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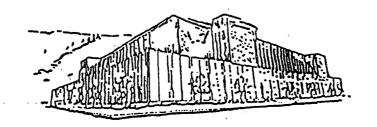
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The Effects of Therapeutic Storytelling and

Behavioral Parent Training on the Problem Behaviors of Children

and on Parental Stress

Laura T. Painter

B.A., University of Richmond, Richmond, Virginia, 1993

Presented in partial fulfillment of the

requirements for the degree of

Master of Arts

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Psychology

The Effects of Therapeutic Storytelling and Behavioral Parent Training on the Problem Behaviors of Children and on Parental Stress (111 pp.)

Director: Paul Silverman, Ph.D.

This study investigated the differential effects of therapeutic storytelling and behavioral parent training in treating children. Four clinic-referred males between the ages of 5 and 7 years experiencing problems with noncompliance and one 10 year-old male experiencing anger control problems took part in a nonconcurrent multiple baseline crossover design across subjects. The noncompliant children were matched according to age and condition. In condition I, the subjects took part in a single therapeutic storytelling session followed by one behavioral parent training session. In condition II, the sequence of these interventions was reversed. Parents completed the Behavior Assessment System for Children (BASC) and the Parenting Stress Index/Short Form (PSI/SF) pretreatment, posttreatment, and six weeks posttreatment. In addition, parents reported on daily frequency and intensity of the targeted behaviors, and they rated their adherence to the strategies and their satisfaction with treatment. Each child repeated the story in order to obtain a recall rating.

Results suggested that both therapeutic methods decreased frequency of targeted behaviors for all subjects and decreased intensity for 4 of the 5 subjects. Measures of global behavioral adjustment suggested stability or a small decline in ratings of problem behaviors and an increase in adaptive behaviors. Parental stress measures yielded results in which slight declines or relative stability was obtained. Data suggested few sequence effects. Follow-up data yielded mixed results across all measures as indicated by a lack of consistency in ratings across subjects. Although variable effects were found at follow-up, the frequency of these target behaviors did not rise to their premorbid levels, and the intensity of the behavior exceeded the premorbid level only for one subject.

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The Effects of Therapeutic Storytelling and Behavioral Parent Training on the Problem Behaviors of Children and on Parental Stress

Storytelling is an important historical tradition. It has been described as the process of relating an either true or fictitious experience or group of experiences in order to educate or entertain (Lawlis, 1995). Stories, metaphors, myths, legends and fairy tales have been said to have many functions including the transmission of familial and cultural lore, the expression of feelings, the relation of personal information, and the communication of values and knowledge (Aurela, 1987; Brems, 1993; Hughes, 1995; Pellowski, 1977). In addition, stories may be used to explore and discover solutions to challenging situations and dilemmas with which children may be confronted in normal maturational development (Bettelheim, 1977; Brems, 1993; Snyder, McDermott, Cook, & Rapoff, 1997). The use of storytelling in child therapy has similar functions.

Storytelling has been used in child psychotherapy in many forms including the following: (1) fairy tales (Bettelheim, 1977; Franzke, 1989; Thiessen, 1985); (2) the mutual storytelling technique (Gardner, 1969, 1970; Schooley, 1976); (3) bibliotherapy (Early, 1993; Fleshman & Fryrear, 1981); (4) the creative characters technique (Brooks. 1981, 1985, 1987); and (5) therapeutic storytelling (Cook, 1993, 1994). In addition, storytelling techniques may be combined with games (Kaduson, 1997; Kritzberg, 1971; Leben, 1997), forms of artistic expression (Eberhart, 1970; Mattingly, 1997; Short, 1997). and use of computers (Brewer, 1997) as well as other activities to facilitate storytelling. particularly child-generated storytelling.

Although the benefits of storytelling in child psychotherapy have been described

in the existing literature, little research has been conducted to assess the efficacy of this technique. The majority of the literature available consists of case studies, informal observations, and descriptions of techniques. The purpose of this study is to augment the literature by formally investigating the effects of therapeutic storytelling and behavioral parent training with a small sample of five children who were referred for individual psychotherapy with William Cook, Ph.D. due to problems with noncompliance and anger management. The form of therapeutic storytelling which was assessed in this project is one devised by the therapist (Cook, 1993, 1994). This procedure will be described in detail in the methods section.

In this project, the efficacy of the rapeutic storytelling and behavioral parent training were examined in terms of their ability to reduce problem behaviors and parental stress. The children's story recall and parents' adherence to behavioral parent training strategies were also assessed. It was anticipated that both therapeutic storytelling and behavioral parent training would induce decreases in the frequency and intensity of problem behaviors and in the level of parental stress. These decreases in problem behaviors and parental stress were expected to be greatest following the combination of therapeutic storytelling and behavioral parent training. Below, a brief overview is provided of the literature in the following areas: the value of storytelling, techniques of therapeutic storytelling, developmental differences in recall and comprehension, behavioral parent training, parental stress, and techniques of multiple baseline research.

Storytelling

The term "metaphor" refers to the transportation of a concept from its customary

realm to a novel realm in which the meaning of the concept changes (Winner, Rosenstiel, & Gardner, 1988). In essence, metaphors may be thought of as a "symbolic language" which is used to communicate an idea in an indirect manner which is more meaningful (Mills & Crowley, 1986). According to Jaynes' theory (1976), within the metaphor, an experience is described in a way that allows the listener to expand current levels of conscious understanding. However, Marvasti (1986) asserts that this supposition should be taken with caution as the existing evidence is largely case history and anecdotal at this time.

In the treatment of children, the primary value of the metaphor, such as is containrf in the therapeutic story and fairy tale, rests in its ability to communicate with the child on conscious, preconscious, and unconscious levels (Bettelheim, 1977; Mills & Crowley, 1986). The conscious, or surface, level of the story is present in the actual text of the story, while the preconscious and unconscious levels are accessed through the directly relevant psychological conflicts (Bandler & Grinder, 1975). In this way, the stories avoid confrontation because the listener maintains a safe distance while gaining insights into his or her own conflicts.

Although valuable, fairy tales, allegories, myths, and legends may be somewhat limited in their therapeutic effects because the child hearing them may not be motivated to engage in the problem-solving necessary to gain insights and promote change. This lack of motivation may stem from the fact that fairy tales do not directly identify representations of the child's hopes, fears, and expected consequences (Fazio, 1991). Even though the child may feel that fairy tales are "speaking to his or her own private concerns"

(Crain, D'Alessio, McIntyre, & Smoke, 1983, p. 10), there is still a leap that the child must make in comparing this universal story to himself or herself because the connections are distant.

Therapeutic stories differ from fairy tales in that they are directed toward a particular problem which the child is facing and may incorporate elements from the child's life which make the story more relevant and familiar. It is assumed that this familiarity facilitates the process of internalizing the story and recognizing the parallels with the child's life. Thus, possibilities of identification and projection are more clear to the child (Early, 1993).

Personalized therapeutic stories are directed at the individual's problems, hopes, and fears. These stories may be used in two ways. First, children can tell the story in order to transmit information about themselves, their needs, and their feelings to the therapist. In this process, the child can symbolically address personal problems to search for other viable solutions to the problems (Brems, 1993). Second, the therapist may tell the story in order to facilitate the development of the therapeutic alliance, to educate the child about the purposes and processes of therapy, to address presenting problems and viable solutions, and to set and aid in attaining goals (Brooks, 1985; Snyder et al., 1997). The inherent value of this process resides in the facilitation of the child's identification with the story and integration of the lessons into his or her life, while the safety of distance is maintained to permit the child to look objectively at potential problems and solutions (Hughes, 1995; Snyder et al., 1997).

Therapeutic storytelling has been implemented in many forms, ranging from client-told stories to therapist-read and therapist-told stories. The focus of the present paper is on therapist-told stories. Therapeutic storytelling has been used to target a wide range of problems including: (1) treatment of sexual abuse (Rhue & Lynn, 1991); (2) improvement of health care management (Lawlis, 1995); (3) introduction to therapy (Brooks, 1985); (4) treatment of divorce issues (Early, 1993; Gardner 1971); and (5) treatment of problems secondary to chronic illness (Robertson & Barford, 1979). Three approaches to therapist-directed therapeutic storytelling are described in the following section.

Storytelling in Child Psychotherapy

The Mutual Storytelling Technique.

Richard Gardner (1986) cites the influence of Hug-Hellmuth who, in 1913, was the first to describe the use of children's stories as sources of psychodynamic information. Similar to dreams and free associations, stories were found to be valuable sources of information which were easier to analyze. However, at that time, there was a fundamental problem regarding the process of utilizing this information to elicit therapeutic change. Gardner (1971) is documented as the first to implement the formal technique of storytelling in child therapy through the use of the Mutual Storytelling Technique (MST).

Gardner's MST operates under the following assumptions: (1) fairy tales will only be relevant to a small number of children; (2) stories speak to the children in their own language, thus facilitating understanding; and (3) stories are less confrontational than

direct therapy particularly because they are in the third person (Gardner, 1969, 1970, 1971, 1974, 1979, 1983, 1986, 1993). The process of MST involves eliciting a selfcreated story from the child which is supposed to have a beginning, a middle, an end, and a moral. This story is then audio- or video- recorded as an episode of the "Make-Up-a-Story" television program. While listening to the story, the therapist attempts to identify the child's role in the story, the meaning of the story, and the sources of other characters. After identifying these factors, the therapist invents a story using the same characters and settings which provides healthier alternatives and resolutions for the child.

Gardner (1993) suggested using this method with children ages 5 to 11 years of age because children of these ages are comfortable verbally and produce stories capable of analysis. Although older children are also verbally capable, they may have a tendency to disregard the procedure as childlike. Gardner also recommended refraining from using props, such as dolls and puppets, because they guide the child to create stories based solely upon the props. According to Gardner (1972), this technique is "not a therapy per se, but rather one technique in the therapist's armamentarium" (p. 35). Gardner (1972) discusses the utilization of supplemental treatment techniques such as play therapy, parental counseling, and environmental change.

MST appears to be beneficial in therapy with many populations, including children with "post-traumatic neurosis" (now called Post-traumatic Stress Disorder; Gardner, 1970); anger inhibition problems (Gardner, 1972); "minimal brain dysfunction" (now referred to as Attention Deficit Hyperactivity Disorder; Gardner, 1974); and oedipal problems (Gardner, 1983). Slight variations of MST have been utilized by many

therapists. For example, variations may be observed in case studies of children who were hospitalized (Schooley, 1976) and children who were identified as "neurotic and borderline" (Aurela, 1987). In these cases, the resolution of problems may be seen in the children's production of stories which had healthier themes and which were less "neurotic" (Gardner, 1969). In addition, Gardner (1971) also provides objective test data suggesting improvement. These case studies suggested the efficacy of this method in individual treatment protocols in which MST and other techniques are combined. However, the efficacy of this procedure has not been established on a larger scale.

Eberhart (1970) developed a variation of MST to be utilized with preschool children. This process is based upon Piaget's (1969) assertion that preoperational children respond best to visual cues and activity and have different organizing structures from children at later stages of development. Eberhart's (1970) group therapy technique incorporates drawing into MST in order to facilitate understanding in children ages 2 to 6 years. Eberhart identified the developmental differences in this age range and indicated that older children require more distance in their stories to avoid narcissistic injury, while this author reported that the stories may directly include 2 to 3 year old children as explicitly defined characters. It seems that this statement could be generalized across all storytelling techniques.

The children involved in Eberhart's (1970) procedure appeared to respond best if they had adequate verbal skills, concentration levels, and intelligence. In individual therapy and crisis management, Eberhart stressed that the therapist should have rapport with the child to avoid increasing the child's anxiety level and suggested that therapeutic

storytelling in which the therapist tells the child a story is most appropriate. The cases illustrated in this publication suggested the power of this procedure to help children coordinate fantasy and reality, to expand children's language skills, to provide alternative behavior strategies, to build self-confidence, and to enhance rapport. Reported successes are also described regarding Brooks' (1981) "creative characters" techniques.

Creative characters technique.

The creative characters technique is a therapeutic procedure which is most appropriate with latency age children (Brooks, 1981). This procedure involves the development of therapist- and child-generated stories which address emotional issues that the child client is facing. These stories are based upon metaphors which the child client has previously introduced in therapy sessions and involve situations similar to those encountered by the child client (Brooks, 1985). The characters within these stories include the following: (1) a representation of the child client (i.e., animal, inanimate object, human); (2) a representation of the therapist as a Wise Owl, Teacher, or Expert; (3) an interviewer such as a newscaster or reporter who clarifies and summarizes; and (4) representations of significant people in the child's life (Brooks, 1987).

The case studies presented by Brooks (1981, 1985, 1987) indicated that this procedure has been effective with children with learning disabilities, low self-esteem, oppositional behavior, temper tantrums, and violent behaviors. Children experiencing parental divorce or separation and those encountering sibling rivalry were also found to benefit from this technique. The benefits of this technique were evidenced in the child's development of mastery, competence, self-esteem, and cognitive organization. This

appears to be an advantageous technique to supplement other modes of treatment because it allows for the distancing of problems, so that problems, feelings, and adaptive coping strategies may be addressed.

Cook's Therapeutic Storytelling Technique.

William Cook (1993, 1994) has developed a procedure for storytelling which is the focus of this study. It involves a therapist-told story which corresponds to the emotional or behavioral difficulties which the child is facing at the time. This procedure follows a five-step process which includes: (1) introducing the main character and setting the stage; (2) identifying and describing the problem; (3) talking to a wise person in the search for resources; (4) trying out alternative approaches and refining strategies for the therapeutic intervention; and (5) summarizing and integrating the lesson (Cook, 1993, 1994; Snyder et al., 1997).

According to Cook's description of these steps (Cook, 1993, 1994; Snyder et al., 1997), the main character in the story is usually a child or an animal which has many of the same characteristics of the child. This character is developed as a wonderful person with one small flaw which he or she is trying to resolve. The wise person accepts this character completely, providing the child with unconditional positive regard necessary to deal with and normalize problems. The wise person also identifies alternative, healthier approaches to overcome the difficulty, and the main character experiments with these alternatives in the story. At the end, the character resolves the issue, and the lesson is summarized.

Cook describes thematic guidelines for parents and therapists to help children with emotional or behavioral problems through storytelling (Snyder et al., 1997). In this text, he specifies the following thematic guidelines for dealing with emotional issues: (1) accepting, valuing, and expressing feelings; (2) realizing the relationships between feelings and problems; (3) becoming aware of the obstacles which block goals; and (4) establishing and implementing a plan to achieve goals. In addition, the following themes are described for addressing behavior problems: (1) placing parents in control of the family; (2) establishing consistent limits; (3) utilizing natural consequences; (4) having children conclude that they are happier when they cooperate and allow parents to teach them; (5) having children relax in response to parental control and give up the struggle; and (6) expanding limits once children experience success and develop skills to accomplish goals. The present study focuses on the thematic guidelines for behavioral problems because noncompliance and anger control problems are targeted in the child subjects.

Cook's procedure is one of many techniques which has been found to be effective in individual cases. Cook (1993, 1994) identifies successes in treating problems such as anger control problems, bereavement, fears, depression, temper tantrums, noncompliance, problems secondary to attention deficit-hyperactivity disorder, sibling rivalry issues, encopresis, and many other childhood difficulties. However, as with other forms of therapeutic storytelling, no empirical evaluations of this method have been conducted. The current project seeks to provide initial empirical evidence regarding the efficacy of this method.

Developmental Trends in Story Comprehension and Recall

Storytelling has been recommended for use with younger children because it parallels their method of understanding and comprehension and because it facilitates their acceptance of psychological change. This recommendation is based upon Piaget's (1969) assertion that until the age of ten children are not capable of analytic insight. At this age, many children enter the stage of formal operations and can consciously "differentiate between a symbol and the entity which it symbolizes" (Gardner, 1993, p. 2). This differentiation is necessary to bring unconscious information into consciousness, a process required in some psychoanalytic definitions of psychological "cures"; however, storytelling literature suggests that it may be easier for children to accept information which they do not have to bring into conscious awareness (Bettelheim, 1977; Mills & Crowley, 1986).

