "Communication" handout
- Emphasize appropriate expectations and appropriate ways of communicating ("I feel" statements, nonattacking language)
- Emphasize allowing the child to play a more active role in decision making as the child matures

___ Go over "Review of Treatment" handout
- Discuss each of the principles and trouble-shoot any problems with implementation
- Summarize "Big 5": (1) ignore minor misbehaviors; (2) practice 3:1 ratio and one-on-one time; (3) have a consistent discipline plan; (4) model appropriate behavior; and (5) have a way for the child to earn rewards.
- Emphasize that each of these needs to be implemented for the plan to work.

___ Have parents fill out assessment measures in session (CBCL, SSRS, PSI-SF)
- Have the parents fill measures out "as things have been for the last week."
- Remind parents that they will be called regarding PDR. Child will also be called to be administered the SSRS self-report form.
- Educate parents about the start of individual therapy
  o Will begin in approximately 2-weeks
  o 6-sessions, which will last 50-minutes. 10-minute wrap-up at the end of the sessions with the parents.
  o Educate parents about the role reinforcers will play in treatment (child can earn between 1-3 reinforcers for appropriate participation each session). Get verbal okay from parents that they will reinforce their child in this manner.

Five Ideas about the Psychology of Children

1. Children are great perceivers, but horrible interpreters
   - In other words, children will pick up on emotions, but they won't know what to do with them. They will often assume that the negative emotion has something to do with them since many of them are egocentric and have difficulty taking other people's points of view. For instance, if contention exists in a marriage, the children of that marriage may assume that they are the *cause* of the contention.
   - Intervention: When you are experiencing a deep emotion, explain what you are thinking or feeling to the child in very clear terms. Don't leave things unsaid or you may be amazed at your child's interpretation of things.

2. Children cannot understand consequences in the future unless they <u>experience</u> consequences in the present.
   - Lecturing is too abstract, it delays consequences, and it may reinforce them with attention. For instance, children will not understand "bad things happen when you lie" until the *experience* something bad (e.g., timeout, no dessert after dinner) happening *because* they lied.
   - Intervention: Provide consequences and walk away rather than lecture. You can always go back later and "teach."

3. Children live in the moment.
   - Threatening or telling a child about a potential distant consequence for their behavior (e.g., "When your father gets home", "…if you keep this up you'll never go to college") is generally never as effective as providing a consequence in the moment.
   - Intervention: Think out consequences (e.g., timeout, movie time taken away) in advance so that: (1) you can give them to the child immediately; (2) you don't have to decide "what to do" when your angry; and (3) the child consistently knows what will happen as the result of their behavior.

4. Children remember what you do, not what you say (unless you lie)
   - *Modeling* (or your example) has a powerful impact on children. It will "trump" any church lesson or lecture you give them. Also a lack of consistency (what you tell them will happen vs. what actually happens) will be remembered.
   - Intervention: Don't do what you would be tempted to lecture you child on. Don't say things you have no intention of following through on. It is better to not give the command.

5. Most children are reinforced by knowing that they've pushed their parent's buttons.
   - Even though they may be "punished" for doing so, the knowledge that they can affect their mommy or daddy's feelings is incredibly powerful to children. So don't be surprised if they cuss, say they "hate" you, or say you "don't love" them when they are being punished.
   - Intervention: First, remember that they don't mean what they say. They haven't learned to master their emotions yet. Ignore these words or you risk teaching them how to manipulate. If your child feels like they've found a "soft spot" they will continually be tempted to exploit it when they are in trouble.

How to Ignore Minor Misbehaviors

1.  If applicable, be sure you and your partner agree as to what behaviors are "ignorable."  This procedure will not work if only one of you ignores the behavior but the other does not.  These behaviors should be listed below.

| Ignorable Behaviors | Behaviors that are not ignorable |
| --- | --- |
|  |  |

2.  When the behavior occurs, tell the child in a very matter-of-fact voice "I'm not going to talk to you when you…." and label what the child is doing.  You may tell the child this only <u>once</u>.  Avoid lecturing or you may reinforce your child's behavior.

3.  Ignoring means: (1) avoiding eye-contact, (2) have a completely neutral expression on your face (think of a "poker face"), (3) not talking or communicating with the child in any way (e.g., deep sighing, groaning); and (4) engaging yourself in another task (e.g, pretending to read a magazine).

4.  If the child continues the behavior for a prolonged period of time or if you feel like you are about to "loose it", tell the child (again very matter-of-fact) "I'll come back when your not…", and label the behavior.  At this point you should leave the room.

5.  If the child follows you into another room, tell the child (again matter-of-fact voice) "If you keep following me, then you will (get timeout, loose a privilege, have to do a chore)" Walk away again, and if the child follows be sure to use the consequence immediately.  While the consequence is being used, there should be little talking to the child.

6.  Wait a few minutes.  As soon as the behavior stops go back to your child and be sure to praise him or her for discontinuing the behavior.  Be genuine in your praise.  This last step is crucial.  Ignoring rarely works unless: (1) both parents do it, and (2) praise and attention is given to the child for discontinuing the behavior.

<u>Note</u>:  It may be necessary to educate extended family members (e.g., grandparents, older brothers/ sisters) about these procedures when the child is not around.  This way these extended family members know what you are doing and do not undermine your efforts.

## The 3 to 1 Ratio

Look for 3 opportunities to praise each time you ignore or punish your child.
* Remember: pay attention to the behaviors you want to see more often.

Behaviors I sometimes see in my child that I can specifically praise (e.g., "I like how you...., It is great when you...., It makes me really happy when you...)

Write any other behaviors you want to add to this list...

Grab-Bag and Connect the Dots program

The following program will reward you child for positive behaviors they do around the house. It will also teach them the importance of long-term goals. It is important for parents to actively look for ways to reward their child during the first part of the program so that the child will become invested in it. In other words, for the first few weeks don't be stingy. Eventually you may want to decrease the number of times you reward your child; however, you should never decrease the amount of praise you are giving them. Always pair a reward with a specific praise (e.g., "I like how you....", "It makes me so happy when you..."). This way your child understands what they specifically did that was appropriate (great learning moment) and it also helps to maintain the reinforcing value of your praise.

Steps

1. Brainstorm with your child 5 to 8 small trinkets that your child can earn for good behaviors. These should be things that the child finds reinforcing, but they should be relatively inexpensive and not too time consuming. List these things below.

| | |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

2. Cut out about 40 small strips of paper. Put one of the reinforcers, listed above, on each strip of paper. Each reinforcer should be written down 5 times. However, if a particular reinforcer is more expensive, you can list this reinforcer less than the others (e.g. there is less "chance" of them pulling it out of the grab bag).

3. Fold the strips of paper up and put them in a large bowl or bag. Decorate the outside of the bowl or bag with the label "grab bag." Each time your child does a behavior that you would like to see more often, specifically praise them and let them choose from the grab-bag. Initially, you want to make a big deal out of this. Put down the specific behaviors you want to see increase in your child below.

| | |
|---|---|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

4. Find opportunities to reward you child for behaviors other than those you've listed above. If the child doesn't like the reward they've chosen, offer it to the child anyway. If they still complain, simply say that they don't get the reward and walk away before your child escalates. When a child performs a positive behavior it is ideal for them to be rewarded immediately. Sometimes, however, this is not possible, but they should be rewarded on the same day.

5. With your child, draw a picture of a "big prize" that the child wants. This is usually something more expensive. After the prize is drawn, add dots to the picture. Each time your child chooses from the grab-bag, they also get to "connect a dot" to the larger prize. Once all the dots are connected, the child should receive the prize as soon as possible. This teaches the child the importance of saving and "working towards" a long-term goal.

6. Display the grab-bag and connect the dot picture somewhere where the child can see it often. Eventually, you may choose to reward your child less frequently. The child can also make suggestions of other prizes to put in the grab-bag; however, ultimately the decision is up to his or her parent(s).

7. Set aside a time to explain all of these procedures to the child. Use a lot of examples and make it sound very exciting.

# Rewards/Punishments

| *Part A: Positive Behaviors* | *Positive Consequences* |
|---|---|
| | Grab Bag |
| | Connect the Dots |
| | |
| | |
| | |

| *Part B: Daily Chores* | *Automatic Privileges (Warning)* |
|---|---|
| | |
| | |
| | |
| | |

| *Part C: House Rules* *warning)* | *Immediate Consequences (no* |
|---|---|
| NonCompliance (e.g., not listening) | Natural Consequences |
| | Job Card Grounding |
| | |
| | |

Part A (Why Rewards?):
Rationale- Adult: "No matter how hard I work at my job, I'm never rewarded for it. Why should I bother?" Just like you sometimes need tangible rewards to keep motivated at work, so do children.
Instructions- Each time your child performs one of the positive behaviors listed on the left, provide a positive consequence on the right with praise regarding what they've done correctly (e.g., "I really like how you played so nicely with your brother"). Remember, try to look for an opportunity to reward at least once a day when starting the program. You can taper off the rewards overtime *but not your praise*. If you need ideas for social rewards (compared to more materialistic rewards) look on the back.

Part B (Daily Chores):
Rationale- Adult: "In order for me to continue to expect time off, I need to at least meet the minimum standards of my job." Daily chores are the "minimum standards" needed to keep daily privileges
Instructions- If the child does not complete one of the daily expected chores listed on the left, give them one warning and a timeframe by which the chore should be started. If they fail to begin the chore by the specified time, take away one or more privilege.
Example: "Andy, you need to start cleaning up your room in 15-minutes or your Play Station gets taken away." Warning- It is generally best not to take away privileges for more than a day. This way they start over with a "clean slate" each morning.

Part C (House Rules or Big No-Nos):

Rationale- Adult: "If I threaten another employee, my boss will immediately reprimand me or worse." There are certain things that simply aren't allowed. The world provides swift consequences.

Instructions: Whenever the child breaks the house rule listed on the left, they should immediately be given a consequence listed on the right. No warning applies. The only exception is noncompliance (e.g., not listening). You can give the child one warning before implementing the consequence. ("If you don't start cleaning you room, like I asked, in 10 minutes, you get a job card." Remember job card grounding equals taking away all the things listed under "Automatic Privileges" until job card is done. Don't remind or nag, just make sure the privileges are removed.

Final Note:- Go over these rules with your child when everyone is nice and calm. This way you won't feel like you have to explain yourself when you or the child is upset. Post the rules and consequences in a public place so they can be referred to often.

## Ideas for Positive Consequences to Part A (Social Reinforcers)

Extra T.V. time

Extra video game time

Extra play time with mom or dad

Extra play time with friends

15 or 30 minute later bedtime

Playing specific game with Mom or Dad

Choosing a special T.V. show or video to watch (parent approved)

Having Mom or Dad do a chore for them

Going for a walk with Mom or Dad

Choosing what is for dinner or dessert

Extra time talking on the telephone

Extra computer time

Remember: For social consequences to be reinforcing, you need to make every effort to give them to the child the same day they perform the positive action.

Communication*

Review the following list of communication habits. On one side of the handout are "Poor" habits and on the other side is each habit's polar opposite- the "Good" habit. Review each line and circle three of the "Poor" habits that you frequently use with your child and then circle three of the "Good" habits you frequently use.

| *Poor* | *Good* |
| --- | --- |
| Insults or labels | State the issue |
| Interrupts | Takes turns |
| Only criticizes | States both good and bad |
| Gets defensive | Calmly disagrees |
| Lectures | Short and straight |
| Looks away | Makes eye contact |
| Slouches | Sits up straight |
| Sarcasm | Talk with respect |
| Goes silent | Say what you feel |
| Denial | Accept responsibility |
| Commands, orders | Asks nicely |
| Yells | Uses normal tone of voice |
| Swears | Uses respectful language |
| Throws a tantrum | Cool it, count to 10, take a hike |

Principles of Good Communication
1. Listen when your child is in the mood to talk, but don't force him or her to open up.
2. Use active listening to encourage your child to express opinions and feelings
3. Honestly express how you feel, good or bad, without being hurtful to listeners.

* Adapted from Barkley, Edwards, and Robin (1999)

Review of Treatment

Dealing with "A":
1.  Are your commands clear?
    a.  Are you breaking commands into manageable parts?
    b.  Are you phrasing your commands as questions or suggestions?
    c.  Do you have their attention first?
    d.  Are you telling them what to do or what not to do?
2.  Can you provide them with something to entertain themselves? (example, quiet book).
3.  Are you frequently praising good behavior, so they do not feel like they need to "act out" to get your attention? (e.g., "I really like how well you are playing quietly while mommy talks on the phone.")
4.  As much as possible, remove problematic objects from the environment.
5.  Remind them of the rules, before going into a potential problem situation.

