

Parent-Child Interaction Therapy: Application of an Empirically Supported Treatment to Maltreated Children in Foster Care

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One of the more serious problems faced by child welfare services involves the management of children with serious behavioral and mental health problems. Aggressive and defiant foster children are more likely to have multiple foster care placements, require extraordinary social services resources, and have poor short- and long-term mental health outcomes. Interventions that work with challenging foster children and enhance foster parents' skills in managing problem behaviors are necessary. This article presents the successful results of a single case study examining the application of Parent-Child Interaction Therapy (PCIT) with an aggressive young boy and his foster-adoptive parent. PCIT is a dyadic intervention that has been identified as an empirically supported treatment for abused children and for children with different types of behavioral disruption. The application of PCIT to assist foster parents is a promising direction for child welfare services.

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The number of children entering out-of-home care nationwide increased 15.4% between 1998 and 2003, from 255,415 to 294,656 (CWLA, 2006a), and estimates reflect that about 74% of the children in out-of-home care in 2003 were in foster care (CWLA, 2006b). Clausen and colleagues (1998) reported 61% of their sample of children in foster care in San Diego showed evidence of mental health problems. Subsequent examination of the same group of children after a year in foster care showed that children experiencing multiple placements were at greater risk for mental health problems, even if they were not judged to be at risk when they entered foster placement (Newton, Litrownik, & Landsverk, 2000).

This evidence, combined with other research documenting a strong connection between placement disruption, behavior problems, and longer term negative consequences (for example, Cook, 1994; Newton, Litrownik & Landsverk, 2000) gives substance to the general belief that every attempt should be made to preserve a child's initial foster placement. There is currently some effort to design interventions for foster parents in order to reduce the risk of placement volatility (for example, Fisher, Burraston, & Pears, 2005; Fisher, Gunnar, Chamberlain, & Reid, 2000). This article reports on the effectiveness of Parent-Child Interaction Therapy (PCIT) in reducing a foster parent's stress in coping with a foster child's behavior problems, hence increasing the likelihood of placement stability.

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Although ample evidence exists for the presence of mental health problems in foster children, examining some of the reasons why these children exhibit these problems is of value. On its own, entry into foster care increases the likelihood of developing mental health problems (Lawrence, Carlson, & Egeland, 2006). Maltreated children are removed from familiar environments and into environments they know are temporary. In fact, Needell and colleagues (2006) found that of the children who entered foster care in 2000 in California and remained in care for at least six months, 29% had three or more placements during that six-month period. The uncertainty of their current living situations, and their future placement(s) may create considerable anxiety, over and above that already created by the trauma of maltreatment and the chaotic environment of abusive households.

The family environments that sustain child maltreatment often involved substance abuse (McNichol & Tash, 2001), mental illness, a high degree of emotional dysregulation, and limited or inconsistent child management skills (Kelly, 1983; Wolfe, 1987; Wolfe, Aragona, Kaufman, & Sandler, 1980). The combination of the uncertain, insecure nature of the foster care experience; and their maltreatment; and their abusive parents' limited parenting skills help explain why many children in foster care have problems related to behavioral disruption, such as defiance, aggression, and noncompliance.

Children's externalizing such behavior problems are particularly troublesome for foster parents. A defiant, aggressive child who resists the positive influence of substitute caregivers, makes it difficult for the caregiver to provide a nurturing environment for the child. Perhaps for this reason, children with externalizing behavior problems are likely to have more placement changes than others (Newton et al., 2000).

In a way, behavior problems are a focal element of maltreated children's relationships with caregivers. Although, the child's aversive behaviors are barriers to developing new relationships with foster parents, research suggests that in interactions with

their abusive parents, these behaviors may be part of a self-protective strategy to elicit predictable responses from the parent and thus serve to organize their environments (Crittenden, 1999).

Many maltreating parents have problems related to aggression (involvement in multiple forms of violence in addition to violence directed toward their child); impulsivity; defiance (for example, yelling, threatening, and hostile behaviors); and misattributions (such as hostile parental attributions to benign child behavior). The children may incorporate their parents' patterns of emotionally dysregulated behaviors into their views of normal family relationships. Research has shown, for example, that children with a history of abuse are both more likely to be highly aggressive and to be victims of bullying (Crick & Dodge, 1994).