Storytelling provides a way for the child to address difficulties on an unconscious level without bringing issues completely into consciousness (Franzke, 1989; Gardner, 1993; Schwartz, 1964). However, children between three and four may have difficulty integrating the symbolic meaning in stories, particularly in fairy tales, and may profit from a more "active, tactile approach" or a more visual approach (Piaget, 1969), such as a combination of techniques using drawing, sandplay, or acting. These approaches are necessary for working with preoperational children, because such children comprehend and think in terms of visual cues and actions (Thiessen, 1985).

In research on children's understanding of metaphor, Warnick (1983) and Winner (1988) indicated that children are capable of comprehending and producing metaphors as

early as their preschool years. The first author also found that this ability increases as a function of age. Although the ability to understand the metaphor does exist at early ages. this finding suggests that metaphors directed toward younger children need to be easily comprehensible.

Story schemas refer to idealized and internalized representations which are held regarding stories. These schemas provide expectations about story structure which lead children in their interpretation of stories (Mandler & Johnson, 1977; Small, 1990). Schemas, which emerge in preschool years, are derived from experience with stories and with the world in general. They function at three levels including: (1) understanding; (2) expectation; and (3) memory. Thus, schemas basically guide children in their comprehension of stories, their predictions of upcoming sequences, and their retrieval or recall of information (Small, 1990).

Overall, these findings suggest that children as young as 4 years of age are capable of understanding therapeutic storytelling and fairy tales. However, 4- and 5-year-old children have less experience with story schemas and with the world, and they are less developmentally able to comprehend complex metaphors and symbolic content. For this reason, Piagetian theory holds that direct, active experience is necessary to form schemas for young children (Silvern, Taylor, Williamson, Surbeck, & Kelley, 1986).

Piaget (1969) discussed the ability of children 6 to 8 years of age to recall stories. He indicated that children at the lower end of the range fail to respect temporal order, exhibit less complete recall than adults, and confuse the relationships of cause and effect. According to Mandler and Johnson (1977), these difficulties in recall may be due to the

structure of the story the child hears. It appears that more structured stories which adhere closely to children's idealized story schemas and story grammar rules may not lead to the same difficulties.

In general, Mandler and Johnson's (1977) study on the recall of children and adults illustrated that adults recalled more information than children and that both children and adults developed and used story schemas to recall information. The difference in the level of recall at different ages appeared to be due to the focus of children's schemas on the setting and outcomes and their relative disregard for the characters' attempts and reactions. Thus, the difference may not represent a comprehension problem, but instead, developmental differences in schematic representation. Brown (1975) corroborated this assertion that preoperational children have difficulties in recall which do not reflect problems with comprehension.

The ability to recall stories accuratelt and in substantial detail is an important development, because it fosters retelling skills which in turn aid in oral language development and comprehension of stories. The retelling activity also promotes these components in preoperational children because it provides an active component to stimulate understanding. Morrow (1985) supported this finding in his study that investigated the ability of preschool and first grade children to retell stories and examined the effects of retelling on comprehension. This study supported the claim that children develop and use story schemas. For children between 4 and 6 years of age, it seemed that the schematic focus was on settings, beginnings, and outcomes. Elementary school aged children extended this schematic focus to include reactions, actions,

attempts, and endings as well. For these reasons, it seems clear that older children would be able to retell more information, and thus comprehend more.

Young children's stories are bound more by story schemas than older children's (Hudson & Nelson, 1983). Thus, young children's recall and comprehension abilities are more limited. This fact is supported by the findings of a study by Hudson and Nelson (1983) in which the recall of preschool and kindergarten children was assessed. The children were asked to recall familiar stories, logically organized stories, and unorganized stories. Consistent with the previously mentioned assumption, preschool children recalled less material overall, were less accurate in terms of recall, and were more affected by unstructured stories. It is notable that overall preschool and kindergarten children recalled significantly more information in the familiar stories.

Overall, it appears that developmental factors play a significant part in children's expectations of stories and in their recall and comprehension of stories. Most notable are the differences associated with story schemas to which young children adhere rather rigidly. These schemas guide the children's view of stories so extensively that the structure of stories needs to be considered when establishing recall tasks. Developmental differences in recall and comprehension are important to consider in this study because they could affect the findings if the subjects were to vary a great deal according to age. For this reason, the children were matched across conditions according to age.

Behavioral Parent Training

Behavioral parent training is a form of treatment that is based upon social learning theory. According to this theory, behavior is acquired primarily through learning via

environmental reinforcement and modeling (Wierson & Forehand, 1994), and behaviors are maintained through maladaptive parent-child exchanges (Kazdin, 1991; Panichelli & Kendall, 1995). Often, parents find themselves in behavioral traps in which they reward negative behaviors. These traps include the following: (1) coercive or negative reinforcement traps, in which a parent ultimately gives in to the child in order to remove an aversive stimulus (i.e., whining or screaming) and (2) positive reinforcement traps, in which problem behaviors are reinforced with attention (Kazdin, 1988; Wierson & Forehand, 1994). Behavioral parent training is incorporated into treatment in order to provide parents with more effective parenting strategies through which they can decrease negative behaviors, increase positive behaviors, and avoid these traps.

The training is directed primarily toward parents who implement discipline strategies in the home and who are the primary teachers of children (Kazdin, 1988, 1991; Wierson & Forehand, 1994). Through this training, the parents are taught to change their children's behavior in the home. The parents work with a therapist who trains them to use specific behavioral strategies guided by social learning principles to redefine problem behaviors, to transform their interactional patterns with their children, and to foster prosocial behaviors (Kazdin, 1991). Specific behavioral techniques may include, but are not limited to, the following: ignoring negative behaviors, positive reinforcement, negotiation, contingency contracting, modeling, differential attention, problem solving, and giving commands, as well as time out procedures and other forms of mild punishment (Cook, 1979; Kazdin, 1988, 1991; Moreland, Schwebel, Beck, & Wells, 1982; Panichelli & Kendall, 1995; Wierson & Forehand, 1994).

These procedures may be taught through live modeling, behavioral rehearsal, viewing training films, feedback, and written manuals. They may be augmented by contacts with the therapists between sessions (Moreland et al., 1982). According to research, all of these methods are superior to no training, but findings are equivocal as to which method of training is best. O'Dell and colleagues (1977, 1979) found that viewing videos and rehearsing the behaviors is superior, while in 1980, O'Dell and colleagues found no significant differences between written training, film plus manual, and individual modeling and rehearsal plus manual. In the present study, the therapist employed a combination of written handouts, live modeling, and rehearsal to provide the behavioral parent training.

Behavioral parent training appears to be effective in decreasing a wide variety of childhood problems including noncompliance (Wierson & Forehand, 1994); disruptive behaviors associated with attention-deficit hyperactivity disorder (Barkley, 1981; Cousins & Weiss, 1993); hair pulling (Gray, 1979); fears (Luiselli, 1978); and aggressive behavior (Patterson, 1982, 1986). Research indicates that these behavior changes appear to be maintained for up to 10 years (Baum & Forehand, 1981; Flieschman & Szykula, 1981; Forehand & Long, 1988; Long, Forehand, Wierson, & Morgan, 1994). These changes also appear to be generalizable across behaviors (Wierson & Forehand, 1994), across situations (Wierson & Forehand, 1994), and across siblings (Forehand & Long, 1988; Kazdin, 1988).

Positive outcomes in behavioral parent training are limited by a number of treatment and client factors. First, the length of treatment may limit the effectiveness.

Kazdin (1985, 1988) and Wells and Forehand (1985) assert that short-term training is less likely to produce positive effects than time-unlimited programs. Although the duration of behavioral parent training is limited in the present study, training focused on only one of the child's issues in order to provide specificity of treatment. Due to this specificity, Cook purported that time-limited treatment would be effective. Upon completion of this study, further treatment continued to address other issues on an individual basis. Despite expected utility of the time-limited treatment in this study, future research would be of value which studied more long-term treatment.

In addition, several client characteristics limit the effectiveness of and contribute to early attrition from therapy. These include the following: low socioeconomic status, marital conflict, few social supports, minority status, and familial disorganization (Holden, Lavigne, & Cameron, 1990; Kazdin, 1988; Moreland et al., 1982; Wierson & Forehand, 1994). In particular, maternal depression has been determined to have the highest correlation with attrition (Griest, Forehand, & Wells, 1981). The active participation required of parents is also problematic in the implementation of behavioral parent training because parents are often unwilling or unable to participate at this level (Kazdin, 1991). In the present study, parents responded to measures assessing their level of adherence to the behavioral strategies in order to allow for some assessment of the level of their participation.

Overall, behavioral parent training has been found to be effective for a number of reasons. First, this training may be effective in decreasing a number of problem behaviors in children and in increasing positive behaviors. Second, it appears to be generalizable

across situations, behaviors, siblings, and time. Third, parents participating in the training may evidence the following: (1) an increase in competence and self-confidence (Cousins & Weiss, 1993); (2) development of insight into the causes of their children's problem behaviors (Mullin, Quigley, & Glanville, 1994); (3) movement toward their perceptions of the own ideal parent (Mullin et al., 1994); (4) increased satisfaction in their relationships with their children (Cousins & Weiss, 1993); and (5) subsequent decreases in parental stress (Cousins & Weiss, 1993).

Parental Stress

Parental stress has been described as a function of a variety of factors which combine to produce negative reactions in parents. McCubbin and Patterson (1983) proposed a model in which family stress is seen as a function of the "pile-up" and perception of strains and their interaction with familial adaptive resources and capabilities. Within this theory, stressors are seen as multiply occurring events which are additive in their effects. However, the stressors may not lead the family to experience crisis if its members have sufficient adaptive abilities or if their perceptions of the situation are adaptive.

According to Mash and Johnston (1990), stress may develop in parent-child relationships based upon a "pile-up" of strains within three domains. These are the child, parent, and environmental domains, which are said to affect each other reciprocally (Mouton & Tuma, 1988). Within the parental domain, factors include cognitive and affective states, behaviors, personality, and health. Child factors include temperament, cognitive and physical attributes, and behavior problems, while environmental effects

stem from the context of the interaction, daily strains, and major life events. Particular child issues may be affected by stressors in one domain more than others, or equally for each domain.

In the present study, we assessed the relative changes in parental stress after treatment using the Parental Stress Index-Short Form (PSI/SF). Abidin (1995) developed the PSI/SF to assess different levels of parental stress and to identify particular sources of stress. The PSI/SF assesses parental stress across the following domains: the Difficult Child (DC) domain, the Parental Distress (PD) domain, the Parent-Child Dysfunctional Interaction (P-CDI) domain, Total Stress, and Defensive Responding. Stress accounted for by the DC domain stems from parental perceptions of the child and from behavioral characteristics of the child. The PD domain reflects parental stress that is a function of the parent's perception of his/her own competence as an individual and as a parent. The P-CDI domain reflects the parent's view that the child does not meet their expectations and that the relationship is not reinforcing. The Total Stress score indicates the overall level of stress the recording parent is experiencing, while the Defensive Responding scale assesses the degree to which the parent presents a biased, favorable representation of the level of stress (Abidin, 1995; McBride, 1991).

The PSI and the PSI/SF have been used to assess parental stress with parents of children who display a variety of difficulties. These difficulties include hyperactivity and behavior problems (Baker, 1994; Dumas, Wolf, Fisman, & Culligan, 1991; Fischer, 1990; Mash & Johnston, 1990); learning disabilities (Fuller & Rankin, 1994); physical abuse (Mash & Johnston, 1990); autism (Dumas et al., 1991); and emotional disabilities

(Fuller & Rankin, 1994). Research findings suggest that childhood difficulties and parental stress often coexist. However, the sources of the stress vary according to the difficulty. For example, Mash and Johnston (1990) investigated parental stress in families of children with attention-deficit hyperactivity disorder (ADHD) and physical abuse histories. Parents of children in each group evidenced parental stress. However, stress with ADHD children appeared to be a function of child and parent characteristics, while with abused children, the stress appeared to emanate from parental and environmental characteristics. Child characteristics are indicated to be the primary sources of stress in children with learning disabilities, emotional impairments, and autism (Dumas et al., 1991; Fuller & Rankin, 1994).

In the present study, the PSI/SF was used to assess parental stress for research and clinical purposes. This clinical focus is particularly important because the instrument provides the therapist with the opportunity to observe how the treatment is affecting the parents of the child client. The PSI/SF was used in treatment to tap the levels of parental stress in order to provide comprehensive services that meet the parents' needs. It was anticipated that behavioral parent training and the combination of parenting and storytelling techniques would result in a decrease in parental stress.

Multiple Baseline Design

Evaluation of treatment strategies through small sample research is necessary to advance research and to contribute to clinical assessment. These evaluations may be conducted using many different experimental designs. Unlike case studies, small sample designs rule out alternative hypotheses which may result based upon the effects of

extraneous factors (Kazdin, 1980). Three designs are particularly popular for research conducted in applied settings: multiple baseline, multiple schedule, and concurrent schedule designs (Hersen & Barlow, 1976). The value of these designs resides in the fact that treatments are not withdrawn or reversed. For this reason, carryover effects are not an issue, and the ethical concern of withdrawing a viable treatment is avoided (Hersen & Barlow, 1976).

The multiple baseline design was employed in this project, as it has been in much applied research. With this design, response changes indicate treatment effectiveness when these responses only occur after the intervention has been introduced (Kazdin, 1980). Another criterion for establishing treatment effectiveness is that in this design the intervention must also be implemented repeatedly at varying times with several different subjects who experience similar behavioral changes (Watson & Workman, 1981).

Three comparisons are possible with multiple baseline studies. These include the following: (1) multiple baseline across behaviors, (2) multiple baseline across settings, and (3) multiple baseline across subjects. This study utilized the latter design. In the multiple baseline design across subjects, the target of the intervention is a single behavior that has been identified for each of several subjects. These subjects take part in the three phases of the design: baseline, intervention, and evaluation of change. As the intervention is applied to one of the subjects in the study, the duration of baseline lengthens for the other subjects. This continues until each subject receives the intervention, and the effects are evaluated (Hersen & Barlow, 1976).

The format for the implementation of the multiple baseline design across subjects is the following. Data are collected on the behavior which has been targeted for change. The data collection is continuous, or daily. According to Hayes (1981), this baseline must consist of at least three data points in order to assess stability of the behavior. Once the baseline data indicate a stabilized pattern for the subject that is marked by flat or rising baseline rates, the intervention is introduced. Meanwhile, baseline data continue to be collected for the other subjects. The behavior which has been targeted for intervention is expected to change, while the behaviors remain stable for the other subjects. When the treated subject shows stabilized behavior change, the intervention is added for a subsequent subject. The process continues until all subjects have received the intervention, and all data points have been collected. Data collection is continued throughout the entire process (Hayes, 1981; Hersen & Barlow, 1976; Kazdin, 1980; Watson & Workman,

The previously described "concurrent" multiple baseline design often creates problems when used in applied settings, particularly in private or small practices. These problems arise from difficulties in obtaining clients with similar problems at the same time. In these situations, the "nonconcurrent" multiple baseline design is the preferred method. Upon entering therapy, clients are assigned to baseline lengths, or durations, which have been randomly predetermined. The baseline lengths are predetermined and randomly assigned to ensure that the treatment is implemented at a random point in time in order to ensure effects are not attributable to the time of the intervention. Baseline data are then collected, and once the behavior has stabilized, treatment is imposed.

Subsequent clients who agree to participate are then randomly assigned to another baseline length when they enter therapy (Watson & Workman, 1981).

The nonconcurrent multiple baseline design across subjects was the experimental design that was implemented in the present study. This design was the most viable alternative for this project because of the practical problems involved in having clients start treatment concurrently and because of the ethical problems inherent in using a reversal design.