Dealing with "C":
1.  Do not provide extra attention for "ignorable" behaviors
    a.  Make a list of what you can ignore with your husband
    b.  Children can't tantrum if they don't have an "audience"- say no more than one sentence and then walk away.
    c.  Be an actor- do not allow the child to know he or she is "pushing your buttons."

2.  After ignoring, look for an opportunity to practice the 3:1 ratio.
    a.  1:3 ratio: each time you ignore your child, look for three instances (after the problem behavior is over) to *specifically* praise your child. This is more than simply saying "good job." Example, "I really like how you listened the first time I asked you to do something."
    b.  Try to spend one-on-one time with the child 4-5 times a week for at least 10 minutes. This way they don't feel like they need to "act out" to get your attention.
    c.  Child should walk away with the impression that they get no kind of emotional reaction or attention for certain behaviors and a great deal of attention/ praise for appropriate behaviors.

3.  For behaviors that can't be ignored, discipline should be done: (1) ASAP, and (2) in a very matter-of-fact fashion (see timeout example).
    a.  No Lecturing. Definition: "Continually repeating what the child already knows at a time period where feelings are hurt, anger is high, or consequences need to be enforced."
    b.  Why? (1) Does not provide the child with any additional attention; (2) Reduces the chances that you will "back down"; (3) Lets the child know that you will not be manipulated; and (4) makes the consequence more immediate. Remember you can always go back and teach later when the environment is good.
    c.  The punishment should not be an "escape" for the child. For instance, do not take a fussy child out of sacrament meeting only to let them run all over the foyer. After timeout, reissue the command that the child got sent to timeout for disobeying.
    d.  Remember to practice the 1:3 ratio after they are punished.

4.  Remember providing a reward from appropriate behavior is not necessarily "bribing."
    a.  Teaches the lesson, in a concrete way, that if you do good, you will receive good. Prepares them for the real world

      b.   *Bribing* is giving the child something so you can be negatively reinforced. In other words, if you're giving something to your child so they will stop doing something you find punishing (e.g., yelling or whining), then this is bribing and will lead to further instances of yelling or whining.

Parent Training Outline and Handouts (continued)

      c.   In contrast, *rewarding* is giving the child something for doing an action that you would like to see more of. Remember, just like you need reinforcers (e.g., promotions, vacations) to continue to be a good employee, your child also needs reinforcers (e.g., special game with mom and dad, choosing dessert for the night, special movie) to continue to be a good child (their job).

5.   In the end, the ideal situation is one where the child:
      a.   Gets no attention and (if necessary) gets something taken away, when they do wrong.
      b.   Gets lots of positive attention when they do right.
      c.   Can easily make a distinction of what it is like to be ignored and what it is like to be praised.
      d.   Knows, in advance, the positive consequences for being good (e.g., rewards, praise) and the negative consequences for being bad (e.g., no attention, timeout, certain privileges being taken away).

Appendix I

PSST Treatment Outline and Handouts

## PSST Session #1

<u>Objectives:</u>  To introduce therapy rules and problem-solving steps to the child.  At the end of this session the child should be able to use the problem solving skills on basic cognitive tasks, with the prompting of the therapist.  Parents should understand the importance of modeling these steps for the child and be willing to reward their children socially (praise) and physically (grab-bag) for using the steps.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|------------------------------------|
| Intro | Complete the "Getting to know you" survey with the child. Structured activity that helps the child and therapist get to know basic things about each other. | 10-minutes | | "Getting to know you" survey | Y / N |
| | Introduce Response-Cost and Reward Systems: Can loose chips for: (1) going too fast; (2) forgetting a step; and (3) getting the wrong answer.  Can get rewards (grab-bag) for: (1) doing homework; (2) participating well in the session; and (3) having chips left at the end of the session (see transcript #1). | 5- minutes | Transcript #1: "Explaining Chips and Rewards." | "How can I lose chips and gain rewards?" handout - Poker chips used for all sessions. | Y / N |
| Main session content | Play checkers slow and then fast (only 2 seconds to move)- only one row of checkers for each player. Discuss the difference between the two styles of play. "The skill to slow down and think through decisions will help you.  Do this through steps that I'm going to teach you." | 10-minutes | | Checker board and checkers | Y / N |
| | Go over problem solving steps using the handout. * Make sure they understand that the step "focus in" requires them to pause and take at least 3 deep breaths before making a response (see transcript #2). | 5-minutes | Transcript #2: "Explaining the Problem Solving Steps" | "The Problem Solving Steps" handout | Y / N |
| | Practice steps on "What comes next" activities.  Therapist does overt coaching of steps, take turns, and demonstrates coping model (since this may be most difficult for children to understand- see transcript #3)  Use response-cost system at least once or twice | 10-minutes | Transcript #3: "Modeling Coping Statements" | "What comes next" handout | Y / N |
| Home work | "Next time you come in I want you to name one time when using the steps would have been helpful." Remind about reward contingency for homework. | 2-minutes | | | Y / N |

## PSST Session #1 (continued)

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|------------------------------------|
| Parent Review | Go over "Session Review #1" handout with parents. Be sure to note the following:<br>- Review problem-solving steps with parents, talk to them about modeling (see handout under "What was discussed today" and "How you can help")<br>- Discuss what the child was asked to do before next time and their role (see handout under "What your child was asked to do for next week"). They are not to nag only remind twice during the week.<br>- Talk to them about the importance of reinforcing child so they stay motivated.<br>- Set up next appointment time and fill this in under "The next meeting time" on handout. Answer any other parent questions. Be sure to include your contact information at the bottom of the form.<br>- Be sure to write down how many reinforcers the child gets for participation (see handout under "How many rewards your child earned"). | 10-minutes | | "Session Review #1" handout | Y / N |

After the Session:

-   Rate how well the child understood the session content (1= seemed confused throughout the session, 10= seemed to understand content well) and why you gave the child this rating (one or two sentences). Rating: _____

-   Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

-   Rate the child's participation level (1= disengaged or defiant throughout session, 10= extremely engaged in session tasks) and why you gave the child this rating (one or two sentences). Rating: _____

-   Sign and date this treatment note and place it in the child's folder.

-   Treating Therapist:_____        Date of session:_____

## PSST Session #2

<u>Objectives:</u>  To help the child apply the problem-solving steps in an unthreatening, game-like format.  The child should be able to state the problem-solving steps in their own words.  Parents should help their children generalize their skills by providing them rewards and praise for pausing during social interactions.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Home-work Review | Ask child about instance where using the problem-solving steps would have helped.  If they didn't complete the homework, help them brainstorm by asking about problem situations they encountered.  Praise liberally for any participation (see trans. #4). | 10-minutes | Transcript #4: "Going over PSST homework" | | Y / N |
| Main Session Content | Remind the child of the steps (ask "What does that mean?" after each step) using the handout from last week. | 5- minutes | | "The Problem Solving Steps" handout | Y / N |
| | Have them list the steps in their own words on the "Stop Sign" handout. (10-minutes).  "These words may not be the way you would say it.  If you had to say step #____ in your own words, what would it be?" | 5-minutes | Transcript #5: "Making a Cue Card" | "Stop Sign" handout | Y / N |
| | Introduce the "Cat and Mouse" game (see transcript #6).  Use the child's new steps while playing the game.  Keep stop sign out so it can be used as a cue card:<br>- After 10-minutes of playing-move to whispered speech if the child seems to understand the steps.  See transcript #7.<br>- Continue to model coping statements when therapist "messes up" (Model at least 3 times).<br>- Use response cost more frequently for forgetting steps or going too fast-not for coming up with "wrong" answer. (for example of how this is done nonpunitively, see transcript #8). | 20-minutes | Transcript #6: "Playing Cat and Mouse." Transcript #7: "Using Whispered Speech" Transcript #8: "Taking away chips nonpunitively" | "Cat and Mouse" game rules (transcript #6). Checkerboard and Checkers | Y / N |
| | Introduce and practice a signal that the child's parents can use to remind them to slow down.  "Sometimes it is hard to remember to slow down all by yourself.  What would be a signal that your parents could use at home to remind you to slow down and use the steps?" (Using stop signal with hand, saying "slow it down"). | 5-minutes | | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|---|---|---|---|---|---|
| Home work | "Use the problem solving steps in one situation over the next week. Could be school work, talking with family, with friends, whatever." Also tell child that parents will use the hand signal or words to help them slow down over the week. | 2-minutes | | | Y / N |
| Parent Review | Go over Session Review #2 handout with parents. Be sure to note the following: <br> - Review the signal the child learned in the session. Child is to be reinforced with a grab-bag every time they pause for 3 seconds after the parent reminds them once with the signal. "Trick is to catch child being good. Don't have to reward every time, but should praise a great deal." <br> - Ask them to bring in examples next time of negative or impulsive reactions their child made in social situations. <br> - Review the child's homework with the parents. <br> - Be sure to write down how many reinforcers the child gets for participation (list on handout). | 10-minutes | | "Session Review #2" handout | Y / N |

After the Session:

- Rate how well the child understood the session content (1= seemed confused throughout the session, 10= seemed to understand content well) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level (1= disengaged or defiant throughout session, 10= extremely engaged in session tasks) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it in the child's folder with the child's "Stop Sign" handout.

Treating Therapist:_____     Date of session:_____

# PSST Session #3

Objectives: To give the child one more opportunity to use the problem-solving steps in unthreatening, game-like tasks. The child should now be able to put the problem solving steps in their own language. Parents should help generalize skills by rewarding their child for "slowing down" when they are not specifically prompted to do so.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Home-work Review | If they didn't do it, brainstorm situations where they could have used the steps. | 5-minutes | | | Y / N |
| Main Session Content | Review the steps. See if child can recite from memory. "Which have you done the best with? Which has been the hardest to do?" Discuss with child your answers if they differ from that of the child. | 5- minutes | | Child's "Stop Sign" handout from last session- to be used to prompt the child. | Y / N |
| | Have the child rephrase each step on a new "Stop Sign" handout using different words. | 5-minutes | | "Stop Sign" handout | Y / N |
| | Play game of checkers using overt steps (One line of checkers per player). Child should be able to state the steps with little reminder now. However, this time the child can also take away any of the therapist's checkers for not using one of the steps or for going too fast:<br>- Continue to model coping statements when therapist "messes up" (Model at least 3 times)<br>- Use response cost more frequently for forgetting steps or going too fast- not for coming up with "wrong" answer. | 20-minutes | | Checkerboard and checkers. | Y / N |
| | Practice using the "Stop and Think Situations" examples<br>- This time steps should be whispered (see previous session) and the child should loose a token for not coming up with at least 3 potential solutions.<br>- Child does all of the activities. | 10-minutes | | "Stop and Think Situations" handout. | Y / N |
| Home work | The child is told that homework is the same as in the last session (bring in an example of when they used the problem-solving steps appropriately). They are also given this warning. "Last week you may have gotten rewards for stopping when your parents reminded you; however, this week you will get rewards only if you stop on your own." | 2-minutes | | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Parent Review | Go over Session Review #3 handout with parents. Be sure to note the following:<br>- Was the child rewarded (grab-bag) for pausing after a reminder? Gently remind parents about the importance of reinforcers if not.<br>- Now reward (grab-bag) if the child pauses without being reminded (signal learned during previous session). Emphasize this will require the parent to "catch the child being good", simply praise if the child pauses after being explicitly reminded- no reward.<br>- Get examples from parents of difficult social situations (as direct in last session). Ask them to bring in next time if they failed to think of examples.<br>- Be sure to write down how many reinforcers the child gets for participation (on handout). | 10-minutes | | "Session Review #3" handout | Y / N |

After the Session:

- Rate how well the child understood the session content (1= seemed confused throughout the session, 10= seemed to understand content well) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level (1= disengaged or defiant throughout session, 10= extremely engaged in session tasks) and why you gave the child this rating (one or two sentences). Rating: _____

- List the examples the parents gave you of problematic social situations on a separate sheet of paper and put it in the child's file with this treatment note signed and dated.