Although negative behavior may be abused children's predominant style for obtaining their parents' attention, maltreating parents often fail to recognize the children's positive behaviors (Cerezo & D'Ocon, 2000). For example, abusive parents may ignore their children's positive behavior, but pay attention to the children when they whine, have temper tantrums, or destroy property, even if only to yell or punish them in some way.

The failure to establish a consistent pattern of interaction with their children is one of the more detrimental characteristics of abusive parent-child relationships. This may be the result of the parent's mental health problems; lack of healthy, appropriate parenting knowledge and skills; involvement in a stressful, chaotic lifestyle, or substance abuse. Lacking consistent, significant reinforcement for desired behaviors, the child entering foster care may not have the basic parent-child, family, and sibling social interaction skills necessary to easily adapt to a new foster home.

Another concerning outcome of inconsistent parenting, both in the family of origin and with different foster parents, is that abused children's ability to develop positive social relationships with others may be impaired. Research has shown that placement disruption is often related to attachment problems (Fanshel, Finch, & Grundy, 1990), which, if uncorrected, may also

impede the children's later ability to function as adults in work and family roles.

Following is a description of using PCIT to address the behavioral and relationship problems of a child with a history of abuse and multiple foster placements.

Parent-Child Interaction Therapy

Although initially developed as a parent-training model, PCIT is unique in that it provides a strong, intensive positive interaction training component; incorporates both the caregiver and child in the treatment session; and provides the mechanism to change the pattern of the dysfunctional parent-child relationship, which the maltreated child may bring to the foster care parent-child relationship—all with live coaching (Eyberg & Robinson, 1982).

PCIT is conducted in two phases: child-directed interaction (CDI; also described as the Relationship Enhancement phase) and parent-directed interaction (PDI; also described as the Behavior Management phase). Both phases of treatment are preceded by a didactic treatment session in which the parent and child are instructed in basic PCIT Relationship Enhancement and Behavior Management concepts. The objective of the didactic sessions is to introduce both parent and child to the concepts and provide a rationale for each concept.

Neither parent nor child is expected to master the skills as a result of information acquired during the didactic treatment session. Instead, acquiring and developing skills occurs during the six to eight treatment sessions following each didactic session. These treatment sessions are described as "coaching" sessions because the parent wears a small remote hearing device (similar to a hearing aid), while the therapist talks to him or her from an adjoining observation room, watching through a two-way mirror. As the parent interacts with the child, such as playing with age-appropriate toys at a table, the therapist coaches the parent from the observation room, using a low-level FM transmitter to provide verbal prompts.

In general, parents learn and practice, then master, specific skills related to communication and behavior management with their children. In CDI (typically 7–10 sessions), the primary goal is to create or strengthen a positive, mutually rewarding relationship between the parent and child (see Hembree-Kigin & McNeil, 1995, for a full description of the PCIT program). In PDI (typically 7–10 sessions following CDI), the primary goal is to provide specific effective parenting skills for parents to use in managing their children's behavior.

A typical coaching sequence might unfold like this:

Parent and child are sitting side-by-side and drawing with colored markers on a piece of paper.

Coach: Watch what Bobby is doing, and tell him what you see him doing.

Parent: Bobby, I see you're drawing a picture of a racecar! (*Describing appropriate behavior.*)

Coach: That was a great description of Bobby's behavior. That will help him stay on track with drawing his racecar. Bobby is really doing a wonderful job of sitting in his chair and being gentle with the crayons today. (*Praising Bobby's appropriate behavior.*)

Parent: Bobby, you are being so careful with those crayons! Wow! That's such a great picture!

Coach: Wonderful praise! By praising Bobby for playing nicely, he's more likely to continue to be gentle with the crayons. (*Praising the parent's positive response to Bobby's behavior.*)

Through a course of treatment sessions, parents are coached in promoting positive, appropriate statements with their children (for example, praising or providing positive attention for desired behaviors), while eliminating statements that might promote negative interactions, like demands, critical statements, or threats.