Purpose and Expectations of the Present Study

The present study investigated the effects of behavioral parent training and therapeutic storytelling in eliciting a change in the frequency and intensity of childhood behavior problems and a change in the level of parental stress. Recall and parental adherence to parent skills were assessed in order to ensure that the therapies were well received and utilized by the subjects. The following predictions were made.

First, the greatest reduction in the frequency and intensity of behavior problems, as rated by parents and teachers, would be evidenced posttreatment, following the combination of the two therapies. Based upon case studies and prior research, it was anticipated that both therapeutic stories and parent training in behavioral interventions would induce decreases in problem behaviors. However, the decrease was expected to be the greatest following the combination in which the child received therapeutic storytelling first because the child receiving a personalized story may be more motivated to attempt to solve problems and attempt the alternative strategies presented in the story (Fazio, 1991). This increased motivation was expected to encourage the child to follow the behavioral

strategies, and thus, be more responsive to parental attempts to implement the behavioral interventions. The personalized story may also offer more hope to the child who has his or her problems normalized and witnesses a resolution of the problem in the story which parallels his or her own. Thus, confidence in the child's ability to follow these procedures is expected to be increased.

Second, given the support provided above, it was anticipated that these decreases would extend to other internalizing and externalizing problems beyond those targeted for treatment as indicated by scores on the Behavioral Assessment System for Children (BASC; see description below). In addition, an increase in adaptive functioning was expected.

Third, the greatest decrease in parental stress was expected to occur following the combination of the two techniques because the child and parent would both receive treatment techniques to address their particular problems. According to Abidin (1983) and Fischer (1990), parental stress is a function of parent and child characteristics. One aspect of these characteristics that increases parental stress is lack of competence in parenting (Fischer, 1990; Mash & Johnston, 1983). Parental training was expected to provide parents with skills to be competent in their parenting and, in turn, increase their selfconfidence. It was anticipated that this would lead to a decrease in parental stress (Cousins & Weiss, 1993). In addition, the child would be targeted with the therapeutic storytelling session to address the children's internal issues and increase compliance to the interventions, influencing child characteristics which also affect parental stress.

For this reason, it was anticipated that both conditions would result in a decrease in parental stress.

Finally, it was expected that the children would encode and recall all five components of these personalized, therapeutic stories including the main character, problem, wise person, alternatives, and lesson. This assumption was based upon the findings of Hudson and Nelson (1983) in which familiarity resulted in higher levels of recall in both preschool and kindergarten children. Therapeutic stories possess a high degree of similarity to the child's life. The characters, problems, and events are based upon the child's experiences. This recall is necessary in order for the children to be able to encode the lessons taught in the therapeutic stories, and thus, reap the benefits inherent in the story.

The present project seeks to provide empirical support for the efficacy of therapeutic storytelling and the combination of therapeutic storytelling and behavioral parent training. The comparison of the effects of behavioral interventions and the combination should provide information about whether or not storytelling augments accepted behavioral interventions. Because therapeutic storytelling is widely used in the field of child psychotherapy, empirical support for its clinical efficacy is necessary.

Method

Participants

The participants were five Caucasian male children and their parent(s) who selfreferred for treatment with William Cook, Ph.D., a licensed psychologist, acting as the therapist across both conditions. The subjects were solicited to participate in the project from Cook's incoming clients over the course of 15 months. All subjects presented for treatment between the months of January and April of the following year. Parents who called to set up an intake session were screened for their interest in the project by telephone or during the intake session. During the first session, Cook conducted an intake interview with the parent(s) to identify the presenting problems and the frequency of problem behaviors, to discuss the project, and to gain parental and child consent to participate (See Appendices A and B).

Subject 1 was a 6 year old kindergartner who presented for treatment for concerns about noncompliance. He was the eldest of two male children from an intact family living with his parents, brother, and four extended family members. Both parents were employed and had some college education. Both parents participated in treatment. Following his second session, Subject 1 attended one more session and then discontinued treatment. During this time, his parents reported few novel events except that one extended family member moved out of their home and that they were planning to move in approximately one month.

Subject 2 was a 5 year old preschooler who was targeted for problems with noncompliance. He was an only child living in an intact family. His parents were employed, and his father and mother completed high school and two years of college, respectively. During the follow-up period, Subject 2 continued with treatment. Cook trained Subject 2's preschool teachers to implement time out and tell therapeutic stories in the school.

Subject 3 was a 5 year old child who presented with noncompliance and was not enrolled in school at the time of his involvement in this project. He was the eldest of two children living in a house with his biological mother, his sister, and his grandparents. His parents were married, and his father was in prison at the time of this project. His mother reported that his father was the disciplinarian and that Subject 3 had difficulty accepting her authority when his father went to prison. His mother had a high school education, and his father completed eleventh grade. His mother was unemployed at the time of this study. Subject 3 continued in treatment with Cook during the follow-up period.

Subject 4 was a 6 year old enrolled in the first grade who was targeted for noncompliance issues. He was the eldest of two male children living in a house with both biological parents who were involved in the treatment process. Both parents had completed some college and were employed at the time of this study. During the followup period, Subject 4 continued treatment, and no changes in the home environment were reported.

Subject 5 was a 10 year old in fourth grade who presented with problems with loss of temper. He was the youngest child living with his father, stepmother, two sisters, and brother. His father completed eleventh grade, while his stepmother completed high school. Both were employed at the time of this project. His brother had reportedly been diagnosed with multiple behavioral and personality disorders. According to familial reports, his relationship with Subject 5 was the primary source of problems. The brother was removed from the home in the interim between post-treatment and follow up data collection. Treatment was continued during the follow-up period.

The subjects were matched across conditions according to age and target behavior problems. The subjects were randomly assigned to the two conditions. The first subject to consent to therapy was placed in condition I (See procedures section). Subsequently, subjects who were identified as matches to existing subjects were automatically assigned to the condition opposite their match, and subjects for whom no match was identified were placed in alternating conditions. Subjects 1 and 4 and subjects 2 and 3 were matched for the purposes of this study. No match was found for Subject 5.

Prior to the start of the project, the following exclusionary criteria were established: (1) suicidality established following suicidal assessment by Cook (N=1, excluded after treatment began due to responses on questionnaires and subsequent suicide assessment); (2) mental retardation in order to ensure the child's capacity to comprehend the story (N=1); (3) unstable medications (less than three months on given medication dosage) or interest in beginning medication use in order to avoid confounding treatment (N=0); (4) divorce situations in which the child would alternate between homes and in which parents were unwilling to cooperate with data collection (N=2, one excluded after they had agreed to participate); (5) lack of measurable behavior problem (N=1, excluded after treatment began); and (6) target problems did not fit those identified as appropriate prior to the study.

During the course of the project, four subjects discontinued after agreeing to participate in the study for a variety of reasons (i.e., lack of time available, need for more intense treatment, custody issues, suicidal ideation). In addition, three subjects refused to participate either due to time problems or desire to address multiple problems. Of the

families approached to participate in this study, 75% agreed to participate. Subsequently, 44.4% dropped out of the project for the previously described reasons.

Families received reimbursement for their participation. If the family paid for services, they received a discount of \$10 for each of the two treatment sessions taking place during data collection. If these sessions were paid for by Medicaid, the family received the \$10/session reimbursement directly.

Setting

The study was conducted in Cook's office in Missoula, Montana, the location in which he operates his practice and conducts his therapy sessions on a regular basis. All subjects involved in the project lived in Montana in the area surrounding Missoula.

Measures

Demographic questionnaire. The demographic questionnaire covers general information about the child, such as age, gender, and education level. Information about the child's family was also gathered, including family structure, education, socioeconomic status, and other familial characteristics (See Appendix C).

Behavior Assessment System for Children (BASC). The parent (PRS) version of the BASC provide a checklist of adaptive and maladaptive behaviors and issues common to children ages 4 to 18 years (i.e., bullies others, talks too loud, is fearful, says please, has good study habits). These behaviors are rated according to the frequency of the behaviors on a scale from 0 ("never") to 3 ("almost always"). Each item appears on only one of the behavioral scales or validity indexes. T-scores and percentiles are yielded by the BASC. Clinical and nonclinical norms are available Reynolds & Kamphaus, 1992).

The following composites are obtained on the BASC: Externalizing Problems Composite, Internalizing Problems Composite, Behavioral Symptoms Index, and Adaptive Skills Composite. These are divided into the following clinical scales: Hyperactivity (Hyp), Aggression (Agg), Conduct Problems (Con), Anxiety (Anx), Depression (Dep), Somatization (Som), Atypicality (Aty), Withdrawal (Wth), and Attention Problems (Att). The following scales comprise the Adaptive Skills Composite: Adaptability (Adp), Social Skills (Soc), and Leadership (Led). Each of these scales is included on the BASC-Child Form; however, Con and Led are not included on the BASC-Preschool Form (Reynolds & Kamphaus, 1992).

The following T-score ranges are used with the clinical scales: (1) clinically significant (70+); (2) at-risk (60-69); (3) average (41-59); (4) low (31-40); and (5) very low (30-). T-score ranges for the adaptive scales are: (1) clinically significant (30-); (2) atrisk (31-40); (3) average (41-59); (4) high (60-69); and (5) very high (70+) (Reynolds & Kamphaus, 1992).

The reliability and validity for the BASC are reported to be more than sufficient (Adams & Drabman, 1994; Flanagan, 1995; Reynolds & Kamphaus, 1992; Sandoval & Echandia, 1994). Ranges of reliability coefficients for the PRS were found to be as follows: internal consistency, .74 to .80; and test-retest reliability, .85 and .88, for the preschool and child forms (Flanagan, 1995; Reynolds & Kamphaus, 1992). Consistent with other research findings, parental agreement on similar rating scales tend to indicate that mothers and fathers respond differently (Achenbach, McConaughy, & Howell, 1987; Flanagan, 1995).

Reynolds and Kamphaus (1992) and Sandoval and Echandia (1994) report results from evaluations of concurrent validity. These evaluations indicate that the PRS Externalizing Problems Composite correlates rather highly with the Child Behavior Checklist Externalizing Composite (CBCL; Achenbach, 1991) (ranging from 71 to .84), while the correlations between the PRS and CBCL Internalizing Composites are moderate (ranging from .65 to .74). The PRS Adaptive Composite correlates in the .60s with the CBCL Total Competence Score. Within these measures, many individual scales correlate in the .70s with those that share similar names. Correlations with the Conners' Parent Rating Scale (CPRS-93; Conners, 1989) were also highest for the Externalizing Composites (ranging from .10 to .72, with highest correlations between those with similar names). In addition, the PRS is reported to correlate moderately with the Personality Inventory for Children-Revised (PIC-R; Lachar, 1982) and the Parent Report Form of the Behavior Rating Profile (BRP; Brown Hammill, 1983) (highest values in the .50s). Researchers (Flanagan, 1995; Reynolds & Kamphaus, 1992; Sandoval & Echandia, 1995) also report that the PRS profiles obtained for youth with carefully diagnosed disorders (i.e., conduct disorder, behavior disorder, attention-deficit hyperactivity disorder, depression, learning disability, autism, mild mental retardation, emotional disturbance) fit the expected patterns. This finding also supports the validity of this instrument.

Parenting Stress Index/Short Form (PSI/SF). The PSI/SF is a 36-item, self-report measure derived from the Parenting Stress Index full-length test (Abidin, 1995). This instrument is used to assess parental stress resulting from parent factors, child factors,

and parent-child relationship factors. It is for use with parents who currently have children 13 years or under. The PSI/SF yields percentile scores for the following domains: (1) Total Stress, (2) Parental Distress (PD), (3) Parent-Child Dysfunctional Interaction (P-CDI), and (4) Difficult Child (DC). In addition, there is a Defensive Responding scale (See previous descriptions).

There is evidence of sufficient reliability and validity for the PSI/SF in general (Abidin, 1995). Coefficients alpha for the PD domain, the P-CDI domain, the DC domain, and Total Stress score are .87, .80, .85 and .91, respectively (Abidin, 1995), indicating a high degree of internal consistency. Abidin (1995) found the PSI/SF to be a stable measure across time with test-retest reliability coefficients of .85, .68, .78 and .84 for the PD, P-CDI, DC, and Total Stress scores, respectively. Although the PSI/SF does not examine the parent-child dyad as thoroughly as the PSI, the PSI/SF has been found to correlate with the long form of the PSI, with Total Stress on the two measures correlated .94 (Abidin, 1995). In addition, PD correlates with the Parent Domain of the PSI (r=.92), and DC is highly correlated with the Child Domain of the PSI (r=.87) (Abidin, 1995).

Behavioral frequency measures. The frequency of the occurrences of the targeted problem behaviors during the course of a normal day was measured using a daily report measure given to the parent on an index card marked with the dates for data collection (See Appendix D). The parent(s) were requested to record how often the child engaged in the problem behavior each day. During the first treatment session, parents were trained to complete these records and to identify the target behavior. The following operational definitions were provided: (1) noncompliance means the failure to comply with a request

within five seconds (one mark is given for each incident) and (2) loss of temper means being visibly upset as noted by one or more of the following: loud verbalizations. aggressive behavior, destruction of property, and/or becoming red in the face and walking out of the room. These daily ratings were recorded on the cards by the parent(s) and were collected by the researcher or a trained research assistant daily by telephone in order to ensure that parents recorded ratings on a daily basis.

Behavioral intensity. Parents also rated the intensity of the problem behaviors as they were manifested over the course of the day. A 4-point scale was used for this rating. ranging from 0 (not at all intense) to 3 (extremely intense). Parents recorded these on the index cards on which they noted the frequency, and the data were also collected by the researcher or a trained research assistant daily by telephone to ensure daily recording (See Appendix E).

Parental adherence. Parents rated their adherence to components of the behavioral parent training session and the therapeutic storytelling session. For each item, the parents provided a rating according to a 5-point Likert scale ranging from 1 (not at all) to 5 (every time). The parents completed this measure approximately two weeks after each treatment session and at follow up (See Appendix G).

Parental satisfaction. Parents rated their degree of satisfaction with treatment following each treatment session and at follow up. For each item, the parents provided a rating according to a 5-point Likert scale ranging from 1 (not satisfied) to 5 (very satisfied). In addition, parents were provided with space to make comments (See Appendix F).

Story recall. Each therapeutic story and the subsequent retelling was audiotaped. The children's recall of the therapeutic stories was assessed by transcribing the therapeutic story and having a trained research assistant listen to the retelling and code the recall according to the guidelines set in Appendix H. Recall level was based upon the inclusion of the five components of therapeutic stories. These components include the following: (1) introduction of the main character; (2) discussion of the problem: (3) conversation with a wise person; (4) testing alternative approaches; and (5) summary of the lesson.

Experimental design

The experimental design for this project was a nonconcurrent multiple baseline crossover design across subjects. A nonconcurrent multiple baseline design was employed because Cook's clients may be starting therapy at different times and because of the difficulty of placing clients on waiting lists in a private practice setting (Watson & Workman, 1981). Two conditions were used. In the first, the storytelling session preceded the behavioral parent training session (ST-BPT), and in the second, the sessions were reversed (BPT-ST).

Procedures

Intake. In both conditions, the parent(s) of the child clients met with Cook for an intake session in which they obtained information about the project, signed the consent forms (Appendices A and B), and provided Cook with personal information and with information about the child's issues. At this time, the parent(s) planning to participate in therapy completed a demographic questionnaire (Appendix C) as well as the Parental

Stress Index (PSI/SF) and the Behavioral Assessment System for Children (BASC). If this could not be done in the office, they were given a self-addressed stamped envelope and asked to return the materials as soon as possible. The time that measures were returned varied from the same day to one month later. When the measures were not received rapidly, the researcher contacted the parents weekly to request them.