- Therapist:_____ Date:_____

# PSST Session #4

Objectives: To introduce the child to actual social situations where they can use the problem-solving steps. The therapist helps coach the child to generate at least 3 alternative ways to solve the situation and helps them brainstorm what is likely to result from each alternative. Parents continue to focus on "catching their child being good" so the child is rewarded for using the steps at home.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Home-work Review | If they didn't do it, brainstorm situations where they could have used the steps. | 5-minutes | | | Y / N |
| Main Session Content | Go over hypothetical situations (7 index cards). Therapist and child take turns drawing cards. The child and therapist take turns providing an example of what would happen in the situation if one didn't use the steps and then an example of what happens when steps are used:<br>- The first step should be a clear statement of the problem at hand without the use of labels or global judgments. For example, "the child next to me seems to be laughing at me for some reason" rather than "Tommy is being a jerk."<br>- The second step (looking at all the possibilities): the therapist should emphasize that the child has to generate his or her own possible solutions to the problems- child should produce at least 3 alternatives. All alternatives should be considered. List alternatives on the portable chalkboard.<br>- In the 3<sup>rd</sup> step (focus in), the therapist teaches the child that while they are pausing or deep breathing they should examine the emotional and behavioral consequences of each alternative. The following questions should be asked: (1) "How will this response make others feel?"; (2) "How will it make me feel?"; (3) "What will it make others do?"; and (4) "What will happen next?"<br>- The therapist should model the steps for the child first (see transcript #9)<br>- Use response-cost only for going too fast or forgetting a step. Do not use for the child picking the "wrong" answer to the situation. Ultimately, the training is on helping | 20-minutes | Transcript #9: "Modeling Problem Solving Steps in Social Situations." | Social Situation Index Cards.<br><br>Portable Chalk-board | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
|  | the child to consider what to think rather than how to think.<br>- It is often helpful to introduce a game format to this activity. If it is age appropriate, you may suggest either playing a game of basketball (if in the child's room) or tic-tac-toe with the practice. In other words, every time the therapist or the child uses the steps correctly, he or she gets to take a shot at the basket or gets to put an "X" or an "O" for tic-tac-toe. |  |  |  |  |
|  | After all the hypothetical situations have been completed once, introduce the concept of using the steps covertly (see transcript #10). The child and the therapist use the steps mentally but show they are using them by raising a finger for each step and through nonverbal cues modeled by the therapist. Child and therapist no longer have to produce examples of thinking through the situations "too quickly." Be sure to ask the child afterward what they were considering during steps #2 and #3 | 15-minutes | Transcript #10: "Explaining the use of Covert Steps" | Social Situation Index Cards<br><br>Portable Chalk-board | Y / N |
|  | Dealing with potential problems: (Once the covert steps are being used) If it is clear to you that the child is not thinking through at least 3 possibilities and their potential outcomes during steps #2 and #3, temporarily switch back to the overt use of the problem solving steps for the next practice. Spend most of your time discussing steps #2 and #3 with the child. It is not necessary for the child to answer all the potential questions listed above during step #3, but they should be able to answer, with minimal prompting, what the potential outcome may be ("What will happen next?"). | If needed |  |  | Y / N |
| Home work | Child is told that the homework is the same as last week. | 2-minutes |  |  | Y / N |
| Parent Review | Go over Session Review Handout #4 with parents:<br>- Was the child "caught being good"? If not, brainstorm times when the child could have received a reward.<br>- Collect examples from the parent of when the child could have | 10-minutes |  | "Session Review #4" handout | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| | "slowed down and thought through things a little better." If you don't have at least 5 examples, brainstorm more examples with the parents. | | | | |

After the Session:
- Rate how well the child understood the session content (1= seemed confused throughout the session, 10= seemed to understand content well) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level (1= disengaged or defiant throughout session, 10= extremely engaged in session tasks) and why you gave the child this rating (one or two sentences). Rating: _____

- List any additional examples the parents gave you of problematic social situations on the separate sheet of paper you used during the last session and put it in the child's file with this treatment note signed and dated.


Therapist:_____ Date:_____

## PSST Session #5

Objectives:  To help the child use the problem solving steps in actual social situations that have proven problematic for the child in the past.  Child takes the role of critiquing themselves. Note: Must have working video camera and tape for this session.  Be sure to have these things set-up beforehand.  This session also requires you to have a situation from your own life where you could have used the problem solving steps more effectively.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|---|---|---|---|---|---|
| Home-work | If they didn't do it, brainstorm situations where they could have used the steps. | 5-minutes | Home-work Review | | Y / N |
| Main session content | Tell the child that they will get to be both an actor and a director today (see transcript #11).  The child is told that you have several "scripts" that will need to be acted out using the problem solving steps.  The child gets to "act" as themselves in the scene, and they get to "direct" the therapist who will play a significant other in the scene.  The therapist and the child act out the scene using the problem solving steps overtly for the camera. <br> - The therapist provides the child with no reminders of the steps during the actual scene.  Afterwards, the therapist and the child re-watch the scene on the TV in the therapy room. It is the child's job to say if and how they used the steps while reviewing the scene.  Response cost should be used at this "review" point if the child forgets a step or goes too fast. <br> - Since this is a new experience for the child, the exercise should begin with the therapist modeling a situation for their life where they "could have thought through things better."  First, tell the child the mistake you believe you made.  Then act out the scene with you being the main actor (as yourself) using the steps. <br> - Be sure to provide the child with a great deal of coaching when they do it the first time (see transcript #12). | 20-minutes | Transcript #11: "Introducing Role-playing" <br><br> Transcript #12: "Coaching the Role-play" | - Working video camera and videotape. <br><br> - The problematic social situations the parents gave you over the last 2 sessions. | Y / N |
| | After 20-minutes, tell the child that you will now do the rest of the scenes using the covert steps discussed during the last session.  Since the steps will be done "covertly" be sure to have child explain in detail their considerations after the scene is over. | 15-minutes | | Same as above | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| | Dealing with potential problems:<br>- If the child is camera-shy and doesn't like seeing themselves on film, tell them that filming does not have to continue. However, it is important to act out the scene "just for us" and talk about what happened when the scene is over.<br>- (Once the covert steps are being used) If it is clear to you that the child is not thinking through at least 3 possibilities and their potential outcomes, temporarily switch back to the overt use of the steps (as before). | If needed | | | Y / N |
| Home work | "Use the problem solving steps in a situation that involves at least one other person in the coming week." Brainstorm with the child potential people that they could use the problem solving steps with and how the steps may be used. | 5-minutes | | | Y / N |
| Parent Review | Go over Session Review Handout #4 with parents:<br>- Give parents a basic overview of session and continue to ask if the parent is rewarding the child ("catching them being good") for using the problem-solving steps.<br>- Have the child show their parents one scene (if they are willing and time permits) of how they used the problem solving steps.<br>- Ask the parents about any other potential scenes that could be acted out in session.<br>- Remind the parents that in the next session they will have to stay during the session and complete measures while the child is with the therapist- ensure that (at the very least) the mother will be at the last session. | 10-minutes | | "Session Review #5" handout | Y / N |

After the Session:

- Rate how well the child understood the session content (1= seemed confused throughout the session, 10= seemed to understand content well) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level (1= disengaged or defiant throughout session, 10= extremely engaged in session tasks) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it and the video tape you used in the child's folder.

Treating Therapist:_____          Date of session:_____

PSST Session #6

Objectives:  To give the child final practice using the problem-solving steps in social situations.
This time the child uses the steps covertly, while his or her parents fill out the measures needed
for this study.
Note: Must have working video-camera and tape for this session.  Be sure to have these things
set-up beforehand.  This session also requires you to have a situation from your own life where
you could have used the problem solving steps more effectively.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Assess-ments | It is important to start the session by giving the parents all the measures for the study (CBCL/ 6-18, Social Skills Rating System- Parent form, and PSI-SF).  Tell the parents that they should not confer with each other and they do not have to fill out the front page (other than the child's name and their name) of the CBCL or SSRS.  Be sure to tell the parent to fill out the measure as the child has been "during the last week." | 5-minutes | | Assessment Measures in file cabinet. Note: Be sure to get the appropriate age of form for SRSS if the child is over the 6th grade. | Y / N |
| Home work | As done in previous sessions. | 5- minutes | | | Y / N |
| Main session content | The first part of this session should follow the same format as the previous session.  However, make the following changes: - Emphasize the new social situations that the parents gave you at the end of the last situation. - Use the steps in a primarily covert fashion- unless you believe that the child is still not generating alternative solutions and processing outcomes at steps #2 and #3. | 25-minutes | See transcripts from previous session. | - Video camera and tape. - Social Situations given by parents in previous session. | Y / N |
| | Have the child tell the therapist specifically what they learned over their meetings.  The child also pretends to teach the steps to a new child (role-played by the therapist). The therapist plays the role of an inquisitive child who doesn't understand how to use the steps in social situations. | 10-minutes | | | Y / N |
| Parent Review | - Collect the measures from the parents and be sure they are filled out completely. - Spend some time talking about the child's strengths and leave some time for the parents to ask any remaining questions. | 10-minutes | | Assessment measures. | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
|      | - Remind the parents that they will be called six times to complete the PDR and the child will be called to complete the student form of the SSRS; otherwise, thank them for their participation or set-up referral to Psychology Community Clinic if you believe further therapy is warranted. |  |  |  |  |

After the Session:

- Rate how well the child understood the session content (1= seemed confused throughout the session, 10= seemed to understand content well) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level (1= disengaged or defiant throughout session, 10= extremely engaged in session tasks) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it and the videotape you used in the child's folder. Also place all assessment measures in the child's folder marking the top of each with the words: "PostPSST Therapy"

Treating Therapist:_____ Date of session:_____

Example Transcript #1: Explaining Chips and Rewards*

T: "...When we do things in the session, we're going to talk out loud, and say five [show 5 fingers] things or steps, every time we do a task. I'll show you the five steps in just a minute. See these chips? When we start each meeting together, I'll give you 10 chips. They are yours to keep for the whole meeting. But when you make a mistake, you will lose a chip. There are 3 kinds of mistakes or three ways to lose a chip [Therapist references handout "How can I lose chips and gain rewards" while speaking]:

1. Going to fast. I want you to do all the work slowly and carefully. If you go too fast, you lose one chip.
2. We will be saying several steps for each task. If you don't say a step or forget to say a step, that's a mistake so you lose a chip.
3. The third mistake is the easiest to understand. If you get the wrong answer, that's a mistake so you lose a chip.

As long as you have at least one chip by the end of each meeting, your parents have agreed to give you a special reward from the grab-bag [or other incentive as used by parents]. You can also gain a reward if you do your best to participate in the session. What do you think I mean by 'do your best to participate?'"

C: "I don't know. Maybe do what I'm supposed to."

T: "In a way, yes. As long as you do your best and are willing to do the activities of the session, you will get a reward from your parents- even if you loose all your chips. But if you refuse to participate or are rowdy in the session, you may loose that reward. Does that make sense?"

C: "Yes"

T: "There is one last way you can earn a reward [therapist references handout]. At the end of each session, I will be giving you homework. Don't worry. This homework won't be like the homework they ask you to do in school. This homework is going to be small, easy activities that you will need to do when you are around other people. As long as you remember to do it, you will get a reward. So lets review, [therapist covers handout] what are the 3 ways you can earn a reward from your parents?"

C: [Therapist coaches the child in remembering the three ways they can earn rewards]

T: "Good. You remembered that one of the ways you can earn a reward is to have some chips left over at the end of the session [therapist covers handout]. Do you remember the three ways you can lose a chip?"

C: [Therapist coaches the child in remembering the three ways they can lose chips].

T: "Great. I'm gonna have this handout ready each session so we can have help in remembering these things [Therapist posts handout somewhere in the therapy room]. Any questions?"
* Adapted from Kendall & Braswell (1985)

Example Transcript #2: Explaining the Problem Solving Steps*

T: "Now lets talk about the five things or steps that we will be saying out loud each time we do a task or problem. At first it may be hard to remember them all, but we will practice them together before you will loose any chips. I also have a handout to help us remember the steps [therapist references the "Problem Solving Steps" handout throughout this discussion]. The first thing to say to yourself is, "What am I supposed to do?" We say that so we can be sure we are doing the right problem in the right way. The second thing we say is, "Look at all the possibilities." What do you think that means?"

C: "I don't know"

T: "That's a tricky one, huh? Well it means be sure to look at all the different answers so we can find the best possible one. Does that make sense?"

C: "So it is like think of all the answers that it could be?"

T: "Right. We want to think of as many different ways to solve the problem as we can- even if some of the ways may be different from how we would usually solve the problem. Next, we'll be telling ourselves to 'focus in.' That way we remind ourselves to really concentrate or think hard about just the problem we are working on right now. It reminds us to slow down and not think about anything else. One way to make sure we are doing this is to take 3 deep breaths when we get to this step so we do things nice and slow. Lets practice." [Therapist coaches the child in breathing slowly in and out 3 times. Practice this a few times to make sure the child understands. While the child practices breathing the therapist may say such things as 'just focus in. All that matters is what your working on right now.']