Numerous studies have demonstrated the effectiveness of PCIT for reducing child behavior problems (Eisenstadt, Eyberg, McNeil, Newcomb, & Funderburk, 1993; Eyberg, Funderburk, Hembree-Kigin, McNeil, Querido, & Hood, 2001; Eyberg, 1988; Eyberg & Robinson, 1982) and maintaining these positive effects up to two years post-treatment (Eyberg et al., 2001). Treatment effects also have been shown to generalize to school settings (Funderburk, Eyberg, Newcomb, McNeil, Hembree-Kigin, & Capage, 1998; McNeil, Eyberg, Eisenstadt, Newcomb, & Funderburk, 1991) and to untreated siblings (Brestan, Eyberg, Boggs, & Algina, 1997; Eyberg & Robinson, 1982). In addition, PCIT also has been shown to be equally effective for both birth parents of physically abused and nonabused children with behavior problems (Chaffin, Silovsky, Funderburk, Valle, Brestan, Balachova, Jackson, Lensgraf, & Bonner, 2004; Timmer, Urquiza, Zebell, & McGrath, 2005). Given the documented effectiveness of PCIT in helping parents manage their behavior-problem children, even when they have a history of physical abuse, we expected it would be an effective intervention for this foster-parent/foster-child dyad.

Some foster parents may have concerns about being active participants in an intervention designed to help them manage child behavior problems. Foster parents usually seek a mental health referral because the child's behavior is very difficult to manage and is disruptive to them and their family. They would like assistance in changing the child's disruptive behavior, but also believe they have cared for many children and have good parenting skills and that the child has the problem and should be the focus of treatment.

To overcome these concerns, PCIT therapists work with foster parents to help them recognize the need for them to be the agent of positive change in the child, and a safe, predictable caregiver. Therapists also continue to show foster parents—while coaching—how powerful and effective they are in providing the child guidance and emotional support.

We argue that PCIT's focus on the caregiver in relationship-enhancing activities will help the children to adjust more easily to the new foster placement. In addition, tailoring behavior-management skills to individual children's needs should increase foster parents' perception of control over the children and also improve children's likelihood of complying with commands.

Method

Participants

The family in treatment was a 41-year-old married foster-adoptive mother and her 4-year-old foster son, "J." The foster-adoptive mother had custody of the boy just two months before entering treatment. The family was referred to the CAARE Diagnostic and Treatment Center at the University of California–Davis Medical Center by their social worker because of the child's extreme physical and verbal aggression toward his parents, his impulsivity, and the parents' inability to soothe their foster son when he threw temper tantrums.

The therapist saw the foster-adoptive mother and J for 36 PCIT sessions in the clinic—four assessments, two didactic sessions, and 30 coaching sessions. After J and his foster-adoptive mother had attended six sessions, they began receiving weekly adjunct in-home sessions to help them use their newly acquired PCIT skills in the home environment.

Child History

J was taken into protective custody at age 16 months when his newborn brother tested positive for exposure to amphetamines and cocaine. J was first placed with his paternal uncle, but was removed a month later when the uncle was arrested. J was moved to a foster home, but was removed just two months later when the foster parents were reported to have physically abused one of the children in their care.

J remained in a subsequent foster home (his third placement) for 10 months, his fourth placement for two weeks, and his fifth placement for almost two months. These foster parents initiated the placement changes because of J's extremely aggressive behavior (kicking, hitting, and spitting). During his last three placements, J's birthmother was working on reunifying with him and had unsupervised visits with him. Because J's aggressive behavior seemed to be escalating after visits with his mother, in addition to an increasing repertoire of self-abusive and sexualized behaviors, the birthmother's visits were changed from unsupervised to supervised, and she and J were referred to the CAARE Center for PCIT.

J and his birthmother began treatment in PCIT about the same time he moved into his sixth foster home. They attended 11 treatment sessions, completing the first phase of treatment, but dropped out of treatment when his mother decided to terminate reunification efforts. J remained in his sixth placement slightly more than a year until he was moved into his current foster-adoptive home.