During the intake session, Cook and the parent(s) targeted a problem behavior to observe for the collection of baseline data. This behavior was operationalized, and Cook and the parent(s) practiced identifying the behavior. The parent(s) were given index cards on which to record daily behavioral frequency and intensity rating scales and received instructions about how to fill in the index card to collect baseline data. The parent(s) were told that these behaviors should be recorded as they happen and that nothing in the home should be changed in order to make this assessment the most effective and to make the treatment work best. A daily check-in time was arranged for the researcher to contact the parent(s) to obtain daily frequency and intensity data in order to ensure that parents recorded the data on a daily basis. After the researcher had collected for the baseline period, trained research assistants began calling the subjects in some instances.

Baseline. Each child was assigned to a pre-determined baseline period of 7, 10, or 14 days. If the behaviors were not stabilized within the established time period, data continued to be collected until stability was obtained (as defined by a relatively flat graph of the frequency of the behavior or by a slight increase in the behavior). These assigned baselines were also altered if the family or the therapist was unable to schedule a session

on the prescribed date. During this baseline period, the previously mentioned data were collected and future sessions were arranged.

Storytelling session (ST). The treatment sessions were each videotaped in order to ensure that similar components were employed for each subject. Upon reviewing the tapes, the following components were identified for each condition: (1) check in with child and parent(s); (2) review of the agenda for the session; (3) telling of the story to the child, including the five key points previously described (See Appendix J for sample); (4) retelling of the story by the child to the parent(s); (5) challenging the child to act like the main character; and (6) discussion of data collection, future sessions, and times to listen to the tape at home. In addition, for subjects who had already taken part in the behavioral parent training session, the therapist discussed ways to incorporate the story into the behavioral package (i.e., remind the child of the story, ask the child to think about the story in the "thinking chair"). Within the stories, themes were similar to those described in the section on Cook's method for treating children with behavioral problems. Additional strategies were added for Subjects 1 and 5. Subject 1 was asked to draw pictures about his recent nightmares and discuss these with his parents, while Subject 5 was encouraged to talk to his parents about events which occurred at home with his brother. For the purpose of this study. Cook added some components which were not typically aspects of his treatment protocol (i.e., data collection, videotaping sessions, audiotaping the retelling, directing the story toward only one problem behavior, and sending a tape home with the child).

Behavioral parent training session (BPT). During this session, Cook trained the parent(s) to respond to noncompliance in some of the following ways: (1) giving clear. specific directions on one occasion in a serious manner; (2) providing appropriate warnings; (3) implementing time out ("thinking chair") or natural consequences effectively following five seconds of noncompliant behavior; (4) ignoring inappropriate behaviors; (5) avoiding power struggles; (6) disciplining children away from home; (7) praising their child for positive behavior; and (8) spending time (approximately fifteen minutes per day) playing with their child in a nondirective manner. In addition, the following behavioral plan was discussed with the parents and child in the case involving loss of temper (Subject 5): (1) talking about problems (particularly with parents who are identified as "coaches"); (2) rating problems according to their severity on a scale from 0 to 100; (3) using the "three P's" to work through problems (identify the problem, think about the possibilities or alternatives, and pick one of the alternatives); and (4) listing and utilizing strategies to "cool off". The parents' roles were to listen to the child as "coaches", to encourage the child to use the strategies, to praise the child for successes with the technique, and to spend time with the child.

The primary components of this session that were identified in the videotapes included the following: (1) check in with the child and parent(s); (2) review of the agenda for the session; (3) live modeling and role plays of the specified behavioral strategies with parent(s); (4) subsequent review and/or role play of the strategies with the child and his parent(s) and discussion of uses in the home; (5) distribution and review of the BPT handout, entitled "Discipline Suggestions for Parents of Young Children" (Cook. 1979):

and (6) discussion of data collection and future sessions. In addition, for subjects who had already taken part in the ST session, the therapist reviewed ways to relate the story to BPT strategies.

Condition I (ST-BPT). Subjects 3 and 4 were assigned to this condition. After the assigned baseline time had elapsed, two therapy sessions were conducted that were videotaped and audiotaped for later coding purposes and to develop the parent adherence scale reflecting each subject's individualized treatment package (See sample in Appendix **G**).

During the first session, each child engaged in therapeutic storytelling with Cook. These stories were adapted to fit the child's individual problems of noncompliance and loss of temper. After hearing the story, the child was asked to repeat the story to Cook and his parent(s). If the child had difficulties recalling portions of the story, Cook used standardized queries in order to see if the child remembered the information (see Appendix H for standardized queries and criteria for recall). The entire story session was audiotaped for future coding of recall and to send home with the child to listen to it two or more times per week.

After this session, parents continued to record daily frequency and intensity data for two weeks according to methods explained by Cook in the initial session, and the researcher or research assistant continued to place daily calls to collect this information. Prior to the start of the second session, the parents completed the Parental Satisfaction Measure, the Parental Adherence Measure, the PSI/SF, and the BASC. If these forms could not be completed before the session, they were sent home as described earlier.

During the second treatment session, Cook disseminated and reviewed the parent training handout and worked with the parents to develop parenting skills appropriate to deal with the targeted problem behavior as described in the BPT section above. The parent(s) also learned how to incorporate the story into the behavioral strategies when they are used in the home. Data were collected daily after this session for approximately two weeks.

Once these two weeks of data collection were completed, the researcher contacted the parent(s) to collect posttreatment data. The rating scales were either mailed to the parent(s) or distributed by Cook during their next session. The parent(s) completed the Parental Satisfaction measure, the Parental Adherence measure, the PSI/SF, and the BASC. Parent(s) mailed these forms to the researcher upon completion. Data were generally returned rapidly; however, Subject 2's data were not received for 11 days despite reminders.

At approximately six weeks posttreatment (4 weeks after posttreatment data were collected), the parent(s) of each child completed the BASC, the PSI/SF, the Parental Adherence measure, and the Parental Satisfaction measure. They also completed behavioral frequency and intensity measures for 5 to 7 days or until stability was reached. The behavior was once again operationally defined to the parents to ensure that coding was consistent. These forms were distributed by Cook if the child was still in treatment, or they were mailed to the parent(s) by the researcher. Parent(s) mailed these forms to the researcher upon completion. Data were generally returned rapidly; however, Subject 2's data were not received for 47 days despite reminders. Because the children may have had

varied experiences during the four weeks prior to this data collection, the parent(s) were asked to identify if the child continued in therapy and if the child had experienced any life changes.

Condition II (BPT-ST). Subjects 1, 2, and 5 participated in this condition. Similar procedures were used in this condition. However, the first treatment session involved BPT as previously described. Data were then collected for approximately two weeks. During the second treatment session, the story was introduced, and the parent(s) were instructed about how to incorporate the story into their routine. Data were again collected for approximately two weeks. Posttreatment data collection and follow up data collection proceeded in the same manner as in condition I.

Personal privacy was provided by assigning a code number to the family's records for the purpose of data collection. The audiotapes, videotapes, and questionnaires were stored in a locked closet and were viewed only by Cook, the researcher, and trained undergraduate research assistants. All research assistants signed a confidentiality agreement prior to their involvement with the project (See Appendix I). Any other use of the videotapes was cleared on the written consent forms to be signed by the parents (See Appendix A). If consent was not obtained for the clinician to keep the tapes, the tapes will be destroyed within one year of the completion of this project.

Results

Results for each of the measures are presented below. Figures 1 through 31 graphically depict the data obtained in the present study. Overall, the results suggest no effects attributable to the varying length of baseline.

Frequency of noncompliance

The results suggest that the frequency of noncompliance for Subjects 1, 2, 3, and 4 decreased from baseline to post-treatment 1 and from post-treatment 1 to post-treatment 2, with one exception (Subject 4). At follow-up, noncompliance frequencies were variable relative to post-treatment, but remained substantially below baseline frequencies.

Figures 1 and 3 depict the daily frequency and mean frequency data obtained for each subject. Table 1 contains the mean and ranges of the frequency of the problem behaviors which were collected for Subjects 1, 2, 3, and 4. The percentage change in problem behaviors for Subjects 1, 2, 3, and 4 after the introduction of treatment 1, after the introduction of treatment 2, and at follow-up are presented in Table 3.

Frequency of anger control problems

The results suggest that the frequency of anger control problems for Subject 5 decreased from baseline to post-treatment 1 and continued to decrease following the introduction of treatment 2. At follow-up, the frequency increased relative to posttreatment, but remained substantially below baseline frequencies.

Figures 2 and 4 depict Subject 5's daily and mean ratings of the frequency of loss of temper. Table 1 contains the mean and ranges of the frequency of the problem behavior which were collected for Subjects 5. The percentage change in the anger control problem frequency after the introduction of treatment 1, after the introduction of treatment 2, and at follow-up are presented in Table 3.

Intensity of noncompliance

Similar to the findings for frequency ratings, the results suggest that the intensity

of noncompliance for Subjects 1, 2, 3, and 4 decreased from baseline to post-treatment 1 and from post-treatment one to post-treatment 2, with one exception (Subject 3). At follow-up, noncompliance intensities were variable relative to post-treatment, but remained substantially below baseline frequencies, with the exception of Subject 1's mean ratings.

Figures 5 and 7 represent the daily and mean intensity data obtained for each subject. Table 2 presents the mean and ranges of the intensity of the problem behaviors which were collected for Subjects 1, 2, 3, and 4. The percentage change in the intensity of the problem behaviors for Subjects 1, 2, 3, and 4 after the introduction of treatment 1, after the introduction of treatment 2, and at follow-up are presented in Table 4.

Intensity of anger control problems

The results suggest that the intensity of anger control problems for Subject 5 decreased from baseline to post-treatment 1 and continued to decrease following the introduction of treatment 2. At follow-up, the mean intensity rating increased relative to post-treatment, but remained substantially below the baseline intensity mean rating. This pattern paralleled that found for the frequency data.

Figures 6 and 8 illustrate Subject 5's daily and mean ratings of the intensity of loss of temper. Table 1 contains the mean and ranges of the intensity of the problem behavior which were collected for Subjects 5. In Table 4, the percentage change in the anger control problem intensity after the introduction of treatment 1, after the introduction of treatment 2, and at follow-up are presented.

BASC

Figures 17 through 31 depict the data obtained on the BASC. According to pretest data collected on the BASC, many of the subjects scored in the clinical or at-risk ranges in terms of externalizing, internalizing, and low levels of adaptive behaviors. Subject 1 scored in the at-risk range on the Hyperactivity, Atypicality, Attention, Behavioral Systems Index, and Adaptability scales. For Subject 2, prior to the start of treatment, all BASC Tscores fell within normal limits except the Adaptability scale which was in the at-risk range. Although Subject 3's scores should be interpreted with caution due to F-scale score which suggests excessively negative maternal reports, the following BASC T-scores fell within the clinically significant range: Aggression, Externalizing Problems Composite, Depression, Attention Problems, Behavioral Symptoms Index, Adaptability, Social Skills, and Adaptive Skills Composite scales. In addition, at-risk T-score levels were obtained on the Atypicality, Hyperactivity, Internalizing Problems Composite, and Withdrawal scales. Subject 4's BASC should also be interpreted with caution due to the excessively negative parental reports. The following T-scores fell within the clinically significant range: Hyperactivity, Aggression, Conduct Problems, Externalizing Problems Composite, Depression, Internalizing Composite, Behavioral Symptoms Index, and Adaptability scales. In addition, the Attention Problems, Social Skills, and Adaptive Skills Composite T-scores fell in the at-risk range. For Subject 5, the following BASC T-scores fell within the clinically significant range: Aggression, Conduct Problems, Externalizing Problems Composite, and Behavioral Symptoms Index scales. In addition, at-risk T-scores were obtained on the Depression, Adaptability, Social Skills, Leadership, and Adaptive Skills

Composite scales. These results suggest that many of the subjects were experiencing significant problems at the start of treatment.

Based upon Externalizing Problems Composite T-scores, the percentage declines from pre-treatment to post-treatment were as follows for subjects 1, 2, 3, 4, and 5, respectively: 41.67%, 5.45%, 1.33%, 23.26%, and 23.61%. These results suggest that the treatment package resulted in some slight declines in externalizing problem behaviors. This pattern suggests that a small degree of generalization may have occurred. For the Internalizing Problems Composite during this period, the following percentage changes were noted for each subject, respectively: 32.00% (decline), 3.39% (increase), 3.23% (decline), 12.50% (decline), and 12.96% (decline), suggesting some behavioral change which was not consistent across subjects. In addition, increases were noted for the Adaptive Skills Composite for each subject: 38.10%, 7.50%, 3.57%, 25.00%, and 47.06%, indicating some improvement in adaptive functioning for all subjects following treatment.

During the period from post-treatment to follow up, the following percentage changes were obtained for Subjects 1, 2, 3, 4, and 5, respectively: (1) on the Externalizing Problems Composite, 34.29% (increase), 3.85% (decline), 1.35% (decline), 9.09% (decline), and 9.09% (decline); (2) on the Internalizing Problems Composite, 17.65% (increase), 0.00% (stable), 5.00% (increase), 14.29% (decline), and 12.77% (decline); and (3) on the Adaptive Skills Composite, 8.62% (decline), 6.98% (increase), 20.69% (increase), 2.50% (decline), and 8.00% (decline). These findings were variable and indicated no consistent pattern of results. It is notable that a decline in terms of

internalizing and externalizing behaviors was noted for Subject 5 at all points of comparison; however, a decrease in adaptive skills was noted at follow-up. No treatment effects were noted on this measure.

Parental stress

Mixed results were obtained for the PSI/SF as seen in Figures 9 through 16. The only consistent patterns were noted on the Parent-Child Dysfunctional Interaction (P-CDI) scale. On this scale, subjects in the BPT-ST condition (Subjects 1, 4, and 5) obtained a similar pattern of results in which the ratings declined at post-treatment and rose again at follow-up. In contrast, those in the ST-BPT condition (Subjects 2 and 3) demonstrated continuing declines in terms of stress from post-treatment onto follow-up.

For the noncompliant subjects, stable levels or decreases in the reported level of stress were observed across all scales except for Subject 3 at post-treatment relative to baseline. However, variable results were obtained at follow-up. No treatment effects emerged for scales other than the P-CDI scale.

For Subject 5, a consistent pattern of results was obtained from baseline to posttreatment data collection across Child, Parent, P-CDI, and Total Stress Scales in which the level of stress declined. This finding suggested that the treatment package may have resulted in a decline in ratings of parental stress for this family. However, less consistent patterns emerged at follow-up as Child and Parent Scale ratings declined further, P-CDI ratings increased, and Total Stress ratings remained stable.

Parental adherence

Mean ratings of parental adherence for Subjects 1 through 5 ranged from 3.42 to

4.66 (on a scale from 1 (not at all) to 5 (every time)) after treatments I and II and at follow-up. These scores suggest that all parents involved in this project reported that they were able to adhere to the parenting strategies at least somewhat.

Story recall

Based upon ratings of story recall by trained research assistants, the following ratings of recall obtained for Subjects 1, 2, 3, 4, and 5, respectively (rater 1/rater 2): 13/11, 15/11, 9/7, 15/12, and 15/14. These ratings were based upon the previously described guidelines in which the maximum possible rating was 15 (See Appendix H). These recall ratings suggested all of the subjects was able to recall the five primary components of the stories either spontaneously or with nondirective and directive cues.

Discrepancies between the two raters are notable. Interrater reliability was calculated using Cohen's kappa (kappa=.22) in order to assess the extent of these discrepancies. The findings suggested that the raters may not have had sufficient understanding of the guidelines or that the guidelines did not capture the meaning of the data.

Parental satisfaction

Parental satisfaction ratings obtained ranged from 4.00 (satisfied) to 5.00 (very satisfied). It is notable that, of the 15 ratings obtained, only one rating varied from the maximum possible of 5.00. That rating of 4.00 was gathered from Subject 2 following the storytelling session.

Discussion

The purpose of this study was to provide empirical support for the use of

therapeutic storytelling in combination with behavioral parent training in treatment with children. The present study is valuable to the field of clinical child psychology because it explores therapeutic techniques which are widely used with children; however, this treatment package has not been adequately researched.