T: "Good. The fourth step is to pick an answer after studying all the choices or possibilities that we thought of earlier. And the fifth step is to check out our answer and if we got it right we tell ourselves that we did a good job. If we didn't get it right, we don't have to put ourselves down. Do you know what I mean when I say 'put ourselves down?'"

C: "Like saying 'I'm stupid'"

T: "Good example. Instead we just remind ourselves to be more careful or go more slowly the next time. What could be something we could tell ourselves after making a mistake?"

C: "I don't know."

T: "We could say 'That is okay, I'll go slower and it will be better next time' or 'Everyone makes mistakes. I just have to be more careful.' Can you think of another one?"

C: "Its not a big deal. I can do better."

T: "Perfect. The idea is that when we do good we should give ourselves a pat-on-the back and when we make a mistake we don't have to feel like a failure or feel really bad. Okay lets review. Why is it important for us to..." [therapist asks the child why each step is important to

remember. You will probably have to do a great deal of coaching here since the steps are still new to the child. No response-cost should be used if the child forgets a step]

T: "Great. Lets do a few things to practice the steps. I'll do the first one. [Therapist pulls out the 'What comes next' handout and practices on the first task marked 'D E F ___'] Listen carefully so you'll be able to do a task using the steps. I'll do the first one. Listen carefully so you'll be able to do a task using the steps. Watch how when I *say* the first step, I then *do* the first step. Then I will *say* the second step, and then *do* the second step. If we only say the steps without doing them, they won't help us very much. [The therapist gets set, focuses on the task, and begins modeling the self-statements, raising one finger with each step to represent which step he/she is on.] Well, the first step is to find out what I'm supposed to do. Looks like I'm supposed to figure out which letter comes next. Second, I need to look at all the possibilities or all the different answers. [Points to three possible answers and examines carefully while reading possible responses out loud.] Next, I have to 'focus in' which means I need to think only of this problem and slow down. [Covers remaining tasks with hand and breathes in and out slowly 3 times. Then the therapist thinks out loud while solving the problem.] Okay, I need to think of an answer. I think this is the right answer because G comes after F. [Circles his/her answer]. Last, I need to check out how I did. Looks like I got it right. I did a nice job...Lets do the second task together. Do you remember the first step? No? No problem. Let's repeat it together. I have to find out what I'm supposed to do....."

Note: The therapist and child go through the rest of the handout in this manner (certain items can be skipped if they are clearly beneath the child's mental ability). Only after the therapist is confident that the child understands these steps should the response-cost (loss of chip) be used. However, it should only be used once or twice at this stage of the child's training (see transcript #8, "Taking away chips nonpunitively" for an example of how to do this).

* Adapted from Kendall & Braswell (1985)

Example Transcript #3: Modeling Coping Statements *

T: [Therapist may intentionally chose a wrong answer on a task and model a coping statement as a substitution for a self-reward- Step #5] "Hmmmm....I guess I made a mistake. I'd like to toss these papers in the trash- this stinks! But wait, I can do these, but I'll have to remember to go slower and think harder next time. Let's see now...I think the right answer is...Okay. Focus in now [breathes]...I think this is the one [points to correct answer]. There I did better this time. Nice job."

* Adapted from Kendall & Braswell (1985)

## Example Transcript #4: Going over PSST homework *

T: "…so did you remember your homework?"

C: "Hmmm….not really."

T: "I know there are times I forget things. In fact, there are times when I get a little too excited and make a bad move. I forget to stop and think and then I get in trouble or make a mistake."

C: "What kind of trouble?"

T: "Oh, I may say something I shouldn't have said, and I might make someone angry with me. Things that wouldn't have happened if I would have remembered to stop and think first. Does anything like that ever happen to you?"

C: "Uh…ummm…no, not really…I don't know."

T: "There's nothing terribly bad about maybe saying the wrong thing or doing the wrong thing. But it would be better if we could remember to think first. Everyone gets into trouble once and a while. Maybe if some people used the steps they'd get in trouble less often. Can you think of a time when using the steps or stopping and thinking in school might have kept you out of trouble?"

C: "Well, once I ran across the parking lot to get a ball and the teacher made me go to the principal's office."

T: "How could the steps have helped you?"

C: "I guess I wouldn't have run after the ball so soon. I forgot running on the parking lot was against the rules. Just like when I always talk to my friend in class and the teacher yells at me…I forget about the rules…"

Note: A procedure like this is used when the child: (1) forgets about the homework assignment; and (2) claims that they can't remember a situation where using the problem-solving steps would have helped. Even if the child does not bring in a specific example (as "required" by homework), if he or she is willing to brainstorm with the therapist how they may have used the steps, they are still rewarded for having done their homework. If the child does not participate with the therapist even after a self-disclosure (as modeled above), he or she does not receive a reward for having completed homework. This procedure, however, should only be used in the first 3 sessions. Starting at session #4, the child does not receive credit for having done their homework unless they can name a specific instance where they used the problem solving steps (even if you suspect that the situation may be fabricated).

* Adapted from Kendall & Braswell (1985)

Example Transcript #5: Making a Cue Card *

T: "….Now I'd like us to think about putting these steps or statements into your own words.  We can write your words down on this paper that looks like a stop sign [Therapist uses the Stop Sign handout].  You can use it like a cheat sheet to help you remember each step.  The first step is, "Find out what I'm supposed to do."  What's the way you might say the same thing?  [Continue creating cue cards using he child's own words for the remaining steps.  Don't require your own words, but rather let the child, within the bounds of the concepts in question, use his/her own words]  Alright, for the next task lets use your words as we do the steps…."

* Adapted from Kendall & Braswell (1985)

Example Transcript #6: Playing "Cat and Mouse"*

"Okay, today we're going to play a game called Cat and Mouse. We will use these 5 checkers and checkerboard (point to one red and four black checkers) in playing the game. See this red checker? It's the mouse. And these four black checkers are the four cats. In Cat and Mouse, the four cats try to "catch" the mouse, and the mouse tries to "get away" from the cats (point to respective checkers while explaining). Let me show you how to play:"

1. (place checkers on board) Both the cat and the mouse can only move on the black squares (demonstrate).
2. The cats may only move forward, like this (demonstrate). But the mouse can move both forward and backward, like this (demonstrate).
3. Cat and Mouse is different from checkers because the pieces do not jump each other. They just slide along like this (demonstrate). Okay? (child should fully grasp the movement aspect of the game before continuing)
4. Play begins with the mouse on either of the two center dark squares at one end of the board. The cats are lined up on the four dark squares at the other end of the board. Remember, the mouse can move diagonally in any direction, while the cats can move diagonally only in the forward direction.
5. The mouse tries to get away from the cats by getting to the other side of the board. The cats attempt to "surround" the mouse by occupying all possible spaces where the mouse may move.
6. The game is "won" when either the mouse has successfully evaded the cats or the cats have surrounded the mouse.
7. Do you understand? Good. Let's start. Here, you be the cats and I'll be the mouse. You try and "catch" me. Mouse moves first...

* Adapted from Kendall & Braswell (1985)

Example Transcript #7: Using Whispered Speech*

T: "We've been saying the steps out loud for a while, and you seem to be catching on pretty well."

C: "Yeah, I'm doing good."

T: "That's right, you are doing a good job in our sessions! And the steps are useful in other places too. But if you wanted to use them while working in the classroom, you probably couldn't say them out loud. That might disturb people and the teacher might get upset. No you could use the steps in class if you whispered them or if you said them silently to yourself. So what we're going to do now is [therapist starts whispering] practice whispering the steps while we take turns doing the problems. Okay? I'll do the next task, whispering the steps...making sure I still say all the steps, even though I'll be whispering them now."

Note: Fading should only be introduced, however, if the therapist has a clear sense that the child has fully learned the self-instructions.

* Adapted from Kendall & Braswell (1985)

Example Transcript #8: Taking away chips Non-punitively*

Reminding the child before chips are deducted

T: [Once the child seems to understand the steps, the response-cost contingency can be reintroduced as follows:] "I think you know the steps pretty well, even though you made a few mistakes. Now we'll start to use the chips. [In a matter-of-fact, nonpunitive voice] If you make a mistake, you lose one chip. Remember the kinds of mistakes you can make?"

C: [Reviews with child the mistakes]

When a mistake occurs

T: "You lose one chip for not taking your time and not getting the right answer" or, at latter stages, "You lose one chip for not using all the steps"

Note: The child is not penalized twice. Only one chip is removed if the child breaks two rules simultaneously. Also each statement begins with the phrase "you lose" rather than the more punitive "I'm going to take one chip for..." The former phrasing encourages the child's internal control of the consequences.

After a mistake occurs

T: [Therapist models coping statements for the child] "That is alright, though. You have plenty of chips left. Just need to remember to _____ next time."

Note: The therapist should supply a sufficient amount of direct and indirect coping statements (3 to 5 based on the number of errors made by the child) during the course of the sessions. As mentioned during orientation, if the child appears seriously disturbed by loosing a chip, pause the session to play a game with the child where he or she may earn chips back. Ask the child a series of 5-10 easy questions about the session content so they can earn back chips. However, Kendall and Braswell advise therapists not to completely stop using the response-cost system (although slowing it down may be acceptable).

* Adapted from Kendall & Braswell (1985)

Example Transcript #9: Modeling Problem Solving Steps in Social Situations*

T: "First, I must remember to find out exactly what my problem is. [Reading from the index card] 'You have promised to mow the lawn, a job that takes 2 hours. What would happen if your friends came by as you were about the begin moving and asked you to go to the circus for a few hours?' My problem is that I want to go to the circus but I promised my mom. Second, I need to think of different ways to solve this problem. Hmm…it's a tough one. I'll need to think a minute… Well, I could go to the circus with my friends…or….I could just say, "No, I can't go." Let's see…I need to think of at least 3 different things I could do. Oh! I guess I could also tell them that I have to work first but I could meet them there later. Hmm…Let me concentrate on these [breathes]. If I just go with my friends, I'll be happy and they'll be happy, but the lawn won't get mowed and I'll get in trouble. If I don't go to the circus at all I'll be pretty unhappy, but if I go after the lawn is mowed then I won't feel so bad and my mom won't be irritated with me. I like that last choice. I guess I did a pretty good job of figuring it out."

* Adapted from Kendall & Braswell (1985)

Example Transcript #10: Explaining the Use of Covert Steps*

T: "Okay, Charlie, nice job on that problem. Let's see, I guess it's my turn, but before I take my turn let's stop and think about what we've been doing with the steps. What do you think?" [Pause]

C: "Well, we've been slowing down when doing stuff."

T: "That's right. And we've also been saying the steps in different ways. When we first began using the steps we said them out loud. Then we started whispering the steps. What might be another way of doing the steps?"

C: "Hmmmm…"

T: "Let's see…talking out loud…whispering quietly….what might come next?"

C: "How about not saying them out loud or whispering?"

T: "You mean doing the steps silently?"

C: "Yeah"

T: "That's a great idea. You say the steps to yourself, without talking out loud or whispering. Even though other people won't hear you saying the steps, you'll be saying them to yourself, just like you've been doing all along."

C: "You mean I'll say them in my head."

T: "Exactly. Any why might it be important to say the steps in your head rather than out loud?"

C: "So I don't bother anyone."

T: "Yeah. But how will *we* know that we are using the steps in here?"

C: "I don't know."

T: "Tell ya what. Why don't we come up with some signals that we are using the steps. Like holding up our fingers for each step [demonstrates 1, 2, 3…]. When we get to 'think of the possibilities' step we can either stroke our chin to show that we are thinking [demonstrates] or pretend to write down the possibilities on an imaginary piece of paper [demonstrates]. Plus we will know that we are using 'focus in' by the way we are breathing."

C: "Might look pretty silly."

T: "Your probably right. That's why we will only do these signals in here. When you are doing it at school or home, it will all be in your head. Lets give it a try…"
* Adapted from Kendall & Braswell (1985)

Example Transcript #11: Introducing Role-playing *

T: "Today we will work on some tasks that are a lot like the ones we did last time, except today we'll act out the situations. We will use the steps again, sometimes saying them out loud, other times just saying them silently in our head just like we've been practicing. Remember to do what you say when using each step. Remember how last time we made up different solutions to the situation? Well, today we will think about the situation, come up with our choices, and think about the consequence of each choice. Then we will act out each one and pick the one we think is best. For each situation, you will pretend to be one character or person and I will pretend to be the other person. You will lose a chip if you go too fast or forget a step."