Diagnoses

When J entered treatment with his birthmother at age 2.7 years, the therapist noted his head-banging, temper tantrums, and low-average scores on the Peabody Picture Vocabulary Test-Third Edition (PPVT-III; Dunn & Dunn, 1997). Shortly after moving into his current home at age 3.8 years, J underwent a comprehensive psychological evaluation. At that time, as a year earlier, he scored in the borderline range on the Stanford-Binet Fourth Edition and on measures of expressive and receptive vocabulary.

Because of his aggressive behavior, temper tantrums, and short attention span, the psychologist felt his symptoms were best described by a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) but expressed some uncertainty, noting the possible effects of his many placement changes. At that time, J had only been with his new family for three weeks. Several months later, J was evaluated by a psychiatrist who confirmed

the earlier diagnosis of ADHD and noted symptomatology consistent with an anxiety disorder. Consequently, the psychiatrist prescribed Paxil and Adderall. Both drugs were discontinued after brief periods.

Measures

Standardized measures. The Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999) and the Child Behavior Checklist (CBCL; Achenbach, 1994) were used to assess the frequency and severity of J's behavior problems. Both measures are normed and validated by a substantial amount of research.

Scores on the Parenting Stress Index (PSI; Abidin, 1995) indicated the amount of stress the foster-adoptive mother felt as a result of her insecurities in her parent role, and the amount of stress she felt as a result of J's difficult behaviors (see Abidin, 1995, for documentation of validity studies).

Child Abuse Potential Inventory (CAPI; Milner, 1986) scale scores measured the likelihood the mother would physically abuse J. To a large extent, these scores reflect the amount of distress—for example, depressive symptoms—a caregiver is experiencing.

Observational measures. The Dyadic Parent-Child Interaction Coding System (DPICS) was used to code parent and child verbalizations and behaviors. The DPICS is a microanalytic behavioral coding system developed to code behaviors in children and parenting skills associated with Parent-Child Interaction Therapy (DPICS, Eyberg & Robinson, 1982). The DPICS has a total of 20 different parent and child codes, distinguishing among different kinds of verbalizations (descriptions, questions, and commands, for example), vocalizations (yell, whine, laugh), and behaviors (such as compliance, answering, physical positives).

In this study, we focused on the types of verbalizations critical to achieving a level of mastery in play therapy skills—descriptive and reflective statements, questions and commands, and labeled and unlabeled praise. Criteria for achieving mastery were at least 25

descriptive and reflective statements; at least 15 praises, 8 of which should be labeled; and no more than 3 questions or commands.

- Descriptions are nonevaluative, declarative sentences that describe people, objects, or activities.
- Reflective statements repeat or rephrase the immediately preceding verbalization by the other member of the dyad.
- Praises are any positive evaluation of products, attributes, or behavior of the other. Unlabeled praises are general, nonspecific positive evaluations ("Good job!"), whereas labeled praises are specific in nature, describing what merits praise ("Good job drawing that house!").
- Questions are verbal inquiries distinguished from declarative statements by having a rising inflection at the end or by having the structure of a question. Questions that suggested a behavior should be performed by the other person (commands in the form of a question) were coded as commands.
- Commands are directions from one person to another that include a stated or implicit you as the subject, and a verb phrase indicating a vocal or motor behavior should be performed.

Procedures

Before treatment, after the relationship enhancement phase, and upon graduation from treatment, parents and their children are observed and videotaped as they play together in a DPICS session. These are evaluative sessions in which parent-child dyads engage in three distinct five-minute play situations, varying in the amount of parental control required.

The first situation, Child Directed Interaction, requires the parent to follow the child's lead in directing play. Parents are told to let the child pick an activity and to play along. In the second situation, Parent Directed Interaction, parents are instructed to pick an activity and have the child play with the parent according to the parent's rules. The third and final situation consists of the parent

directing the child to clean up without the parent's assistance. The therapist codes the parent's verbalizations for the first five minutes of the DPICS session.