The following results were obtained in this study. First, the results suggest that the treatment package is successful in reducing the daily ratings of the frequency and intensity of the targeted behaviors of both noncompliance and anger control problems. This finding suggests that the treatment package effectively targets the identified problem behaviors. However, the anticipated sequencing effects were not noted. For all of the subjects, the frequency of the targeted behaviors declined after the first treatment was implemented. In the BPT-ST condition, these behaviors continued to decrease after the second phase of treatment, while they remained stable or increased in the ST-BPT condition. The intensity of the behaviors consistently declined for Subjects 1, 2, and 4, while Subject 3's ratings increased after treatment II. Although variable effects were found at follow-up, the frequency of these behaviors did not rise to their premorbid levels, and the intensity of the behavior exceeded the premorbid level only for the noncompliance of Subject 1.

Second, the BASC results suggest that the subject population in the present study was experiencing significant problems which were often in the clinically significant or atrisk ranges at the time of intake, supporting the use of this treatment package with children who are experiencing significant problems. For the noncompliant subjects in this study, mixed results were obtained on this measure for the Internalizing and Externalizing Composites, while the results of the Adaptive Behavior Composite demonstrated slight

increases for all subjects at post-treatment. These increases were maintained at follow-up for three of the four subjects. These results suggested that while the benefits provided by this treatment package were not generalized consistently across other problem behaviors, the package appeared to facilitate the development of adaptive skills. This finding may be due to the fact that the subjects were being exposed to adaptive coping skills in treatment that facilitated their ability to adapt and to interact successfully with other children. For the single anger control subject, Internalizing and Externalizing Problem Composites evidenced declines both at post-treatment and at follow-up, suggesting generalization across other problem behaviors. In addition, at post-treatment, increases in adaptive behaviors were noted; however, these were not maintained at follow-up.

Third, the PSI/SF yielded mixed results in the present subjects. Patterns of results suggested that stress related to parent-child relationship factors decreased following treatment for all subjects. However, the follow-up data varied across conditions, suggesting sustained benefits in the ST-BPT condition. These results suggest a trend in which stress associated with relationship factors decreased for subjects targeted for both problem behaviors. For three of the four noncompliant subjects, small, though consistent, declines in ratings of stress were noted between pre- and post-treatment. However, the findings at follow-up were not consistently maintained. These findings suggest a pattern in which parental ratings of stress level decline after the implementation of treatment. This decline supported the anticipated finding that the treatment package would provide parents and children with tools to decrease their negative impact on parental stress levels. It is anticipated that these ratings would be strengthened by extended treatment and a

focus on the specific problems faced by the parents and the family as a whole. The lack of consistent findings for Subject 3 may have been the result of significant factors impinging upon this child's treatment (i.e., living situation, paternal imprisonment, maternal ineffectiveness).

In addition to the trend noted on the P-CDI scale, further data collected for Subject 5 indicated declines in reported stress levels across all other scales. These findings were maintained at follow-up for all scales except the P-CDI scale. These finding supported the benefit of this treatment package in decreasing parental stress in families affected by the child's loss of temper; however, these results should be interpreted with caution given the single subject with this targeted problem behavior.

Fourth, in the present study, parents responded to measures assessing their level of adherence to the behavioral strategies in order to allow for some assessment of the level of their participation. The results suggest that the parents involved perceived that they adhered to the behavioral strategies at least somewhat. Previous research suggests that the active participation required of parents is often problematic in the implementation of behavioral parent training because parents are often unwilling or unable to participate at this level (Kazdin, 1991). Current results should be interpreted with caution because the parents may have felt compelled to respond positively in order to please the researchers. In addition, the parents may not have been able to accurately report these data due to problems comprehending the strategies.

Fifth, story recall ratings were varied across raters as indicated by the <u>kappa</u> statistic. It is possible that the rating system was too vague to provide for consistent

coding. In addition, the coding system might have been collapsed to two codes to reflect a composite of free and nondirectively cued recall and a composite of directively cued recall and unrecalled information. When the rater's responses are collapsed in this way, kappa increases (kappa=.52). However, the results indicated that Subjects 1, 2, 4, and 5 demonstrated sufficient recall of the story, while Subject 3 had difficulty recalling the material. Based upon observation of Subject 3's videotaped recall, there is some concern that these problems may have stemmed from discomfort in the novel situation, attentional deficits, retrieval problems, or lack of familiarity with the story schema; however, this subject was able to identify all story components when he was provided with a cue. Perhaps, the recall task was not an appropriate way to assess story comprehension. Future studies may benefit from new techniques to assess story comprehension.

Finally, parental satisfaction ratings suggested that all families who took part in this study were pleased with the treatment received. However, as with the parental adherence data, these results should be interpreted with caution given potential response biases.

Despite the potential biases, the parents expressed satisfaction, and many parents offered comments suggesting specific aspects of treatment with which they were pleased.

There are some limits to the interpretability of these results given the small sample design. As Watson and Workman (1981) report, the nonconcurrent multiple baseline design "does not automatically allow the researcher to isolate which specific components of the treatment 'package' is responsible for change" (p. 258). However, the authors report that this design is beneficial because it allows the researcher to rule out history because all clients begin therapy at different points in time and were assigned varied

lengths of baseline. In light of the inherent benefits and limitations, it will be necessary to conduct further large scale research in order to isolate the effectiveness of therapeutic storytelling in treatment and to compare it to other treatments.

Another potential limitation of the present study rests in the short-term nature of the treatment. Kazdin (1985, 1988) asserts that short-term training is less likely to produce positive effects in behavioral parent training than time-unlimited programs. Although the duration of behavioral parent training was limited in this study, training was focused on only one of the child's issues in order to provide specificity of treatment. However, it is unknown if this specificity was sufficient to overcome this limitation. The limited nature of this treatment may also have limited the generalizability of the results to other problem behaviors. Further studies involving more long-term treatment will be of value to indicate the effectiveness of the treatment in that modality. It is anticipated that generalizability across other problem behaviors would be more prevalent if the length and scope of treatment were expanded.

Positive outcomes in behavioral parent training are limited by a number of factors. These include the following: low socioeconomic status, marital conflict, limited social supports, maternal depression, minority status, and familial disorganization (Griest, Forehand, & Wells, 1981; Holden, Lavigne, & Cameron, 1990; Kazdin, 1988; Moreland et al., 1982; Wierson & Forehand, 1994). In the present study, the majority of families did not report significant problems of this nature. However, Subject 1's parents noted problems with familial disorganization because many extended family members were living in the home and hindered parental discipline strategies. In addition, specific concerns arose

surrounding the impact of the treatment protocol on Subject 3 due to his familial difficulties. Based upon informal review of the data and the videotapes of the treatment sessions, Subject 3's family met many of these criteria (i.e., low socioeconomic status, potential maternal depression, familial disorganization, marital difficulties). However, maternal reports indicated that his mother perceived that she adhered to the behavioral strategies.

It is also important to consider the limited nature of the measures utilized in this study because they rely heavily on parental report. These reports may be influenced by demand characteristics or impression management. They may also reflect parental difficulties in detecting internal problems. Although these reports are valuable because they address parental perceptions of the problems, future studies may need to incorporate direct behavioral observations by independent observers in order to assess deviant behaviors (Atkeson & Forehand, 1978).

Clinicians have reported the success of therapeutic storytelling in treating children for a myriad of problems. To date, these reports have primarily been informal. It will be important for researchers to investigate this method of therapy further in order to add empirical support to these informal reports. This study is an important step in this process. Future research needs to expand upon these findings with large scale studies utilizing measures which rely on the reports of multiple informants, assessing generalizability across other behaviors, and involving more long-term treatment.

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Appendix A

Statement of Informed Consent - Parent

Before taking part in this study, you and your child need to be informed of the following information to allow you to consent to your child's participation in the project. Indicate your consent by signing at the bottom:

The purpose of this study is to enhance knowledge of the effects of storytelling and behavioral therapy on children. While parents and therapists have reported on the effectiveness of the two treatment methods, additional formal research is needed to further the evaluation.

In order for your child to participate, one of his/her parents or a guardian must read and sign this statement. You will be asked to respond to additional questionnaires in the weeks during treatment. Details of this procedure will be provided by the therapist and/or the researcher.

As participants in this study, you and your child will be involved in individual counseling sessions with Dr. Cook. These sessions will be audiotaped and videotaped for future coding by the researcher. You and your child will also be asked to respond to oral and written questions concerning your child and his/her treatment. The researcher will also contact you daily to collect daily ratings of the frequency and intensity of your child's behaviors.

The questionnaires, audiotapes, and videotapes will be reviewed by the researcher, trained research assistants, and Dr. Cook. These individuals will be committed to confidentiality. Confidentiality will be maintained throughout this process by assigning a code number to your family's records by a code number which will be used throughout the data analysis procedures. Your identity will not be divulged to anyone else.

There are several potential benefits of this research. The data we collect will provide information about the effects of treatment on children's behavior and psychosocial adjustment and on familial adjustment. This data will help to make the treatment more effective for your child and for future children seeking therapy.

Risks involved in this study are minimal. However, The University of Montana requests that the following clause be included in all consent forms for studies with human participants: "In the event that a participant is physically injured during the course of this research, he or she should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, the participant may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of the Administration under the authority

of the M.C.A., Title 2, Chapter 9. In the event of a claim for such personal injury, further documentation may be obtained from University Legal Counsel."

Reimbursement will be provided for your effort. This reimbursement will include a discount of \$10 for the two sessions which take place during data collection. If these sessions are paid for by Medicaid, your family will receive the \$10/session directly.

For any reason, the participants of this project may choose to end the session(s) at any time without prejudice. Alternate treatment with Dr. Cook and monetary reimbursement/discount for two sessions will still be guaranteed.

If the participants have questions about any aspect of this project, please feel free to contact the project coordinator, Laura Taylor Painter; her supervisor, Dr. Silverman; or the clinician, Dr. Cook:

Laura Taylor Painter Department of Psychology University of Montana Missoula, MT 59812 (406) 243-4521 (406) 543-5194

Dr. Paul Silverman Department of Psychology University of Montana Missoula, MT 59812 (406) 243-6349

I have read the preceding information and participation of myself and my child,	
Signature of Parent:	Date:

Dr. Cook and I would appreciate your consent to allow him keep these audiotapes and videotapes and use them for future training. Dr. Cook plans to use these tapes in training workshops for therapists and parents in order to teach them how to do therapeutic storytelling. I would appreciate being able to use these tapes in workshops and classes. If you do not agree, these tapes will be destroyed within one year of the completion of this project.

Please check here if you do not agree:	
No, I do not agree to allow Dr. Coo	ok and myself, Laura Taylor Painter, keep these
tapes for use in training.	
Yes, I agree to allow Dr. Cook keep	ere if you agree to let him use these videotapes: these tapes for use in training with parents.
Signature of parent:	Date:
Yes, I agree to allow Dr. Cook keep	ere if you agree to let him use these videotapes: these tapes for use in training with
therapists.	Date:
C	
Please check the box and sign your name he for courses and workshops:	ere if you agree to let me use these videotapes
Yes, I agree to allow Laura Taylor	Painter keen these tapes for use in training
with therapists and graduate psychology	
	Date:
Please include your name and address if you	wish to receive a summary of the research
findings when this study is complete. The e	xpected completion date is September 1996.
Name:	
Address:	

Appendix B

Statement of Informed Consent - Child Consent to Audio- and Videotaping

If you witnessed your child agree to have these sessions taped, please sign the following:						
,	, witnessed my child, audio- and videotaped.	, verbally agree to have				
Signature:		Date:				

Appendix C

Demographic Data Sheet

As a part of this study, we would like to obtain some information about you and your child. This information will help us to tell your child a story that will interest him or her and to understand and interpret our findings. We would appreciate it if you would respond to every question. However, if you would rather not answer a question, please feel free to leave it blank.

1.	Child's name:		
2.	Child's date of birth:		
3.	Child's gender (please circle): Male Female		
	Child's race/ethnicity:		
5.	Is English your child's first language(please circle): Yes		
	If not, what is your child's native language:		
	How many brothers does your child have:	_	
	How many sisters does your child have:		
8.	Which birth order best fits your child? (please circle):		
	1st born 2nd born	Youngest	Oldest
9.	Does your child have a best friend (please circle):		
	Yes No		
10.	Do you tell your child stories (please circle): Yes	No	
	If so, what are the ongoing themes you discuss:		
_11	Does your child attend school or day care (please circl	•• • ,	
	Preschool Day care Kindergarten	Other	
12.	Child's level of education/educational experience:		
10	YYTI' 1 - C41 - C-11 - i - 1 - 4 1 i - 4 1 C 1 C 1 C 1	J1.3	
13.	Which of the following best describes the type of house	enoia	
	in which your child lives? (please check one):		
	[] House [] Mobile home		
	[] Apartment, condominium		
1.4	[] Other (please describe): Who are the members of your child's household?		
14.	[] Mother		
	[] Step-mother		
	[] Father		
	[] Step-father		
	[] Sisters (please provide number)		
	[] Brothers (please provide numbers)		
	[] Other (please describe)		
15	Range of household income per year:		
. J.	range of household moonic per year.		

Storytelling 70

	[] \$0 to \$9,999	[]\$40,0	000 to \$49,999	
	[] \$10,000 to \$19,999	[]\$50,	000 to \$59,999	
	[] \$20,000 to \$29,999	[]\$60,	000 to \$99,999	
	[] \$30,000 to \$39,999	[] over	\$100,000	
16.	Parents' highest levels of education:			
	Mother:		Father:	
17.	Parents' present employment:		•	
	Mother:			
	Father:			
18.	What is your name (person completing	g form):		
	Relation to the child:		· ·	
	Date of birth:		_	
	Gender (please circle): Male	Female		

Appendix D

Behavioral Frequency Measure

Directions: Please record the number of times your child demonstrates the target behavior. Record one mark for each display of the behavior. Be sure to follow Dr. Cook's definition.

	Subject #: Week:
Target Rehavior Defined:	

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Waking-				,			
12:00				<u>.</u>			
12:00-							
5:00 PM							
5:00 PM-							
Bedtime							
Intensity							
Rating							

Appendix E

Behavioral Intensity Measure

Directions: Please record the intensity of the problems your child exhibited today. Tell how difficult they were according to the following scale:

0	1	2	3
Not at all intense	Somewhat intense	Quite intense	Extremely intense
		Subject #:	
		Week:	
		week	
Toront Daharian Da	.c1.		