Note: The procedures for engaging in self-instruction in this session are similar to those of previous sessions with the exception of physically "acting out" rather than just verbalizing each choice. It is important to let the child be maximally involved in "directing" each role-play sequence. If the child is only giving socially appropriate responses, it is helpful for the therapist to talk to the child about how he/she might respond differently if they were to respond quickly and in real life.

* Adapted from Kendall & Braswell (1985)

Example Transcript #12: Coaching the Role-play*

T: "Okay, here's your situation. 'While walking into the classroom you accidentally stubble over Ann's [real class name] notebook which is lying on the floor. Dave, a boy you don't like, calls you clumsy. You feel yourself getting very embarrassed about stumbling and mad at Dave for calling you a name.' Now I'll pretend to be Dave and you be yourself. We'll try to make this situation as real as possible. So pretend you're walking into the room and pretend to stumble on this notebook [place something on the floor to represent the notebook] but don't hurt yourself. Try and use the steps to find the best way to solve the problem. This is your first try, so it doesn't have to be perfect- but try your best."

C: "I don't know if I can do the steps with this."

T: " Well, lets give it a try and see what happens. I think it will be a lot easier than you think. Ready? Action."

C: [Child acts out entering into room and stumbling]

T: "Hey look at [child's name]! How clumsy. You're always tripping over something."

C: "What do I do now? Say the first step?"

T: "Yep, or something that means the same thing as the first step."

C: "I have to make sure I know what I'm supposed to do."

T: "Or 'I need to stop and think about this problem before doing anything.'"

C: "Next, I have to look at all the possibilities."

T: "What are the possibilities?"

C: "Well, I can punch Dave [laugh]."

T: "Yep. What might happen then?"

C: "I'll get in trouble for hitting. He might hit me back too."

T: "What else could you do?"

C: "I could tell the teacher."

T: "That's another way to solve the problem. What might happen then?"

C: "The other kids would make fun of me- call me a baby or teacher's pet."

T: "What would happen to Dave if you told the teacher?"

C: "He might get in trouble, but he'd probably get back at me on the playground. And the other kids would still call me a baby."

T: "So these solutions might not be the best for you."

C: "No, but I'd probably hit him."

T: "Well think ahead, you know what will happen then. What if you just didn't pay any attention to Dave?"

C: "I'd still be mad."

T: "You could tell yourself, 'Just because Dave called me clumsy doesn't mean I am always clumsy. In fact, I do really good in gym class and soccer.' It might also be a good idea to ask Ann if she could put her notebook someplace else so other people won't trip over it. Sometimes its smart thinking not to get into a fight."

Note: As demonstrated, the first few times you go through role-playing expect to do a great deal of verbal coaching. After the verbal coaching is finished, however, the child and therapist should act out the possibilities. As the session, progresses, the therapist's involvement in modifying the steps and generating alternatives for the child decreases. Some situations are solved covertly but often the major portion of the therapist-child interchange involves discussions as detailed above and the self-instructions naturally become part of the conversation. In such cases, productive overt problem solving takes precedence over ineffective covert self-instruction.

* Adapted from Kendall & Braswell (1985)

# How Can I Loose Chips and Gain Rewards?

-I will loose a chip if...
1. I go too fast
2. I forget to use one of the problem solving steps
3. I get a wrong answer on a question or task

-I can gain a reward from my parents each time I....
1. Complete my homework for the session
2. Have any chips left-over at the end of the session
3. If my therapist thinks I participated in the session.

Problem Social Situations

Directions: Write down 5-6 social situations that have been problematic for the child. Write down who was involved and what was said. The more specific you are the more helpful you will be to the child. Keep this handout in the child's folder so you can add ideas to the handout as the parent thinks of them.

1. _____
_____
_____

2. _____
_____
_____

3. _____
_____
_____

4. _____
_____
_____

5. _____
_____
_____

6. _____
_____
_____

# Problem-Solving Steps

1. What am I supposed to do?

2. Look at all the possibilities

3. Focus in/Relax

4. Pick an answer

5. Check out your answer

Stop and Think Situations

<u>Directions</u>: Read the following situations to the child out-loud. Younger children (7-9) should only do situations #1- #5; however, older children can do all situations. The key is for the child to come up with multiple potential solutions (emphasizing step #2) and be able to tell you why they selected a particular solution (emphasizing step #4)

#1. " 'My birthday is finally here,' Scott said. 'Now I can open the big package that is on the kitchen table." Scott is feeling…."

#2. "Meg wanted to see the end of the movie. Her eyes kept closing, though. Meg was very…"

#3. "The little boy's mother grabbed his hand. She pointed at cars rushing by. She told him in a loud voice that he must say with her. The boy's mother is.…"

#4. "Mark is not sure which way to go. He things the playground is nearby. He hopes to see someone he knows who can help. Mark is…"

#5. "Ann wished her friend had not moved. She thought about her everyday. She hoped they could be together again soon. Ann is feeling…"

#6 "You are staying alone in a country cottage and need to iron a shirt, but no iron is available. It is too far to town to buy an iron (this would be a waste of time and money). Available to you in the cottage is your suitcase, a furnished kitchen, bathroom linens, a sack of groceries you bought on your trip and your ski boots and poles. How could you get your shirt ironed?"

> Potential answer: Heat a frying pan on the stove then place it in the paper grocery sack and iron your shirt on your suitcase.

#7. "An ambulance on a mountain road found itself behind a large flock of sheep. The driver sounded the siren and gently nudged the rearmost sheep, but it was useless. The mountain embankments prevented the sheep from getting out of the road. Between the baaing of the sheep, the siren, and the driver shouting at the shepherd it was horrible. How can the ambulance get past the sheep?"

> Potential answer: Simply stop the ambulance, and let the shepherd turn the sheep around and lead them past the ambulance. Thus the ambulance is free to go ahead- don't get the ambulance past the sheep, get the sheep behind the ambulance.

Session Review #1

What was discussed today

Today your therapist introduced the problem-solving steps to your child. These steps are:

6. What am I supposed to do? (child defines the problem)
7. Look at all the possibilities (child brainstorms potential solutions)
8. Focus in/Relax (child is encouraged to pause and take 3 deep breaths)
9. Pick an answer (child is encouraged to pick the "best" solution)
10. Check out your answer (child is encouraged to evaluate how they did)

These steps will be used repeatedly in the upcoming sessions to help you child think through problems more effectively. The therapist and the child played a series of easy games in this session to introduce these concepts to your child.

How you can help

One of the best ways you can help right now is to "model" or demonstrate these steps when your child is around. You may choose to do this by speaking out-loud to "yourself" as you consider how to solve routine problems you face. For instance, "Lets see I need to run some errands (step #1)...I could go to the store first and then the bank, or I could check my balance at the bank and then go to the store (step #2)...lets see what would be best (pause) (step #3)....I think going to the bank first because it is closer, and checking how much money I have before I spend it makes more sense (step #4)...Yeah, that seemed to work out pretty well (step #5)" The more you demonstrate this type of thinking around your child, the more likely they will understand these concepts.

What your child was asked to do this next week

Your child was asked to think of one example of how using the problem-solving steps would have helped them. As with all homework assignments, do not nag your child. Simply remind the child once or twice about the assignment and leave it up to him or her. You can also remind the child that they will receive a reward (e.g., grab-bag) for remembering to complete the assignment.

How many rewards your child earned:

Circle all that apply:

Had tokens left              Participated well
at the end of session.       in the session.

# of rewards earned: _____

## Session Review #2

<u>What was discussed today</u>

Today the therapist and your child used the problem solving steps on a simple game called "Cat and Mouse." Instead of speaking the steps out-loud, the therapist helped the child practice how to use the steps in a whispered tone of voice. Your child and the therapist also came up with a special "signal" you can use to remind your child to slow down and use the steps.

<u>How you can help</u>

Be sure to use the signal once a day with the child over the next week. When the child pauses by taking 3 deep breaths, feel free to reward him or her occasionally with a grab-bag. The trick here is to catch the child "being good." You don't have to reward him or her every time from the grab-bag, but you should praise a great deal. Your child does not have to speak the steps out-loud (or whispered) to be praised/ rewarded- they only have to pause. Also, we would like you to start brainstorming a list of social situations in which your child typically acts impulsively. Come up with at least 3-4 ideas you can share with your child's therapist at the end of the next sessions. These situations will be used as examples during treatment.

<u>What your child was asked to do this next week</u>

Your child was asked to use the problem solving steps in one situation over the next week. This does not mean they have to use the steps in social situations. These situations could be while doing school work, talking with family or friends, or whatever. Again, just provide one or two reminders for your child. You do not have to "nag" or "quiz" them on the situation they selected.

<u>How many rewards your child earned:</u>

Circle all that apply:

| Had tokens left at the end of session. | Participated well in the session. | Completed homework |

# of rewards earned: _____

<u>The next meeting time:</u>

Day: _____
Date: _____
Time: _____
If you need to cancel, call your therapist _____ at _____ 24-hours in advance.

Session Review #3

<u>What was discussed today</u>

Today the therapist and your child used the problem solving steps in hypothetical social situations. Instead of speaking the steps out-loud, the therapist helped the child practice how to use the steps in a whispered tone of voice. Your child and the therapist also reviewed how the child could have used the steps in social situations over the last week.

<u>How you can help</u>

Last week you were encouraged to reward/praise your child if he or she paused when you gave him or her a "signal" to stop and think. This week you are only to reward your child (grab-bag) if he or she pauses without being reminded. This will require you to look for situations where your child is using the steps (catch them being good). It would be great if the child could be reinforced spontaneously like this once a day. Continue to use the hand signal and praise the child for complying; however, do not reward your child from the grab-bag if you had to give them a specific reminder (signal) to slow down. Also, if you did not give your therapist a list of social situations to review with your child, be sure to give them this list by the next session. We need these examples for your child to get the most out of treatment.

<u>What your child was asked to do this next week</u>

Your child was asked to use the problem solving steps in a social situation over the next week. The therapist brainstormed with your child times when he or she may use the steps when interacting with someone else.

<u>How many rewards your child earned:</u>

Circle all that apply:

Had tokens left          Participated well          Completed homework
at the end of session.    in the session.

# of rewards earned: _____

<u>The next meeting time:</u>

Day: _____
Date: _____
Time: _____
If you need to cancel, call your therapist _____ at _____ 24-hours in advance.

## Session Review #4

What was discussed today

>Today the therapist and your child role-played using the problem-solving steps in hypothetical social situations. The therapist encouraged the child to use the steps covertly. In other words, the therapist helped the child use the problem-solving steps silently, rather than saying or whispering the steps out-loud.

How you can help

>Last week you were asked to reward your child (grab-bag) if he or she pauses without being reminded. This week we would like you to continue to do this; however, feel free to spontaneously reward your child if you can see them demonstrating any of the problem-solving steps. For example, the child may think out-loud about different potential solutions to problems (step #2- "Look at all the possibilities.") or the child may want to talk with you about how a decision they made worked out (step #5- "How did I do?"). Also, the social situations that you have been giving to your child's therapist over the last few weeks will be used in the final two sessions. Therefore, if you did not give your therapist a list of social situations to review with your child, be sure to give them this list now.

What your child was asked to do this next week

>Your child was asked to use the problem solving steps in a social situation over the next week. The therapist brainstormed with your child times when he or she may use the steps when interacting with someone else.

How many rewards your child earned:

Circle all that apply:

>Had tokens left          Participated well       Completed homework
>at the end of session.      in the session.

# of rewards earned: _____

The next meeting time:

>Day: _____
>Date: _____
>Time: _____
>If you need to cancel, call your therapist _____ at _____ 24-hours in advance.

## Session Review #5

<u>What was discussed today</u>

Today the therapist and your child role-played the situations you identified as being a particular problem for your child. They did this by acting out a "scene" for the video-camera located in the therapy room. This gave the child visual feedback regarding their use of the steps. This procedure will be repeated in the next and final session.

<u>How you can help</u>

Continue to "catch the child being good" by being sure to reinforce (through either praise or reward) any use of the problem solving steps. If there are other situations you would like the therapist to practice with the child, tell the therapist of these situations now.

<u>What your child was asked to do this next week</u>

Your child was asked to use the problem solving steps in a social situation over the next week. The therapist brainstormed with your child times when he or she may use the steps when interacting with someone else.