In addition to coding the DPICS sessions, the therapist uses the first five minutes of each weekly treatment session to observe parent-child interactions in child-directed play. The therapist remains silent, coding parent verbalizations.

Because the therapist has an interest in portraying the client in a favorable light, 20% of the tapes were recoded by research assistants who had achieved 85% reliability with each of two criterion tapes. The intercoder reliability, measured by an intraclass correlation, was $r = 0.96$.

Results

Standardized Measures

J's score on the PPVT-III, obtained at age 2.8 years, shows a receptive vocabulary T score of 42, which is extremely low. The child's anxiety in a strange environment, however, and possible difficulties in focusing on the task may account for the low score.

In March 2000, three weeks after his move to his foster-adoptive parents' home, J was given a comprehensive psychological evaluation that included a battery of cognitive tests. J's scores on the PPVT-III at that time were in the borderline range ($SS = 75$). Six months later, he received another comprehensive psychological evaluation and was also administered the PPVT-III, in addition to a battery of other measures. He obtained a score of 101 on this measure of receptive language, which is well within the normal range.

Table 1 shows the scores of pretreatment measures obtained from the foster-adoptive mother's scores on the pre-, mid- and post-treatment measures. The foster-adoptive mother's ratings of her son on the ECBI at pre-treatment show clinical levels of intensity and numbers of behavior problems. An examination of individual items showed the biological mother rated him as highly oppositional,

TABLE 1

Standard Measures for Pre-treatment, Mid-treatment, and Post-treatment

Measure	Pre-treatment	Mid-treatment	Post-treatment
<i>Eyberg Child Behavior Inventory (raw scores)</i>			
Intensity score	163**	156**	103
Problem score	22**	1	4
<i>Child Behavior Checklist (T-scores)</i>			
Internalizing	60	46	33
Externalizing	67**	63	49
Total	66**	60	44
<i>Parenting Stress Index (percentile scores)</i>			
Child as a source of stress	90**	67.5	50
Child's distractibility subscale	99**	92.5	45
Child acceptability subscale	85*	50*	20
Child reinforces parent subscale	55	15	30
Parenting as a source of stress	22.5	7.5	52.5
Parent competence subscale	55	45	45
Parent attachment subscale	50	15	10
Total stress	57.5	22.5	47.5
<i>CAPI (raw scores)</i>			
Abuse	31	17	29
Faking good	yes	yes	no

*Borderline range

**Clinical range

defiant, angry, and whining, and as throwing temper tantrums.

A comparison of the foster-adoptive mother's pre-, mid-, and post-treatment scores on measures of child behavior problems showed the greatest drop in behavior problems from mid- to post-treatment. Scores on the ECBI and the CBCL not only dropped significantly (one standard deviation), they also dropped from clinical levels, or not far from clinical levels, to well within the normal

range. An examination of the PSI scales measuring child problems as a source of parenting stress also revealed consistent improvements across the three assessment periods. The foster-adoptive mother rated J as a significant source of stress pre-treatment, particularly with respect to his distractibility and the acceptability of his behaviors.

A comparison of the foster-adoptive mother's pre-, mid- and post-treatment scores on the parent domain scale of the PSI showed a substantial increase over time in the stress of raising her foster son. Scores move from the 23rd percentile at pre-treatment, to the 7th percentile after CDI, to the 52nd percentile after PDI. Her score on the PSI Defensive responding scale suggested she may have been minimizing her difficulties with J at midtreatment. Interestingly, changes in her Defensive Responding scale score correspond proportionally with changes in the measure of her stress from Parent Domain. This suggests the actual stress the foster-adoptive mother felt may not have changed much across assessment periods, and that her post-treatment scores on the scale measuring stress in the parent domain was most accurate at post-treatment, though still not in the clinical range.