Target Behavior Defined:

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Waking-							
12:00							
12:00-							
5:00 PM							
5:00 PM-				:			
Bedtime							
Intensity							
Rating							

Appendix F

		Parental Satisfaction Parent's Na Child's Nar Date:		
Please rate the de	gree of your satis	sfaction with your child's trea	atment up to t	his point.
1	2	3	4	
5				
Not Satisfied		Neutral		Very
Satisfied				

Comments (Please include information about what you liked or disliked, what you felt was most helpful or unhelpful, etc.):

Name: _____

Appendix G

Parental Adherence to Behavioral Training Strategies

			Date:	· · · · · · · · · · · · · · · · · · ·
implement in their ho which you and your f	y that some behavioral ome or with their family family were able to adh eek. Circle your respon	. We are it	interested in finding stegies that Dr. Cool	out the degree to k introduced to
l. Being able to prais	e and attend to approp	riate beha	viors.	
1 2	3	4	5	N/A
Not at all Comments:	Somewhat		Every time	Not applicable
2. Being able to give 1 2 Not at all	clear and specific direction 3 Somewhat	etions.	5 Every time	N/A Not applicable
Comments:				
3. Being able to ignor	re inappropriate behavi	ors.		
1 2	3	4	5	N/A
Not at all	Somewhat		Every time	Not applicable
Comments:		•		
	olish appropriate house			37/4
1 2	3	4	5. T	N/A
Not at all	Somewhat		Every time	Not applicable
Comments:				
	appropriate warnings t			77/4
1 2	3	4	5	N/A
Not at all Comments:	Somewhat		Every time	Not applicable

6. Being able to	set effective cor	nsequences i	n public.		
1 2	. 3		4	5	N/A
Not at all	So	omewhat		Every time	Not applicable
Comments:					
7. Being able to	engage child in	activities ar	nd prevent hehas	zior problems	
1 2		dotivitios ui	4	5	N/A
Not at all	•	mewhat	•	Every time	Not applicable
Comments:					
8. Staying calm	and non-reactiv	e when givii	ng consequences	S.	
1 2	_	· ·	4	5	N/A
Not at all	Sc	mewhat		Every time	Not applicable
Comments:		······································	,		
9. Avoiding por 1 2 Not at all Comments:	3 So	omewhat	4	5 Every time	N/A Not applicable
10. Using time of 1 2 Not at all Comments:	3 Sc	mewhat		5 Every time	N/A Not applicable
11. Selecting na 1 2 Not at all Comments:	itural consequen 3 Sc		child learn appro 4	opriate behavior 5 Every time	rs. N/A Not applicable
12. Implementing problem.	ng the specific pl	an Dr. Cool	c identified to de	eal with your cl	nild's target
1 2	3		4	5	N/A
Not at all Comments:		omewhat		Every time	Not applicable

Appendix H

Standard Procedure for Assessment of Recall

Procedure:

- 1. Ask the child to retell the story. "Would you retell your story to your mother/father as close to the same way I told it as you can?"
- 2. If the child cannot remember the story, use the following prompts beginning with the first one:
 - a. If child has trouble beginning, suggest the beginning: "Once upon a time..."
 - b. If the child stops, say "What happens next?"
 - c. If unable to restart, use nondirective prompts (i.e., what was the character's name? What was his/her problem? Who helped him/her? How? What did he/she learn?).
 - d. If the child is unable to come up with these answers spontaneously, ask directive questions (i.e., choice questions: was her name Judy, Betty, or Lucy?).
 - e. If the child misses two or more of these questions, retell the story and begin asking the questions again.

Rating of Recall

- 3 = spontaneous recall
- 2 = recall with nondirective cues
- 1 = recall with directive cues
- 0 = no recall
- R = story retold (add rating above next to R)

This rating will be made for each child's recall of the 5 components of the therapeutic story:

- (1) Introducing the main character
- (2) Identifying the problem
- (3) Talking to a wise person
- (4) Trying out alternative approaches
- (5) Summarizing the lesson

The greatest possible score will then be 15 points.

Appendix I

Consent Form for Research Assistants

In assisting with this research project, you will have access to audiotapes, videotapes, and questionnaires completed by Dr. Cook's clients. You may also be contacting these individuals by phone, so you will also be aware of the clients' names. This information is confidential and extremely sensitive. While confidentiality of data in research is always required, extra care will need to be taken with these records.

Because Missoula is a small community, you may know the family, recognize the identity of some of the clients, or be familiar with the family names of the clients. For this project, you will asked to handle these situations in specific ways:

- 1. If you are uncomfortable working with a client, discuss this with the researcher, and she will handle the contacts with this subject. Coding will also be conducted in another manner, with the client's identity being kept confidential.
- 2. If you know a client or if the client is a relative/friend of someone you know, let the researcher know. She will then contact this individual.
- 3. If you recognize the family name, but do not have a connection with the family, proceed to contact the family.
- 4. For all of the clients, it is imperative that you do not disclose any information about the family. This information would include the fact that this family is participating in this research or that the family is in therapy. This information should not be discussed with anyone except the researcher, Laura Taylor Painter; her faculty supervisor, Dr. Paul Silverman; the clinician, Dr. Bill Cook; or other designated individuals involved in this project.

If we find that you are divulging this information, your work on this project will be discontinued, and you will fail this course.

Please feel free to consult with the researcher or her supervisor at any time that questions may arise or that any ethical concerns arise.

Please sign	here if you agree to follow these guidelines.	
Name:	Signature:	
Date:	_	

Appendix J

Sample Story for Noncompliance

The following story was told to Subject 4:

<u>Dr. Cook</u>: Once upon a time, there were 3 bears. Sounds familiar, doesn't it. There was a Mama Bear, a Papa Bear, and you know what? They were both Grizzlies. And then there was the little bear. And you know what his name was? What? Little Griz. Now little Griz. I tell you, he was actually pretty big you know. He was about like that big and the Mama Bear was about like that big, and the Papa Bear was about that big and Little Griz, he was so smart that he could just kind of figure things out like real quick. He could do just about anything. I mean he could climb trees, he could swim.

Child: Could he write?

Dr. Cook: No, he couldn't write like you.

Now here's the problem. Little Griz was the smartest character, but he would not listen to the Mama Bear and the Papa Bear. I mean if they said, "Hey, Little Griz, it's about time for you to go to beddy-pie." He'd say, "No, I'm not gonna do it." They'd say, "Little Griz, come on we're gonna take you out hunting. We're gonna catch something." He'd say, "Nope, I'm not gonna listen to you, I'm not even gonna do it." He was a little tiny bit of a brat sometimes.

Well, the Papa Bear would try to help him, the Mama Bear tried to help him, but he would just, wouldn't listen. Well, this was the bad thing here. Well, one day the Mama Bear was trying to be real nice to him. She said, "Okay, Little Griz, time for you to go to beddy-pie." He slapped at her with his paw like this and scratched her right across her tummy. Oh man, she didn't like that. She kind of snarled at him like, "grrrshnnnnn." Then Papa Bear he said, "Okay, we're going, we're taking Little Griz. Tomorrow, we're gonna go down to the middle of the forest, and we're gonna go see somebody that will help us."

You know who they went to see? The Wise Old Grampa Bear, who lived in the middle of the forest. Now The Wise Old Grampa Bear knew everything. He knew it all. Now, they went down there that next day. Now then that next day they had to take a big hike through the forest. And when the Wise Old Grampa Bear saw the Little Grizzly. He said, "Little Griz, how you doin? Come on. Sit on my lap." Little Griz crawls up on his lap and puts his arm around him and gives him this great big bear hug. Cause he loved that Little Griz. He said, "Hey, tell me all about your life." So he tells him all about how he's climbing trees, how he's going swimming and he's doing all this stuff.

The Old Wise Grampa bear says, "So why'd you come and see me?" Little Griz kind of puts his head down like this and kinda frowns. Mama Bear says "Grampa, he won't even listen to me. He won't do nothing we tell him to do, and he won't do nothing we ask him to do." Papa Bear says, "That's right, he won't even mind me."

Well, the Wise Old Grampa Bear hugs the Little Griz a little bit more. He says, "Oh, Little Griz, I've got something kinda sad to tell you." Little Griz says, "What is it?"

He says, "It's pretty sad!" He says, "You know, a Little Griz like you that's this big, can never, ever, ever, ever be the boss of your Mama Bear and your Papa Bear. You're this big, and they're this big. One of these days you're gonna have to learn to let them teach you. And let them help you."

Well, Little Griz said, "Well, I wanna be the boss, I don't wanna listen to them. I wanna be the boss." Well, the Wise Old Grampa Bear says, "I know it's gonna be hard. I tell you what. I'll make you a deal." He says, "How about the very first day, tomorrow, you don't even listen to your Mama Bear and Papa Bear, don't do anything they say. Just check it out and see what happens."

So that's what they did. They said to the Wise Old Grampa Bear, "Thanks a lot Grampa," They said, "We're gonna go home and check it out, and we'll come back and see ya after we figure it out." So off they went home.

So, the next morning, the Mama Bear says to Little Griz, "Little Griz, let's go get some huckleberries. I'm gunna show you where the big, juicy ones are." Little Griz wasn't gunna listen so he said, "No, I'm gunna go find them all by myself because I know more about it than you do. So he takes off crashing through the trees and gets tangled up in all of these briars and brambles and these sharp sticker things, and he gets stickers in his hair and all through his coat and he's just filled with them. And the Mama Bear takes off and gets all of these beautiful juicy huckleberries. Slurp. Slurp. She starts eating them and they're delicious. And Little Griz doesn't get any.

Well, after lunch the Papa Bear says, "Well, Little Griz, I'm gunna take you down and show you how to catch some fish for super." Little Griz says, "No, I'm not gunna go with you. I know more about it then you do." So he takes off and goes flying down to the lake, and he jumps right in the middle of the lake and starts swimming and paddling like this and scares every fish in that lake away and he doesn't catch none. He gets water in his nose and water in his ears and water in his mouth. Well, the Papa Bear caught some nice fish, but Little Griz didn't catch any.

Well, that night the Mama Bear says and the Papa Bear says, "Come on, let's clime the tree here, we'll show you how to get some bee, some honey out of the bee hive." And you know what Little Griz said, "I'm not going to listen to you." So he climbs up that tree, and he starts grabbing that honey like this, with both hands. "Ksh, ksh, phh. No, I'm not gunna do it, cause I know how to get the honey all by myself." What do you think happened? Sting, sting, sting, sting! Oh, those bees came flying out of there. They sting him right here on the nose, right there, they stung him on his tongue, right when he was eating. They got inside his ears and stung him inside his ears. And he started yelling and growling, and he was hurting so bad. And he came charging down that tree.

Well, that night they went to the beddy-bye. And the Mama Bear and the Papa Bear sat on the bed. And they said, "Little Griz, how was your day today?" Little Griz just goes like this, he goes, "Terrible, yucky, awful." Like that (points his thumbs down).

Mama Bear and Papa Bear said, "Remember what The Wise Old Grampa Bear said. Tomorrow we'll try it again." So Little Griz remembered. And what was he gonna do the next day? Be good, and listen to his Papa and Mama. He was gonna listen to em and do what ever they say.

So the next day Mama Bear says, "Hey, Little Griz, let's go pick some huckleberries." Little Griz says, "You got it, Mama Bear. I'm following you. Zoom!" He walks right behind her. She takes him up where the big juicy ones are, and they start eating like this, slurp, slurp, slurp. They were delicious. He loved them.

After lunch, Papa Bear said, "Hey, Little Griz, let's go down and catch some fish!" They go down to the creek, and they don't just jump in and scare em. Papa Bear shows him how to be real careful, just move your paw down real slow and watch for the fish and grab it like that whenever you see it. And Little Griz grabbed it and he caught his very, very first fish. He was so proud of himself and his Papa Bear taught him how to do it. Well, that night they had fish for dinner and then they climbed up the tree and the Papa Bear and Mama Bear both showed him just to stick your paw in just a little bit and get a little bit of that honey. Slurp. Oh, and it tasted so good. So, Little Griz did it the same way and none of the bees came out. They didn't even sting him on the nose or the tongue or the ears and nothing.

Child: I know about it would feel like to get stung on the tongue.

That night, when Little Griz got ready for beddy-bye, the Mama Bear and Papa Bear sat on the bed and said, "Little Griz, how was your day today?" He said, "It was so cool. So cool, the huckleberries. I caught my own fish, and I even got some honey. Thank you for helping me Mama Bear and Papa Bear."

Well, they decided, "Okay, we're going back to see The Wise Old Grampa Bear." So the next day they went back to see him. Little Griz comes and sits on that Grampa bears lap, puts his arm around, and gives him a big hug. He said, "Well, what did you learn Little Griz?"

Little Griz says, "Grampa Bear you were right. I listened to him, and it was so much fun, and I got huckleberries, and I caught a fish and I even learned how to get the honey out of the bee hives."

Child: With out getting stung?

The Wise Old Grampa Bear just kinda grinned for a little bit. "Hmmmmh uhmmm!" The Wise Old Grampa Bear said, "You know you are smart. Do you think you can keep doing it?"

Little Griz said, "yes I can!"

Well, for two weeks it didn't matter what the Mama Bear said or what the Papa Bear said. Mama Bear said, "Hey, Little Griz, let's take this garbage out!"

He said, "You got it Mama Bear, bzzzzzzz, as fast as he could, he'd take it out."

And the Papa Bear said, "Hey Little Griz, time to go down and take a little back down in the creek come on I'm gunna take you down there."

He said, "I'm right with ya Grampa, Papa Bear, no problem, and he'd follow him right down and get all washed up, wash his hair up."

Well, for 2 weeks he kept doing it. If they asked him to go to beddy-pie, he went to beddy-pie. He was just the best beat you ever saw in your life. Well, at the end of the 2 weeks, guess what they did?

Child: What?

Cook: They had a little party.

Child: Oh wow!

Cook: A celebration party cause the Little Griz was getting a little bit bigger and a little bit bigger and he learned the lesson that The Wise Old Grampa Bear was trying to teach him. He didn't have to try to boss the Mama Bear. He didn't have to try to boss the Mama Bear. He didn't have to try to boss the Papa Bear. He could let them teach him how. So they invited the deer, the elk. They invited the squirrels and all the bunnies in the forest and of course they invited the Wise Old Grampa Bear and they got then all together. And they got ice cream and cake and Kool-aid. And they had special little thing to eat like peanuts and M&M's, and they all had a big party, and they danced and sang songs. And everybody cheered for the Little Griz. Cause they said, "Yeah, Little Griz, Little Griz, you have learned your lesson (clap, clap, clap, clap), and you're not been a brat anymore, you're being the nicest bear you would ever want to play. Well, the Little Griz kept doing it and kept doing it. He got a little bit bigger and little bit bigger and a little bit bigger and a little bit bigger. And he got a little bit smarter and a little bit smarter and a little bit smarter and he got happier and happier and happier. Some people say that when he grew up he got to be The Wise Old Gramp Bear because he was so smart. But I don't know for sure.

<u>Table 1</u>: The mean and range of the frequency of noncompliant behaviors and anger management problems for Subjects 1 through 5.

	BASELINE		POST-TX 1		POST-TX 2		FOLLOW UP	
	Mean	Range	Mean	Range	Mean	Range	Mean	Range
Subj. 1	7.36	2-15	1.57	0-5	0.57	0-6	0.89	0-2
Subj. 2	2.86	0-7	1.67	0-3	1.07	0-3	0.00	0
Subj. 3	4.43	2-7	3.12	0-5	3.00	1-5	2.57	1-4
Subj. 4	2.93	0-6	0.42	0-1	0.57	0-3	0.67	0-2
Subj. 5	2.00	0-5	1.35	0-4	0.13	0-1	0.43	0-2

<u>Table 2</u>: The mean and range of the intensity of noncompliant behaviors and anger management problems for Subjects 1 through 5.

	BASELINE		POST-TX 1		POST-TX 2		FOLLOW UP	
	Mean	Range	Mean	Range	Mean	Range	Mean	Range
Subj. 1	0.86	0-3	0.43	0-2	0.19	0-2	0.89	0-2
Subj. 2	0.71	0-3	0.50	0-1	0.29	0-2	0.00	0
Subj. 3	1.43	0-3	0.94	0-2	1.15	0-2	0.71	0-1
Subj. 4	1.00	0-3	0.25	0-2	0.07	0-1	0.33	0-1
Subj. 5	1.30	0-3	0.94	0-3	0.07	0-1	0.43	0-2

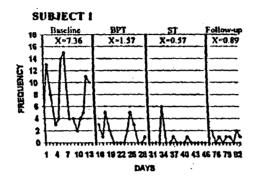
<u>Table 3</u>: The percentage change in the ratings of the frequency of noncompliance and anger management problems for Subjects 1 through 5.

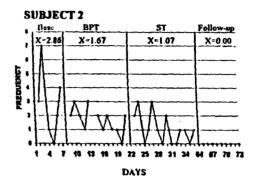
·	PERCENTAGE CHANGE						
	Baseline-Post Tx 1	Post Tx 1-Post Tx 2	Post Tx 2-Follow up				
Subj. 1 (BPT-ST)	78.60% (decrease)	63.69% (decrease)	56.14% (increase)				
Subj. 2 (BPT-ST)	41.61% (decrease)	35.93% (decrease)	100.00% (decrease)				
Subj. 3 (ST-BPT)	29.57% (decrease)	3.85% (decrease)	14.33% (decrease)				
Subj. 4 (ST-BPT)	85.67% (decrease)	35.71% (increase)	17.54% (increase)				
Subj. 5 (BPT-ST)	32.50% (decrease)	90.37% (decrease)	230.77% (increase)				

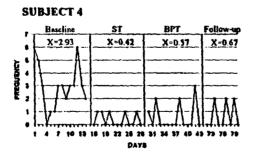
<u>Table 4</u>: The percentage change in the ratings of the intensity of noncompliance and anger management problems for Subjects 1 through 5.