- Important Note: During the next session, you will be asked to complete the study's measures while your child talks with the therapist. You should plan for at least 30-minutes to complete these measures.

<u>How many rewards your child earned:</u>

Circle all that apply:

Had tokens left                    Participated well                    Completed homework
at the end of session.          in the session.

# of rewards earned: _____

<u>The next meeting time:</u>

Day: _____
Date: _____
Time: _____
If you need to cancel, call your therapist _____ at _____ 24-hours in advance.

Appendix J

Nondirective Therapy Outline and Handouts

## Attention-Control Session #1

<u>Objectives:</u> To introduce the child to the therapy setting and acquaint them with rules of therapy. Building a comfortable relationship with the child is imperative during this session. Parents are reminded of basic parent-training principles; however, the child is not taught the problem-solving steps.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Intro | Get to know you activity. | 10-minutes | | "Getting to know you" survey | Y / N |
| | The therapist tells the child that over the next 6-weeks the child and therapist will play with any of the toys provided (child's choice). The therapist will only provide limits when: (1) the child may hurt him or herself; (2) the child may hurt the therapist; and (3) the child may damage toys or items in the therapy room. If such actions are in danger of occurring, the therapist will give the child one warning before placing the child in timeout during the session (see transcript #13).<br><br>The child is also told that he or she will be rewarded by his or her parents for playing appropriately and participating actively during the sessions (grab-bag). | 5- minutes | Transcript #13: "Introducing the Child to Therapy" | | Y / N |
| Main session content | Follow the basic instructions of the child's game while you and the child play (see "Attending to your Child's Good Play Behavior" handout for further instructions). If the child is not in the mood to play, you may simply talk about the content of the child's life; however, you should use a person-centered approach that avoids specific instructions of how to problem-solve. | 25-minutes | "Attending to your Child's Good Play Behavior" handout | Toys provided by the study. | Y / N |
| | While the child plays (or talks about their experiences), be sure to reflect feelings the child is demonstrating during play (see transcript #14). The therapist should ensure that these are truly reflections and not questions (although the child may correct the therapist's impressions) | | Transcript #14: "Reflecting a Child's Feelings" | | Y / N |
| | Once you and the child are comfortably playing, make reflections of your own feelings regarding the actions of the child in therapy or the content they tell you about regarding their life (see transcript #15). These should be "I feel…" statements that the | | See transcript #15: "Reflecting your own feelings" | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| | child does not perceive as being correction or reproof. | | | | |
| Parent Review | Tell the parents that they have the right to know everything that was discussed during the session; however, let them know that therapy is often more beneficial when the therapist and the parents have worked out a verbal agreement that the therapist will reveal to the parents only what the child is comfortable in disclosing (obviously self or other harm statements do not apply). See if the parents are okay with making a similar verbal agreement with you. <br> - Next, tell the parents whether or not the child earned a reinforcer for their participation in today's session. <br> - Brainstorm with parents potential solutions to problems they are having with their child. Emphasize the principles of differential reinforcement (e.g., ignoring), use of Child's Game (e.g., positive reinforcement), and the use of the reward program (e.g., grab-bag) taught to parents during parent training. Follow-up with parents regarding each of these principles at the end of all sessions. The general rule is that it is fine to review basic parenting practices as long as the problem-solving skills are not directly taught to the children. | 10-minutes | | | Y / N |

After the Session:

- Rate the quality of the relationship formed with the child in the session (1= child resistant to talk or share personal info, 10= child talks freely about his or her life, strong sense of trust formed with the therapist) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level in the session (1= disengaged or defiant throughout session, 10= extremely engaged in talk or play) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it in the child's folder.

- Treating Therapist:_____ Date of session:_____

Attention-Control Session #2

Objectives: To continue to build a relationship with the child. As with all sessions, therapist's main priorities are to: (1) develop a warm, friendly relationship with the child where the child is exposed to unconditional acceptance and feels they can express feelings completely; (2) avoid the use of questions or commands so that the child's actions or conversations are not directed in any manner; and (3) reflect and interpret feelings and play themes the child is manifesting. Parents are reminded of basic parent-training principles; however, the child is not taught the problem-solving steps.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|---|---|---|---|---|---|
| Intro | Remind the child of what their parents decided regarding confidentiality at the end of the last session. If the parents were okay with keeping things in confidence, tell the child that at the end of the session the therapist will ask the child what is okay to share with the parents as part of parent review. Otherwise, ask the child about their week and their activities as a way to further understand the child and add context to any play themes they demonstrate. | 5-minutes | | | Y / N |
| Main session content | Follow the basic instructions of the child's game while you and the child play (see "Attending to your Child's Good Play Behavior" handout for further instructions). If the child is not in the mood to play, you may simply talk about the content of the child's life; however, you should use a person-centered approach that avoids specific instructions of how to problem-solve. | 35-minutes | | Toys provided by the study. | Y / N |
| | While the child plays (or talks about their experiences), be sure to reflect feelings the child is demonstrating during play (see transcript example). The therapist should ensure that these are truly reflections and not questions (although the child may correct the therapist's impressions). | | See transcript #14 | | Y / N |
| | Once you and the child are comfortably playing, make reflections of your own feelings regarding the actions of the child in therapy or the content they tell you about regarding their life (see transcript). These should be "I feel…" statements that the child does not perceive as being correction or reproof. | | See transcript #15 | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Parent Review | - If the parents are okay with maintaining confidentiality in the session (see first session), ask the child what aspects of the session are okay to talk with their parents about. Give the parents this information as an overview of session content.<br>- Tell the parents whether or not the child earned a reinforcer for their participation in today's session.<br>- Brainstorm with parents potential solutions to problems they are having with their child. Emphasize the principles of differential reinforcement (e.g., ignoring), use of Child's Game (e.g., positive reinforcement), and the use of the reward program (e.g., grab-bag) taught to parents during parent training. Follow-up with parents regarding each of these principles at the end of all sessions. The general rule is that it is fine to review basic parenting practices as long as the problem-solving skills are not directly taught to the children. | 10-minutes | | | Y / N |

After the Session:

- Rate the quality of the relationship formed with the child in the session (1= child resistant to talk or share personal info, 10= child talks freely about his or her life, strong sense of trust formed with the therapist) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level in the session (1= disengaged or defiant throughout session, 10= extremely engaged in talk or play) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it in the child's folder.

- Treating Therapist:_____     Date of session:_____

Attention-Control Session #3

Objectives: As with all sessions, therapist's main priorities are to: (1) develop a warm, friendly relationship with the child where the child is exposed to unconditional acceptance and feels they can express feelings completely; (2) avoid the use of questions or commands so that the child's actions or conversations are not directed in any manner; and (3) reflect and interpret feelings and play themes the child is manifesting. Parents are reminded of basic parent-training principles; however, the child is not taught the problem-solving steps.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Intro | Ask the child about their week and their activities as a way to further understand the child and add context to any play themes they demonstrate. | 5-minutes | | | Y / N |
| Main session content | Follow the basic instructions of the child's game while you and the child play (see "Attending to your Child's Good Play Behavior" handout for further instructions). If the child is not in the mood to play, you may simply talk about the content of the child's life; however, you should use a person-centered approach that avoids specific instructions of how to problem-solve. | 35-minutes | | Toys provided by the study. | Y / N |
| | While the child plays (or talks about their experiences), be sure to reflect feelings the child is demonstrating during play (see transcript example). The therapist should ensure that these are truly reflections and not questions (although the child may correct the therapist's impressions). | | See transcript #14 | | Y / N |
| | Once you and the child are comfortably playing, make reflections of your own feelings regarding the actions of the child in therapy or the content they tell you about regarding their life (see transcript). These should be "I feel…" statements that the child does not perceive as being correction or reproof. | | See transcript #15 | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Parent Review | - If the parents are okay with maintaining confidentiality in the session (see first session), ask the child what aspects of the session are okay to talk with their parents about. Give the parents this information as an overview of session content.<br>- Tell the parents whether or not the child earned a reinforcer for their participation in today's session.<br>- Brainstorm with parents potential solutions to problems they are having with their child. Emphasize the principles of differential reinforcement (e.g., ignoring), use of Child's Game (e.g., positive reinforcement), and the use of the reward program (e.g., grab-bag) taught to parents during parent training. Follow-up with parents regarding each of these principles at the end of all sessions. The general rule is that it is fine to review basic parenting practices as long as the problem-solving skills are not directly taught to the children. | 10-minutes | | | Y / N |

After the Session:

- Rate the quality of the relationship formed with the child in the session (1= child resistant to talk or share personal info, 10= child talks freely about his or her life, strong sense of trust formed with the therapist) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level in the session (1= disengaged or defiant throughout session, 10= extremely engaged in talk or play) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it in the child's folder.

- Treating Therapist:_____    Date of session:_____

Attention-Control Session #4

<u>Objectives:</u> As with all sessions, therapist's main priorities are to: (1) develop a warm, friendly relationship with the child where the child is exposed to unconditional acceptance and feels they can express feelings completely; (2) avoid the use of questions or commands so that the child's actions or conversations are not directed in any manner; and (3) reflect and interpret feelings and play themes the child is manifesting. Parents are reminded of basic parent-training principles; however, the child is not taught the problem-solving steps.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-------------------------------------|
| Intro | Ask the child about their week and their activities as a way to further understand the child and add context to any play themes they demonstrate. | 5-minutes | | | Y / N |
| Main session content | Follow the basic instructions of the child's game while you and the child play (see "Attending to your Child's Good Play Behavior" handout for further instructions). If the child is not in the mood to play, you may simply talk about the content of the child's life; however, you should use a person-centered approach that avoids specific instructions of how to problem-solve. | 35-minutes | | Toys provided by the study. | Y / N |
| | While the child plays (or talks about their experiences), be sure to reflect feelings the child is demonstrating during play (see transcript example). The therapist should ensure that these are truly reflections and not questions (although the child may correct the therapist's impressions). | | See transcript #14 | | Y / N |
| | Once you and the child are comfortably playing, make reflections of your own feelings regarding the actions of the child in therapy or the content they tell you about regarding their life (see transcript). These should be "I feel…" statements that the child does not perceive as being correction or reproof. | | See transcript #15 | | Y / N |
| Parent Review | - If the parents are okay with maintaining confidentiality in the session (see first session), ask the child what aspects of the session are okay to talk with their parents about. Give the parents this information as an overview of session content. <br> - Tell the parents whether or not the child earned a reinforcer for their participation | 10-minutes | | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-------------------------------------|
| | in today's session. <br> - Brainstorm with parents potential solutions to problems they are having with their child. Emphasize the principles of differential reinforcement (e.g., ignoring), use of Child's Game (e.g., positive reinforcement), and the use of the reward program (e.g., grab-bag) taught to parents during parent training. Follow-up with parents regarding each of these principles at the end of all sessions. The general rule is that it is fine to review basic parenting practices as long as the problem-solving skills are not directly taught to the children. | | | | |

After the Session:

- Rate the quality of the relationship formed with the child in the session (1= child resistant to talk or share personal info, 10= child talks freely about his or her life, strong sense of trust formed with the therapist) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level in the session (1= disengaged or defiant throughout session, 10= extremely engaged in talk or play) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it in the child's folder.