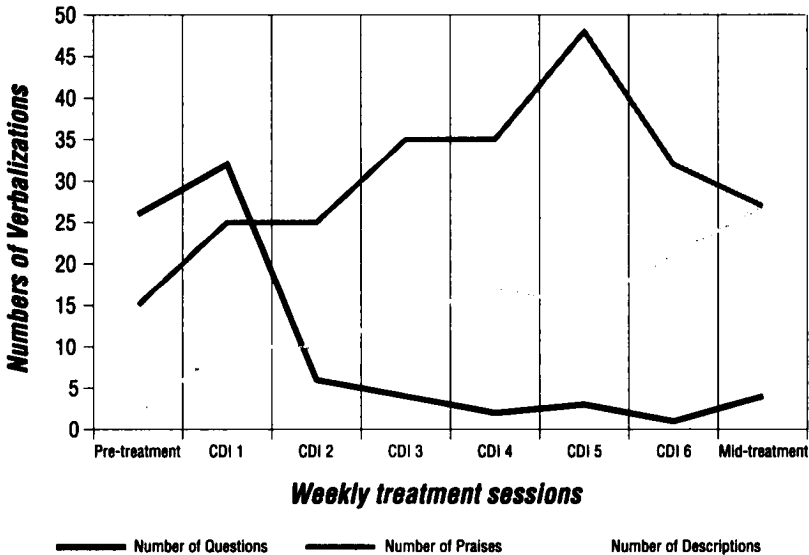
The foster-adoptive mother's scores on the CAPI abuse potential scale were quite low. This measure of parent distress and rigidity about parent and child roles, which strongly predict abusiveness toward children, has strong demand characteristics for answering in a "socially appropriate" manner. For this reason, we included the scores for Faking Good, which, like the PSI's Defensive Responding scale, reflects the reliability of the parent's abuse-potential score. Her faking-good scores suggested she may have been minimizing her own distress and frustration at pre- and mid-treatment. Consequently, her abuse scores were not reliable at these points in time, although they were unlikely to be clinically significant.

Observational Data

Figures 1 and 2 show the number of praises, descriptions, and questions/commands from the initial DPICS session at pretreatment

FIGURE 1

Total Number of Questions, Praises, and Descriptions During Weekly Five-Minute Uncoached Free Play: CDI



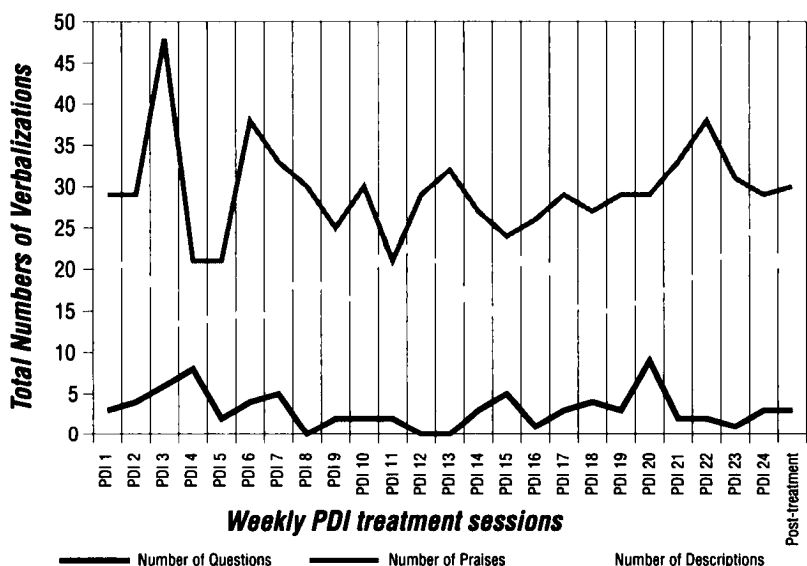
through the midtreatment DPICS session (Figure 1) and from mid-to post-treatment DPICS (Figure 2). These frequencies reflect the foster-adoptive mother's week-to-week progress in her ability to use relationship enhancing and behavior management skills.

Figure 1 shows at pretreatment, the foster-adoptive mother asked a lot of questions and gave very few praises or descriptions. She used questions both to involve herself in J's play, to teach him to think for himself ("What do you think it is?"), and to obtain compliance ("You're going to put all the toys away and put them in the corner. Does that sound good?").