	PERCENTAGE CHANGE						
	Baseline-Post Tx 1	Post Tx 1-Post Tx 2	Post Tx 2-Follow up				
Subj. 1 (BPT-ST)	50.00% (decrease)	55.81% (decrease)	368.42% (increase)				
Subj. 2 (BPT-ST)	29.58% (decrease)	42.00% (decrease)	100.00% (decrease)				
Subj. 3 (ST-BPT)	34.27% (decrease)	22.34% (increase)	38.26% (decrease)				
Subj. 4 (ST-BPT)	75.00% (decrease)	72.00% (decrease)	371.43% (increase)				
Subj. 5 (BPT-ST)	27.69% (decrease)	92.55% (decrease)	514.29% (increase)				

Figure 1: The daily frequency of noncompliance for Subjects 1, 2, 3, and 4.







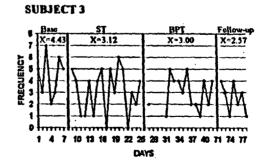


Figure 2: Daily frequency of anger control problems for Subject 5.

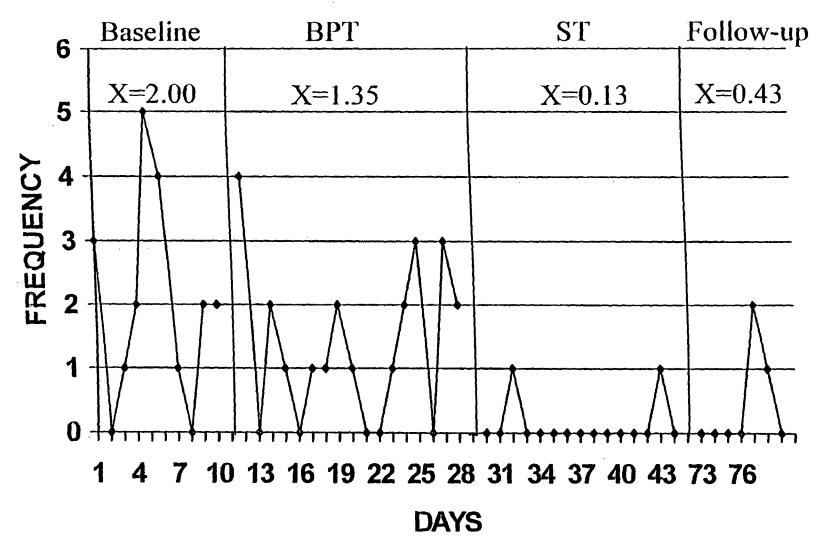


Figure 3: Mean daily frequency of noncompliance for Subjects 1, 2, 3, and 4.

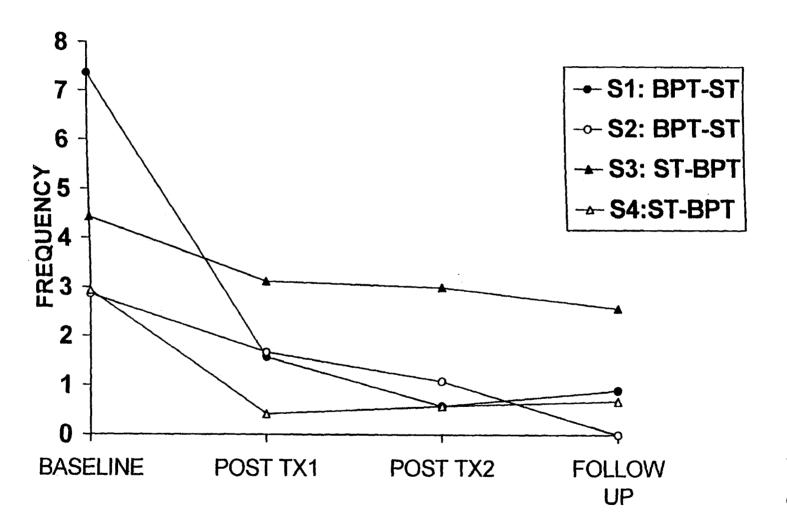
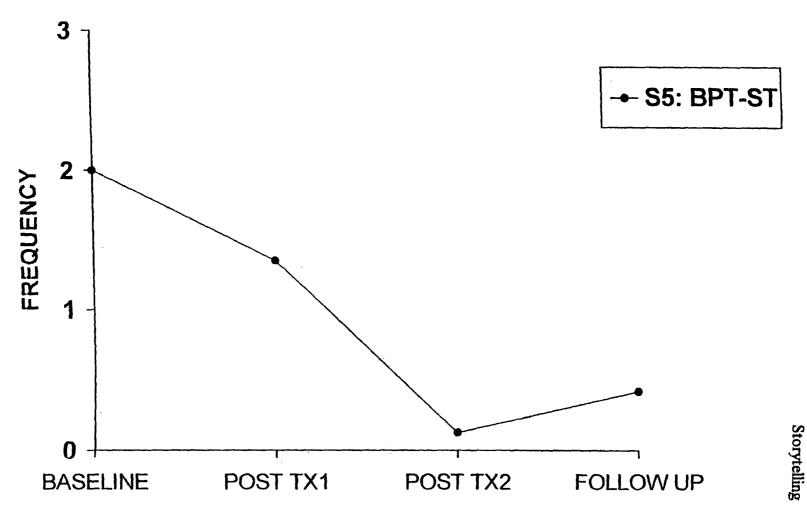
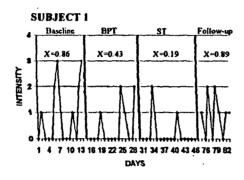


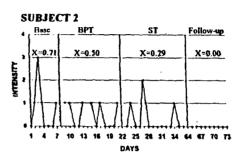
Figure 4: Mean daily frequency of loss of temper for Subject 5.

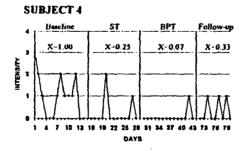


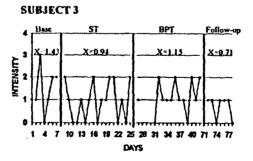
Storytelling

Figure 5: The daily intensity of noncompliance for Subjects 1, 2, 3, and 4.



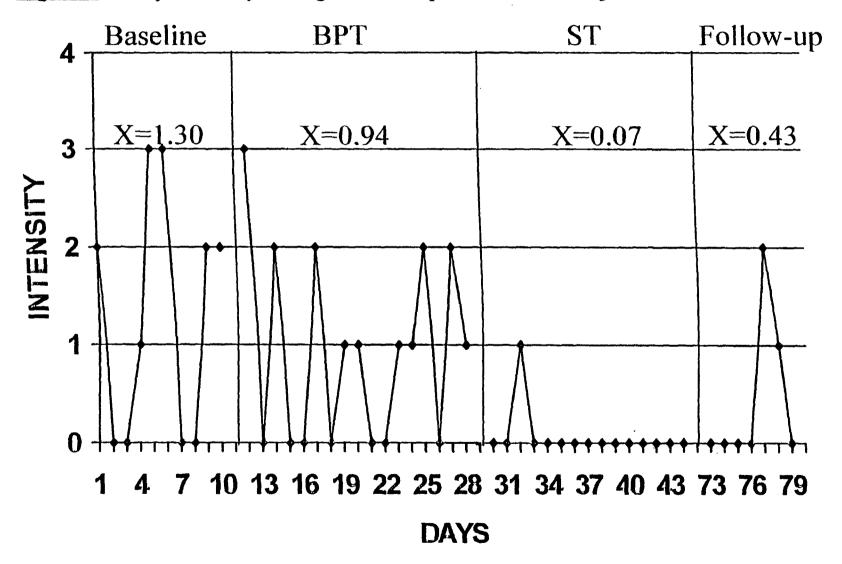






Storytelling

Figure 6: Daily intensity of anger control problems for Subject 5.



Storytelling

2 **→** S1: BPT-ST - S2: BPT-ST 1.5 → S3: ST-BPT -<u>→</u>- S4:ST-BPT INTENSITY 0.5 0 **BASELINE** POST TX1 POST TX2 **FOLLOW UP**

Figure 7: Mean daily intensity of noncompliance for Subjects 1, 2, 3, and 4.

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Figure 8: Mean daily intensity of loss of temper for Subject 5.

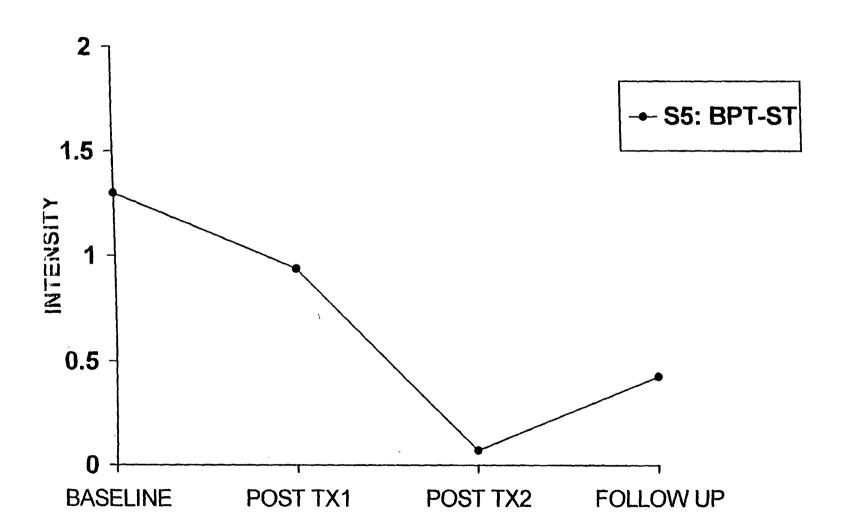


Figure 9: PSI/SF Percentage Ratings of Total Stress for Subjects 1, 2, 3, and 4.

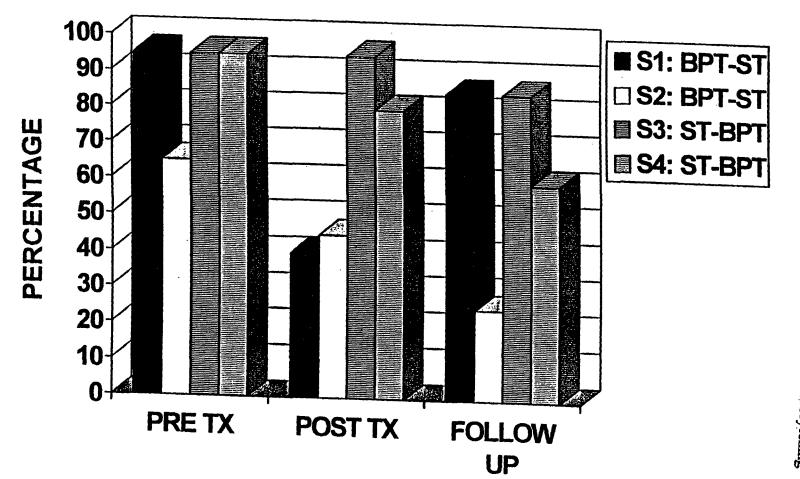


Figure 10: PSI/SF Percentage Ratings of Stress for Subjects 1, 2, 3, and 4: Parent Factors.

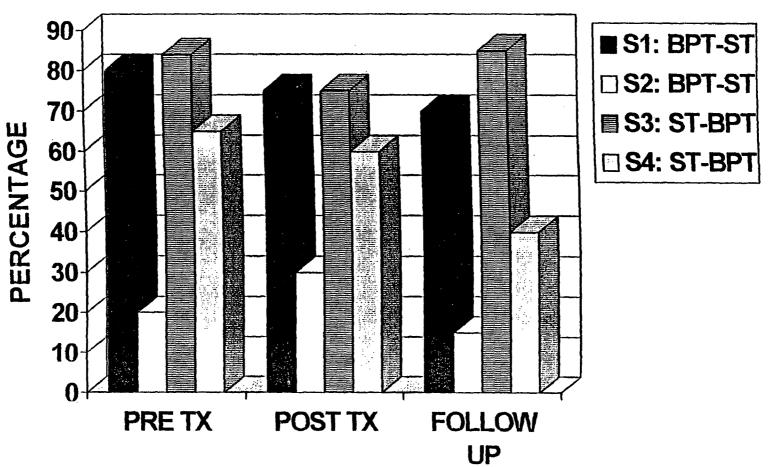


Figure 11: PSI/SF Percentage Ratings of Stress for Subjects 1, 2, 3, and 4: Child Factors.

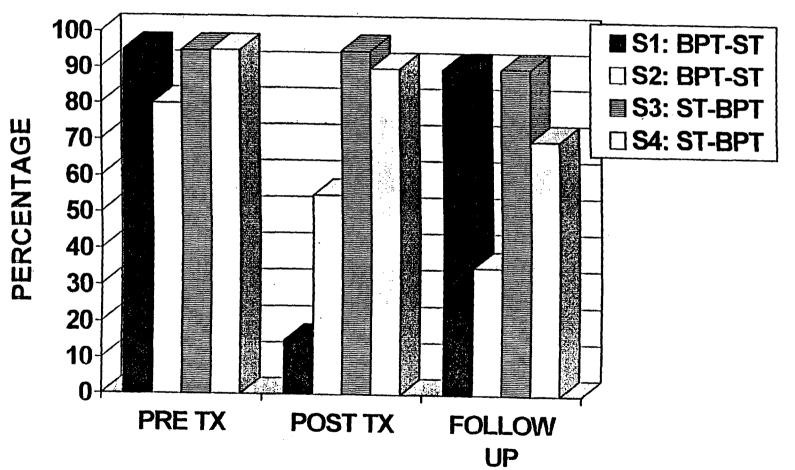
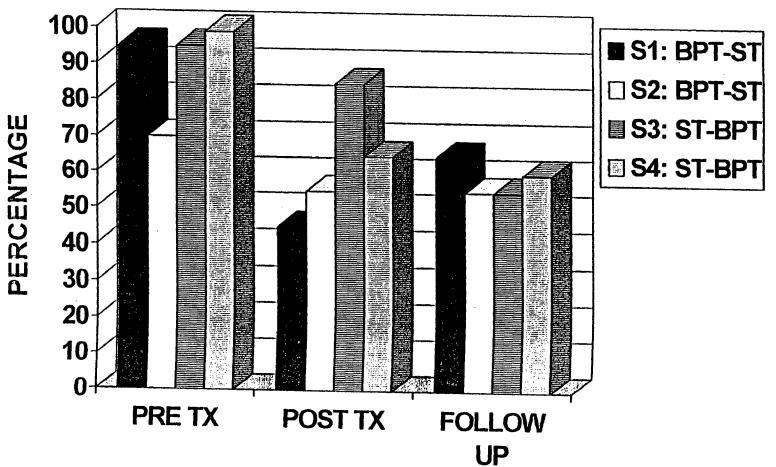


Figure 12: PSI/SF Percentage Ratings of Stress for Subjects 1, 2, 3, and 4: Parent-Child Relationship Factors.



Storytelling

Figure 13: PSI/SF Percentage Ratings of Total Stress for Subject 5.