- Treating Therapist:_____ Date of session:_____

## Attention-Control Session #5

<u>Objectives:</u> As with all sessions, therapist's main priorities are to: (1) develop a warm, friendly relationship with the child where the child is exposed to unconditional acceptance and feels they can express feelings completely; (2) avoid the use of questions or commands so that the child's actions or conversations are not directed in any manner; and (3) reflect and interpret feelings and play themes the child is manifesting. Parents are reminded of basic parent-training principles; however, the child is not taught the problem-solving steps.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|---|---|---|---|---|---|
| Intro | Ask the child about their week and their activities as a way to further understand the child and add context to any play themes they demonstrate. | 5-minutes | | | Y / N |
| Main session content | Follow the basic instructions of the child's game while you and the child play (see "Attending to your Child's Good Play Behavior" handout for further instructions). If the child is not in the mood to play, you may simply talk about the content of the child's life; however, you should use a person-centered approach that avoids specific instructions of how to problem-solve. | 35-minutes | | Toys provided by the study. | Y / N |
| | While the child plays (or talks about their experiences), be sure to reflect feelings the child is demonstrating during play (see transcript example). The therapist should ensure that these are truly reflections and not questions (although the child may correct the therapist's impressions). | | See transcript #14 | | Y / N |
| | Once you and the child are comfortably playing, make reflections of your own feelings regarding the actions of the child in therapy or the content they tell you about regarding their life (see transcript). These should be "I feel..." statements that the child does not perceive as being correction or reproof. | | See transcript #15 | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|------|----------------------|-----------|---------------|------------------|-----------------------------------|
| Parent Review | - If the parents are okay with maintaining confidentiality in the session (see first session), ask the child what aspects of the session are okay to talk with their parents about. Give the parents this information as an overview of session content.<br>- Tell the parents whether or not the child earned a reinforcer for their participation in today's session.<br>- Brainstorm with parents potential solutions to problems they are having with their child. Emphasize the principles of differential reinforcement (e.g., ignoring), use of Child's Game (e.g., positive reinforcement), and the use of the reward program (e.g., grab-bag) taught to parents during parent training. Follow-up with parents regarding each of these principles at the end of all sessions. The general rule is that it is fine to review basic parenting practices as long as the problem-solving skills are not directly taught to the children.<br>- Remind the parents that in the next session they will have to stay during the session and complete measures while the child is with the therapist- ensure that (at the very least) the mother will be at the last session. | 10-minutes | | | Y / N |

After the Session:

- Rate the quality of the relationship formed with the child in the session (1= child resistant to talk or share personal info, 10= child talks freely about his or her life, strong sense of trust formed with the therapist) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level in the session (1= disengaged or defiant throughout session, 10= extremely engaged in talk or play) and why you gave the child this rating (one or two sentences). Rating: _____

- Sign and date this treatment note and place it in the child's folder.

- Treating Therapist:_____ Date of session:_____

## Attention-Control Session #6

<u>Objectives:</u>  Process with the child what they have learned in their sessions.  Also complete study instruments and answer any remaining questions of the parents.

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|---|---|---|---|---|---|
| Assess-ments | It is important to start the session by giving the parents all the measures for the study (CBCL/ 6-18, Social Skills Rating System- Parent form, and PSI-SF).  Tell the parents that they should not confer with each other and they do not have to fill out the front page (other than the child's name and their name) of the CBCL or SSRS.  Be sure to tell the parent to fill out the measure as the child has been during the last week. | 5-minutes | | Assessment Measures in file cabinet.  Note: Be sure to get the appropriate age of form for SRSS if the child is over the 6th grade. | Y / N |
| Intro | Ask the child about their week and their activities as a way to further understand the child and add context to any play themes they demonstrate. | 5-minutes | | | Y / N |
| Main session content | Follow the basic instructions of the child's game while you and the child play (see "Attending to your Child's Good Play Behavior" handout for further instructions).  If the child is not in the mood to play, you may simply talk about the content of the child's life; however, you should use a person-centered approach that avoids specific instructions of how to problem-solve. | 25-minutes | | Toys provided by the study. | Y / N |
| | While the child plays (or talks about their experiences), be sure to reflect feelings the child is demonstrating during play (see transcript example).  The therapist should ensure that these are truly reflections and not questions (although the child may correct the therapist's impressions). | | See transcript #14 | | Y / N |

| Step | Content to be covered | Timeframe | Any Examples? | Needed Materials | Completed? Y or N (if N then list) |
|---|---|---|---|---|---|
| | Once you and the child are comfortably playing, make reflections of your own feelings regarding the actions of the child in therapy or the content they tell you about regarding their life (see transcript). These should be "I feel…" statements that the child does not perceive as being correction or reproof. | | See transcript #15 | | Y / N |
| Child Review | Ask the child about what they have learned during their sessions with you. This should be a time for you and the child to process the end of the relationship. It may be helpful to also give the child an overall sense of some of their positive qualities. | 10-minutes | | | Y / N |
| Parent Review | - Collect the measures from the parents and be sure they are filled out completely.<br>- Spend some time talking about the child's strengths and leave some time for the parents to ask any remaining questions.<br>- Remind the parents that they will be called six times to complete the PDR and the child will be called to complete the student form of the SSRS; otherwise, thank them for their participation or set-up referral to Psychology Community Clinic if you believe further therapy is warranted. | 10-minutes | | Assessment measures. | Y / N |

After the Session:

- Rate the quality of the relationship formed with the child in this session (1= child resistant to talk or share personal info, 10= child talks freely about his or her life, strong sense of trust formed with the therapist) and why you gave the child this rating (one or two sentences). Rating: _____

- Rate the extent to which parents are following through on the recommendations made during treatment (1 = "child inappropriately reinforced/ continual reminders are needed to follow through on recommendations," to 10 = "child appropriately reinforced, parents appear to be following all recommendations") and why you gave the family this rating (one or two sentences). Rating: _____

- Rate the child's participation level in the session (1= disengaged or defiant throughout session, 10= extremely engaged in talk or play) and why you gave the child this rating (one or two sentences). Rating: _____

Treating Therapist:_____     Date of session:_____

## What We Will be Doing in Therapy

Your child is participating in a non-directive approach to therapy. This form of therapy will help the child with the following skills:

- Develop understanding of feelings
- Express feelings to better meet their needs
- Explore the consequences of inappropriate behavior
- Explore any conflicts the child may be feeling
- Increase their self-confidence

Various professionals have used this therapy approach successfully for many years. Depending on the age of your child, he or she will participate in several play activities as a way of exploring his or her feelings. Therefore, don't be surprised if your child says to you that he or she "played" the entire session with the therapist.

As your child's parent, you have a legal right to know all of the information that is discussed during therapy. However, therapy usually is more helpful if the therapist can form a verbal agreement that he or she will reveal only information that the child is willing to have revealed to his or her parents. Many times this makes the child more willing to discuss his or her problems. Obviously, if your child makes any statements leading the therapist to believe that he or she is a serious danger to themselves or others, the therapist will automatically tell you this information. Feel free to discuss this option with your therapist. Obviously, the choice is up to you.

Finally, you will be involved in the last 10-minutes of each of your child's sessions. During these 10-minutes, the therapist will inform you of what happened during the session, and will review basic principles you learned in the group parent discussions. The therapist can also be used to brainstorm how to deal with any problem behaviors you are still seeing in your child. The therapist will also let you know if your child earned a reward (e.g., grab-bag) for actively participating in therapy.

Transcript #13: Introducing the Child to Therapy

[Therapist escorts child to play area. Several toys are displayed for the child to choose from. Only play toys from the study should be used during the sessions]

T: "This is a special room with all types of toys and activities we can do. This room is special because you are in charge. In other words, we can play with anything in this room or talk about anything you want to. If there is something you may not do, I will let you know. I will participate in any way you want me to. If there is something I do not feel right about doing, I will let you know. Now, when we are in this room, who is in charge?"

C: "Me"

T: "Yep. And when the hour is over, who is in charge?"

C: "My parents."

T: "That is right? Let me tell you why we are doing this. It is my job to help you learn a little more about your feelings and the feelings of others. We can learn about feelings by playing or just by talking about anything that troubles you- your choice. Sometimes I may suggest an activity to do to help us learn about feelings, but it will be up to you whether or not we do it. Make sense?"

C: "Yes"

T: "Plus, if you participate in playing or talking with me, your parents have agreed to give you a grab-bag for participating. Sound good? Lets start with one game we can play that will help us get to know each other [therapist uses the "Getting to Know You" handout] then we can play or talk- your choice."

Setting Limits

The general rule about limits is to consider whether the limit is necessary for the students' safety, the safety of others, or the protection of valuable toys or property. There is a 3-step sequence to setting limits: (1) stating the limit; (2) giving a warning; and (3) providing the consequence (e.g., generally taking away the toy or grab-bag privilege in extreme circumstances).

C: "Lets play cops and robbers [picks up dart gun]. You have to shoot me with the gun."

T: "Darrin, you'd like me to shoot the gun at you. Remember I said I'd let you know if there's something you may not do? One of the things you and I may not do is point or

shoot the dart gun at someone when it is loaded.  But you can shoot it almost anywhere else in the room." (Stating the limit)

C: "Okay, lets take out the darts."

T: "That makes me feel good that you're still willing to play." (reflection of therapist feeling)

[later in session]

C: [dart gun is now loaded]  "I bet I can hit you with this."

T: "Remember, if you point or shoot the dart gun at me, I will have to take it away for the rest of the session." (Warning provided in very matter-of-fact tone of voice)

C: [Continues to laugh and wave the dart gun at the therapist for 20-seconds.  Therapist is silent.]

T: "Okay, Darrin you've chosen to point the dart gun at me.  It needs to go away for the rest of the session." [Takes gun away and puts it out of sight] (Provides consequence)

C: "Can I have it back next session?"

T: "Yes, as long as you obey the rule" [therapist redirects the child by asking them what else they wish to play with]

- If multiple infractions occur or if the child continuously protests the enforcing of consequences, the therapist reminds the child that they may loose their grab-bag privilege for the session.  This consequence, however, should be used sparingly and only after the child has been warned.

Transcript #14: Reflecting the Child's Feelings

Younger Children (ages 7-9)

- Note: The therapist refers to pictures and toys the child is playing with rather than the child. It is assumed that the toys or pictures represent the child. Just like in regular therapy, it is important to watch for reoccurring patterns and rituals as possible themes so as not to draw far-reaching conclusions from a single play occurrence. Common themes include: control, good-evil, win-lose, problem solving, rescue, family/peer relationships, and dealing with authority.

C: [Child has once again chosen to play with dolls where one doll is being told what to do by the other dolls] "You need to go make your bed. Your always messing things up." [two dolls "scolding" another doll]

T: "The doll is sad [points to the doll being scolded] and feels lonely" (reflection of feeling)

C: "No, she isn't. She is mad."

T: "It is tough being told what to do all the time." (reflection of feeling)

C: "Yeah, she wants to them to stop." [child has "scolded" doll hit the other dolls repeatedly] "bam, bam, bam"

T: "She is getting them back for how they made her feel." (reflection of content)

C: "Yeah. She doesn't like them."

T: "Doesn't like being told what to do. I wonder how she feels now." (Note: This is not asked in a question format- only as a reflection of the therapist's thoughts. The child can choose to respond to the implicit question if he or she wishes. If the child does not choose to respond, the therapist continues to follow the child's lead.)

C: "She feels bad for having hit them."

T: "Bad because she hit." (reflection of content and feeling) "I wonder what she could do to make it better." (Therapist reflecting on his or her own feelings)

C: "She can say sorry" [Child has scolded doll "kiss" other dolls on their cheeks]

T: "It makes me happy to see people make up and do the right thing after a mistake." (Reflection of the therapist feelings)

C: "Lets play with this now" [motions to another game]

T: "You want to do something else. Okay…"

Older children or younger children who choose to talk about themselves rather than play

- Note: When the context turns to the child describing issues and details of their life, a person-centered approach is used.

C: [Child is describing not being invited to a party by a friend] "…then when I saw her the next day, she didn't even say hello."

T: "It made you feel mad." (reflection of feeling)

C: "No, I just wanted her to talk to me and tell me why. So I kept going by her desk hoping she would say something. But she didn't."

T: "It is important to you to know why know why she left you out." (reflection of content)

C: "Yeah."

T: "You try hard to be a good friend, and it feels bad when people don't do the same." (reflection of content and feeling)

C: "Yeah, like what else am I supposed to do? What would you do?"

T: "You want to know how I would deal with the problem. I'm not really sure yet. Maybe we can talk about some ways to deal with it. What would happen if…." [Therapist goes on to explore possibilities with the child; however, the message is clearly communicated that the child has the best answer, and the therapist expresses confidence in his or her ability to choose.]

Transcript #15: Reflecting you own feelings

Younger Children (ages 7-9)

- Note: Most of the reflection of feeling will be done related to toys that are acting out common themes of the child (see previous transcript). The therapist reflects his or her feelings as a way to "teach" the child about consequences, develop perspective, and teach empathy. However, skill building is not made an explicit component of treatment.

C: [Drawing a picture of a family]

T: "There is the dad, and the mom, and the son…(descriptions)…the boy has a frowny face. I wonder what he is sad about." (therapist reflects his or her feelings)

C: "I don't know."

T: "Something bad may have happened to make the boy sad around his family." (reflection of content)

C: "They yell at him a lot."

T: "It would make me sad if my parents were yelling all the time" (therapist reflection of feeling)

C: "They don't yell at him all the time, but a lot"

T: "I wonder what he could do to solve the problem…. (therapist continues to use reflection as the child explores various ways the "boy" could solve the problem)

Older Children

C: [Child is describing how mad he or she was at being grounded by their parents] "….I didn't even hit her- I only shoved her."