Figure 1 also shows a substantial increase in her use of praise and descriptions. As she used more praises and descriptions, she reported improvements in her son's behavior at home. As the

FIGURE 2

Total Number of Questions, Praises, and Descriptions During Weekly Five-Minute Uncoached Free Play: PDI



graph shows, the number of questions she asked dropped dramatically after the first treatment session. At the same time, the number of praises she gave, and the degree to which she used descriptions to involve herself in J's play, increased significantly.

By the fourth treatment session, she had "mastered" fundamental play therapy skills of giving at least 15 praises, 25 descriptive or reflective statements, and no more than 3 questions or commands. Furthermore, the foster-adoptive mother was more than twice as likely to give very specific, labeled praises rather than more general, unlabeled praises like "Good job," per mastery criteria.

Figure 2 shows the numbers of praises, descriptive and reflective statements, and questions/commands from the midtreatment

DPICS, through 24 PDI sessions, to the post-treatment DPICS session. The foster-adoptive mother frequently used descriptions, suggesting high involvement in the child's activities; and she infrequently used questions or commands, suggesting low levels of intrusiveness. From the fourth to the last treatment session, she fell below mastery level only three times.

We observed some decay in the foster-adoptive mother's use of praise toward the end of treatment, by which time the habit of praising appeared to have been incorporated into her general style of interacting with J—it was more automatic and less of an effort. Overall, the foster-adoptive mother's liberal use of praise suggests a positive context for the parent-child relationship.

Discussion

In the case presented in this article, J, a young, maltreated child with a long history of using negative behaviors to manage difficult or uncertain relationships, was referred to PCIT for treatment together with his foster-adoptive mother. Over the course of treatment, the severity of his psychopathology became increasingly clear. Although J was very responsive to praise, and appeared to develop a warm relationship with his foster-adoptive mother over the CDI phase of treatment, J was extremely impulsive, distractible, and aggressive. As a result, the PDI phase of treatment took twice as long as usual. By the end of treatment, the foster-adoptive mother was able to control his negative behavior, preventing an escalation of negative and aggressive behavior, and helping him moderate his negative affect. PCIT could not eradicate J's impulsiveness, however. Medications prescribed post-treatment appeared to substantially moderate his impulsiveness.

A large part of PCIT's success depends on caregivers' dedication to and belief in the treatment process, and their investment in changing their children's behavior. In these ways, J's foster-adoptive mother represented the perfect PCIT parent. Noting

the changes in ECBI scores, however, and in the acceptability of the child's behaviors (PSI subscale), we believe PCIT helped reinforce her dedication. The changes she made in her own behavior produced changes in J's behavior, and thus increased her confidence in the process of PCIT.

Additionally, the therapist helped her understand the nuances of her interactions with J—how her tone of voice affected him, how she saw him responding to her praise, and her skills at following J's lead in play. In short, the PCIT therapist led her through a process of better understanding J through his behavior.

Through the efforts of dedicated foster parents, supported by both center-based and home-visiting therapists, PCIT was able to reduce J's behavioral problems, decrease parenting stress, and salvage a high-risk foster placement. The outcome of this final placement and intervention has been the successful adoption of J into a foster-adoptive family. Given the level of his behavior problems, without both this foster-adoptive family and PCIT intervention, J likely would have continued multiple foster placements and eventually been referred to residential treatment. The application of PCIT as part of a regular, ongoing intervention for maltreated children in foster care can provide a means of increasing foster care placement stability and improving the lives of both maltreated children and the foster parents who care for them.

Changing the foster child's understanding of how to interact with a parent figure—which becomes the maltreated child's world view—is difficult and not often undertaken. When parents and social workers underestimate the significance of the child's behavioral problems, the result often is placement loss. It is incumbent on mental health programs, social service administrators, and social workers to come to the assistance of foster parents in meeting the needs of these children (Faver, Crawford, & Combs-Orme, 1999; Robertson, 2006). Results of this case study suggest PCIT can be used to enhance the quality of the foster parent–foster child's

relationship and improve foster parents' skills in parenting difficult children, thus increasing foster placement stability and improving child mental health outcomes.

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