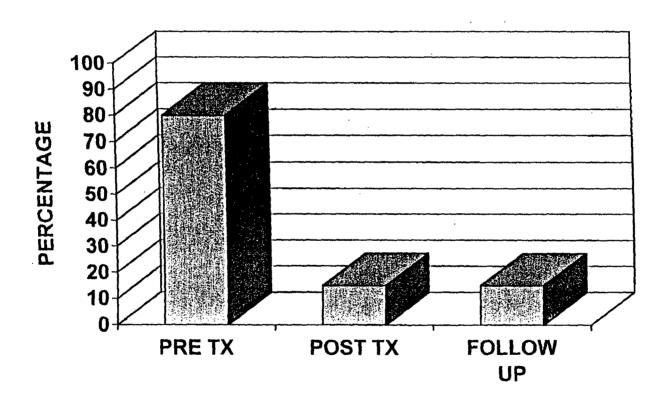


Figure 14: PSI/SF Percentage Ratings of Stress for Subject 5: Parent Factors.

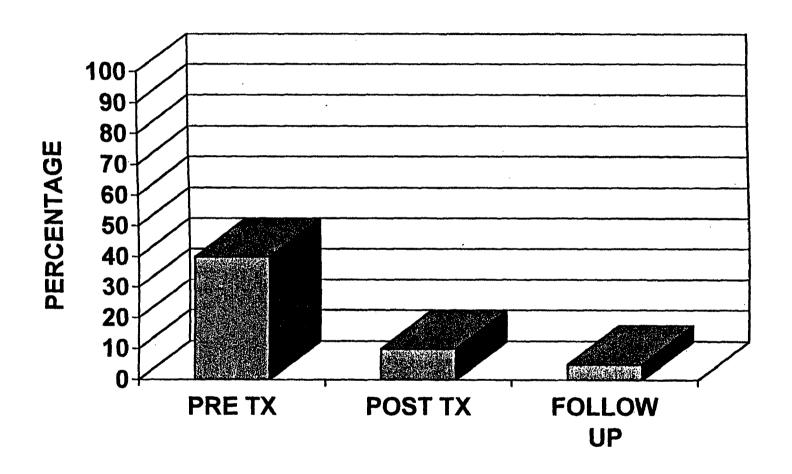
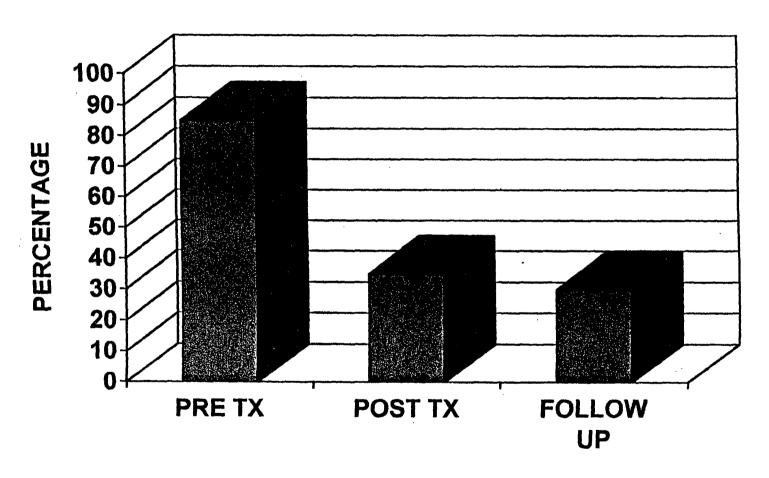


Figure 15: PSI/SF Percentage Ratings of Stress for Subject 5: Child Factors.



<u>Figure 16</u>: PSI/SF Percentage Ratings of Stress for Subject 5: Parent-Child Relationship Factors.

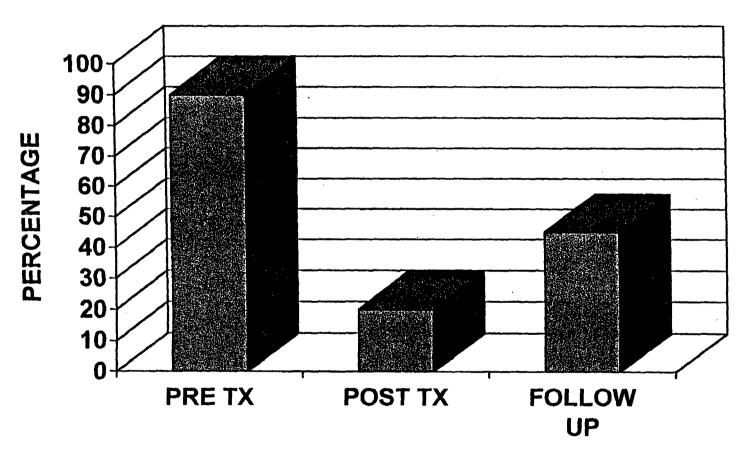


Figure 17: BASC T-scores for the Externalizing Behavior Composite for Subjects 1, 2, 3, and 4.

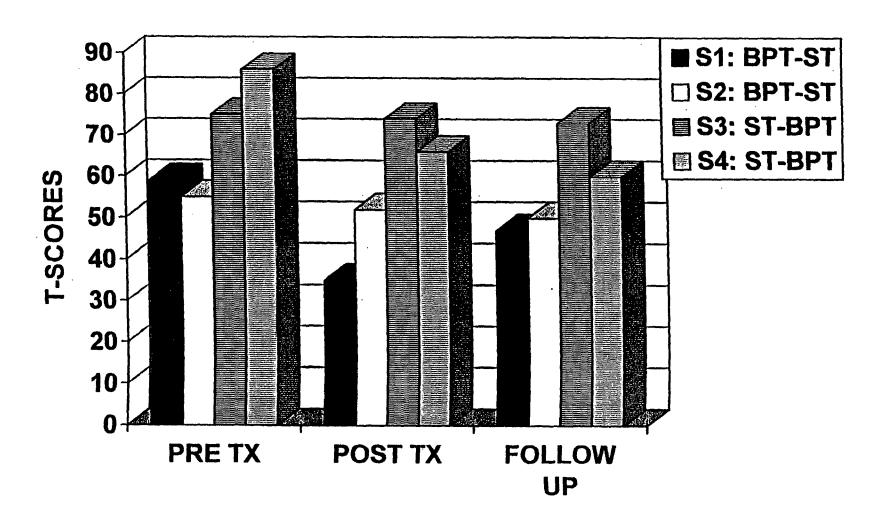


Figure 18: BASC T-Scores for the Internalizing Behavior Composite for Subjects 1, 2, 3, and 4.

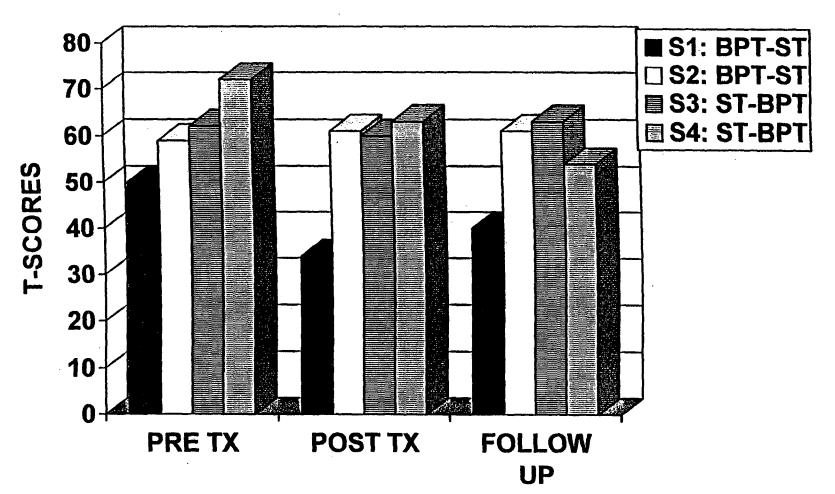


Figure 19: BASC T-scores for the Adaptive Skills Composite for Subjects 1, 2, 3, and 4.

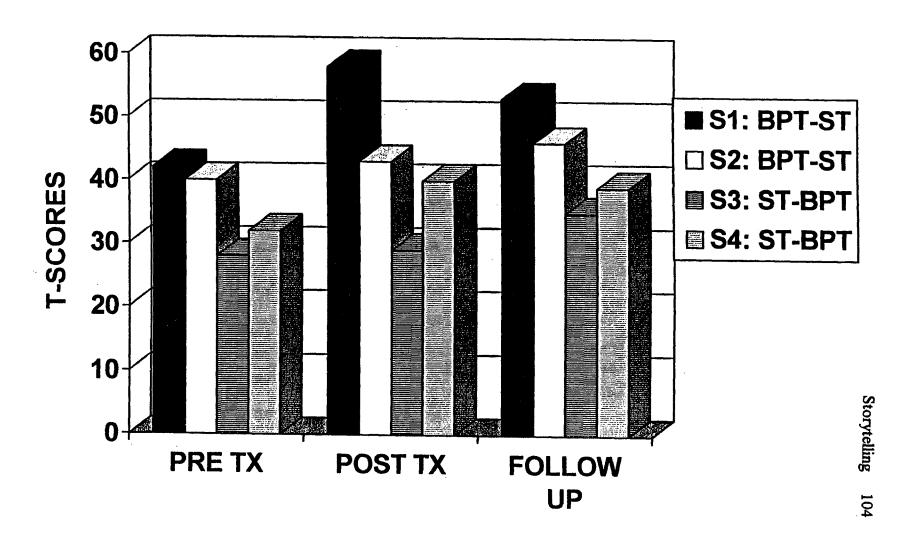


Figure 20: BASC T-scores for the Externalizing and Internalizing Behavior Composites for Subject 5.

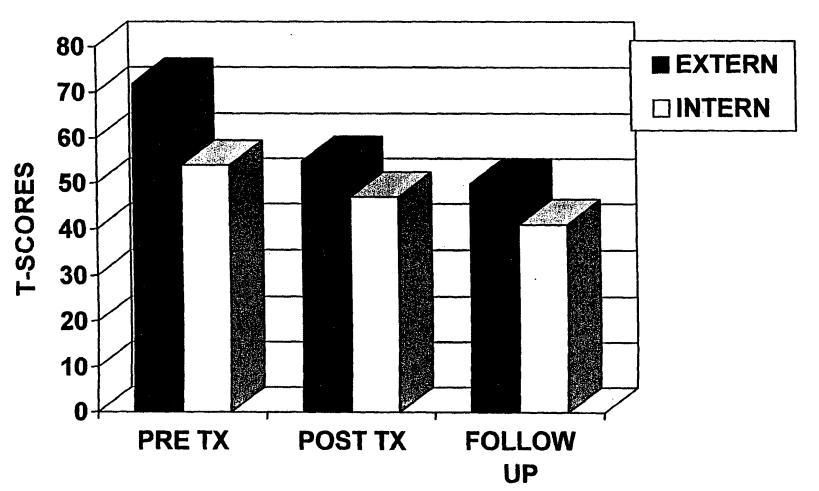
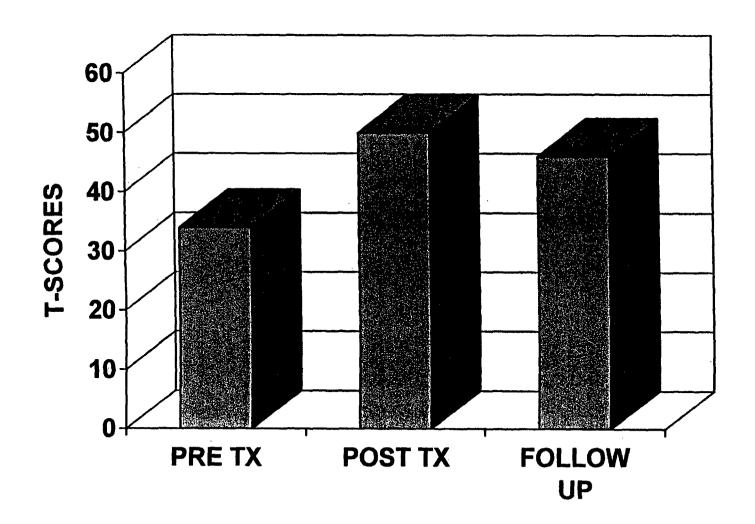


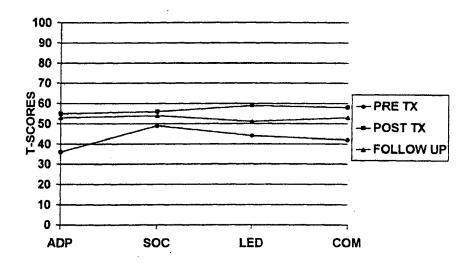
Figure 21: BASC T-scores for the Adaptive Skills Composite for Subject 5.



100 90 80 70 T-SCORES 60 - PRE TX - POST TX 50 **FOLLOW UP** 40 30 20 10 0 HYP AGG CON ANX DEP SOM ATY WITH ATT

Figure 22: BASC T-scores for Subject 1: Clinical scales.

Figure 23: BASC T-scores for Subject 1: Adaptive scales.



SOM

ATY

WTH

ATT

Figure 24: BASC T-scores for Subject 2: Clinical scales.

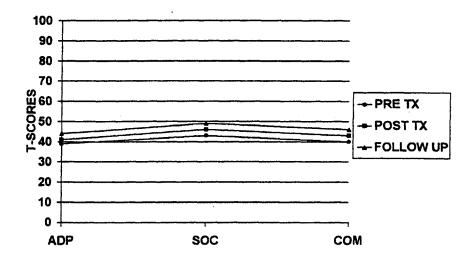
Figure 25: BASC T-scores for Subject 2: Adaptive scales.

ANX

DEP

HYP

AGG



<u>Figure 26</u>: BASC T-scores for Subject 3: Clinical scales.

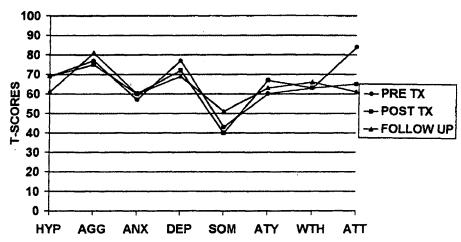


Figure 27: BASC T-scores for Subject 3: Adaptive scales.

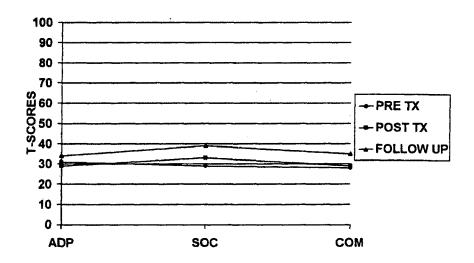


Figure 28: BASC T-scores for Subject 4: Clinical scales.

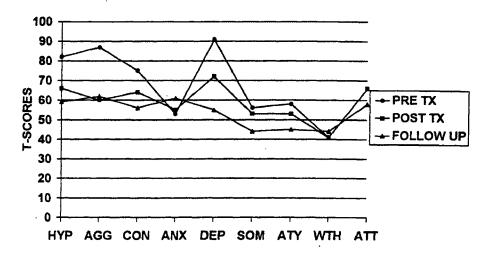


Figure 29: BASC T-scores for Subject 4: Adaptive scales.

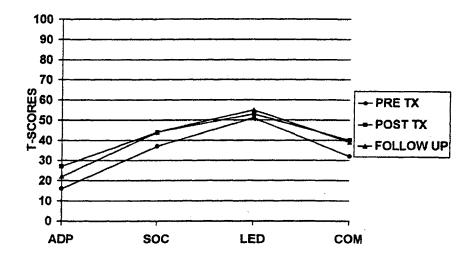


Figure 30: BASC T-scores for Subject 5: Clinical scales.

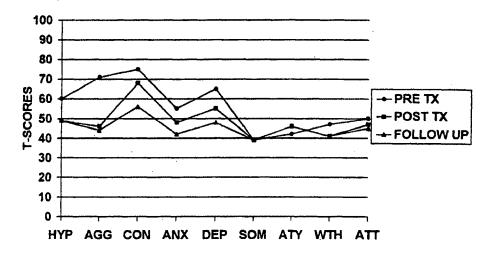


Figure 31: BASC T-scores for Subject 5: Adaptive scales.