T: "You feel mad and like your mom and dad don't understand you." (reflection of feeling)

C: "Yeah, they are always pissing me off about something."

T: "It makes me sad that you don't feel close to your parents." (refection of therapist feeling)

C: "Sometimes they are okay."

T: "So sometimes you think they understand you but other times they don't really listen." (reflection of content)

C: "Yeah. I guess I make them mad too."

T: "I wonder how." (<u>Note</u>: With older children, this kind of indirect questioning is often necessary to fully explore issues)

C: "Sometimes I can say stuff I don't mean- like cussing."

T: "That would make me feel kind of sad if my son cussed at me." (reflection of therapist feeling)

C: "Dad doesn't act like he is sad- he yells right back."

T: "Sometimes I yell when I'm really sad. (Reflection of therapist feeling/experience) I wonder what else he could be feeling." [...therapist continues to reflect as child explores possibilities *being sure to reflect their feelings when the child is exploring a socially appropriate response*].

Appendix K

Other Clinical Findings

Due to the nature of the measures employed, three other outcome scores could be calculated: the internalizing and total problem behavior scores on the CBCL and the total problem behavior score on the SSRS. These outcome measures did not specifically pertain to either of the research questions; however, they are briefly mentioned here for the sake of future research and discovery. Tests of statistical significance revealed an effect for time, but no group by time interaction effects on these measures. Examining effect size calculations (see table below), the SSRS Total Problem Behavior Score for children in the PSST group demonstrated a moderate incremental decrease in problematic behaviors ($ES = -.45$) at the follow-up interval, while children in the non-directive group demonstrated little incremental decrease ($ES = -.17$) at the same interval. Children in the PSST treatment also demonstrated a moderate incremental decrease in internalizing behaviors ($ES = -.50$) after individual therapy, while children in the non-directive children demonstrated no change at the same assessment interval ($ES = .04$).

*Effect Size Calculations at each Assessment Interval by Treatment Condition*

| Measure/treatment condition | T1 to T2 | T1 to T3 | T1 to T4 |
|---|---|---|---|
| SSRS: Total problem behavior score | | | |
| PSST ($n = 11$) | -.79 | -1.02 | -1.47 |
| Non-directive ($n = 13$) | -.63 | -.80 | -.97 |
| CBCL: Internalizing total score | | | |
| PSST ($n = 12$) | -.30 | -.80 | -.80 |
| Non-directive ($n = 13$) | -.47 | -.51 | -.95 |
| CBCL: Total problem behavior score | | | |
| PSST ($n = 12$) | -.81 | -1.00 | -1.27 |
| Non-directive ($n = 13$) | -.49 | -.63 | -1.11 |

*Notes.* T1 = Baseline assessment interval; T2 = Post-parent training assessment interval; T3 = Post individual therapy assessment interval; T4 = Follow-up assessment interval.

# CURRICULUM VITAE

## BRYAN BUSHMAN

Home
112 Center St. #2
Danville, PA 17821
(570) 275 - 8600
Email: bbushman@cc.usu.edu

Office
Geisinger Medical Center
Psychiatry Department
100 N. Academy Ave.
Danville, PA 18822
Phone: (570) 271 - 8255

## Education:

- *Utah State University:*    *Sept 2000- present*
    - o Ph.D. Candidate (degree expected- May 2007):
      APA accredited Combined Clinical- Counseling-
      School Psychology program.

    - o M.S. in Counseling Psychology   *Dec 2003*

- *University of Texas at Austin: Bachelor of Arts*   *May 1999*
    - o Psychology major, graduated with honors

## Interests:

- *Clinical:* pain management for chronic and acute medical conditions, medical regimen adherence, pediatric anxiety disorders
- *Research:* applied treatment outcomes for children with disruptive behavior / medical conditions.

## Internship (APA Accredited):

- *Geisinger Medical Center (Danville, PA)*   *July 2006 - present*
    Position: Pediatric Psychology Resident
    Setting: Regional Hospital
    Responsibilities/ Rotations:
    - o Anxiety Disorders Clinic:
        - responsible for assessment, diagnosis, and treatment of a variety of anxiety disorders utilizing structured interview (ADIS).
        - many of the clients referred have significant medical histories and are coping with issues related to ongoing pain (abdominal pain, headaches).
    - o Consultation/ Crisis:
        - functioned as part of medical team to answer specific questions either in children's hospital or in the ER.
        - collaborated as part of nephrology team to enhance treatment adherence for children with encopresis / enuresis.

- o Assessment Clinic:
  - • responsible for interviewing, administering measures, writing reports, and giving feedback related to cognitive, neurological, and academic tests (completed approximately 20 reports while on rotation).

## Graduate School Clinical and Practicum Experience:

- *Utah Leadership Education in Neurodevelopmental*     *Sept 2005 - June 2006*
  *Disabilities (ULEND): (Logan and Salt Lake City, UT)*
  Position: Interdisciplinary Team Member
  Setting: Various Medical Clinics
  Responsibilities:
  - o collaborated with interdisciplinary professionals (MD, OT, Speech-Language, PT) in multiple medical settings providing services to children and families with various medical/ developmental conditions:
    - • consulted with feeding clinic personnel regarding behavioral methods to augment treatment.
    - • devised community-based treatment for language-delayed, Hispanic children.
  - o chosen as one of two graduate students to represent field of psychology.

- *Utah State University Counseling Center (Logan, UT)*     *Sept 2004 - May 2006*
  Position: Graduate Assistant Therapist
  Setting: University Counseling Center
  Responsibilities:
  - o conducted individual and group therapy with college students.
  - o supervised undergraduate "peer" counselors.
  - o responsible for conducting various outreach workshops on campus.

- *Early Intervention Research Project (Salt Lake Valley, UT)*   *June 2005 - Aug 2005*
  Position: Assessment Specialist
  Setting: Elementary Schools
  Responsibilities: administered developmental/ cognitive assessment measures for state-wide study of early intervention outcomes.

- *Budge Clinic: Pediatric Medical Center (Logan, UT)*     *Sept 2003- June 2004*
  Position: Practicum Student (Clinical Child/ Pediatrics Practicum)
  Setting: Primary Medical Care Clinic
  Responsibilities:
  - o chosen to be the first student to function as a provider at the site.
  - o set-up initial organization so this would be a practicum site for future students.
  - o collaborated with five referring pediatricians to provide individual/ family counseling to child patients with various behavioral and medical conditions.

- *Bear River Mental Health (Logan, UT)*     *July 2003- June 2004*
  Position: Graduate Assistant Therapist

Setting: Community Mental Health Center
Responsibilities:
o provided individual/ group therapy for various clients (SPMI/ low-income population).
o utilized MMPI, Rorschach, and Millon-III in psychological reports.
o functioned as lead therapist for weekly anger management group.

**Graduate School Clinical and Practicum Experience (continued):**

- *Counseling Center: Utah State University (Logan, UT)*       *Sept 2002- July 2003*
    Position: Student Therapist (Counseling Practicum)
    Setting: University Counseling Center
    Responsibilities: Provided individual therapy for various clients.

- *Arizona State University Early Intervention*       *June 2002- July 2003*
  *Research Grant (Logan, UT)*
    Position: Northern Utah Data Collection Manager
    Setting: Home Visits
    Responsibilities:
    o responsible for all data collection in the northern Utah area for a study on the effectiveness of early intervention services.
    o recruited volunteers, scheduled appointments, conducted home visits with EI staff, administered measures, and collected other relevant data.

- *Psychology Community Clinic (Logan, UT)*       *Jan 2001- July 2003*
    Position: Practicum Student (Clinical and School Practica)
    Setting: Psychology Department Outpatient Clinic
    Responsibilities:
    o provided individual therapy for various child and college age clients: ADHD, ODD, feeding disorders, anxiety disorders.
    o conducted Psychological Evaluations: primarily ADHD/ LD assessment.

- *Interdisciplinary Training Program (Logan, UT)*       *Sept 2001- Sept 2002*
    Position: Interdisciplinary Trainee
    Setting: Home Visits and Medical Clinics
    Responsibilities:
    o similar to LEND program (see above), but not as intensive.
    o collaborated with professionals in other departments (medical, speech/language, OT, PT) to provide services to families and children with medical and developmental disabilities.

- *Center for Persons with Disabilities (Logan, UT)*       *June 2002- Aug 2002*
    Position: Practicum Student (Clinical Practicum)
    Setting: Primary Care Clinic
    Responsibilities: performed assessments for adult and child clients.

**Additional Clinical Experience (Volunteer, Unpaid/ Non-practicum):**

- *Fibromyalgia Study:*       *May 2004- Aug 2004*

      o  co-led group therapy sessions helping patients with fibromyalgia cope with the condition.

- *ADHD Parent study:*                                           *Sept 2001- Sept 2004*
  - o  responsible for conducting parent-training with ADHD study participants.
  - o  participated with a group of graduate students in designing research based on this project.

## Teaching Experience:

- *Instructor- Research Methods: Utah State University*      *June 2005- Aug 2005*
  - o  taught undergraduate (upper-division) research methods course.

- *Teaching Assistant: Utah State University*            *Sept 2001- Dec 2002*
  - o  responsible for preparing and teaching lectures for graduate level courses in intellectual assessment and research methods.

## Research Experience:

*Professional Conference Presentations:*

      Bushman, B. B., & Crowley, S. (2004, October). Comparing Factor Structure Between the MASC and RCMAS: A Psychometric Investigation Using Structural Equation Modeling in Third- and Sixth-Grade Children. Poster presented at the conference, Kansas Conference in Clinical Child and Adolescent Psychology, Lawrence, KS.

      Bushman, B. B., & Crowley, S. (2004, July). Developmental Changes in the Structure of Affect: Is the Tripartite Model equally valid for older and younger children? Poster presented at the annual conference, American Psychological Association, Honolulu, HI.

      Gimpel, G.A., Gifford, J., Veeder, M.A., Sneedon, P., Bushman, B.B., Carter, J., Brent, M., Hughes, K.N., Suzuki, E., Berglof, H., & Odell, D. (2004, July). Addition of stress management training to parent training. Poster presented at the annual conference, American Psychological Association, Honolulu, HI.

      Bushman, B.B. (2002, November). Does CBT treatment for bulimia nervosa maintain its effectiveness over time?: A meta-analytic study. Poster presented at the annual conference, Association for the Advancement of Behavior Therapy, Reno, NV.

*Publication:*

      Gimpel, G.A., Collett, B.R., Veeder, M.A., Gifford, J.A., Sneedon, P., Bushman, B., Hughes, K., & Odell, J.D. (2005). The effects of stimulant medication on the cognitive performance of children with ADHD. Clinical Pediatrics, 44, 5. 405-411.

*Manuscripts in Submission:*

Bushman, B., & Crowley, C. (In submission). Developmental Changes in the Structure of Affect: Is the Tripartite Model equally valid for older and younger children?

Also participated in ADHD research team in graduate school and completed undergraduate honors thesis regarding attribution and ADHD children.

## Volunteer/ Leadership Experience:

- *APAGS- State Advocacy Coordinator (Utah)*          *July 2005- June 2006*
  o coordinate advocacy efforts all APA approved graduate programs in the state of Utah.
  o responsible for recruiting campus representatives and organizing/ initiating legislative advocacy efforts with state organizations.

- *APAGS- Campus Representative for Utah State*          *Dec 2004- June 2005*
  o responsible for coordinating and communicating legislative issues and advocacy efforts for graduate students at USU.
  o recruited members into APA and communicated APAGS information.

- *Bear River Adult Skills Center (Logan, UT)*          *Sept 2001- May 2002*
  o taught basic self-care skills to adults with mental retardation and built devices assisting those with physical disabilities.

## Familiar Assessment Tools

- *Personality:* MMPI-2, MMPI-A, Rorschach (Exner System), Millon-III (adult)
- *Cognitive/ Intellectual:* WISC-IV, WPPSI-III, NEPSY, CCT, KABC-II, Trails, KBIT-2, PPVT-III, VMI
- *Academic:* WIAT-II, Bracken, CTOPP
- *Developmental:* Battelle Developmental Inventory, Adaptive Behavior Assessment System
- *Structured Interviews:* Vineland, Anxiety Disorder Interview Schedule for DSM-IV

## Certifications/ Honors:

- *National Award for excellence in APAGS campus leadership (May 2005)*
- *Cumulative GPA: 3.9*
- *Interdisciplinary Training certification*
- *Certified in At Home and At Day Care Training (AHEAD)*
- *PSI CHI National Psychology Honor Society*