Challenging Children in Kin Versus Nonkin Foster Care: Perceived Costs and Benefits to Caregivers

Susan G. Timmer, Georganna Sedlar and Anthony J. Urquiza

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Susan G. Timmer
Georganna Sedlar
Anthony J. Urquiza
University of California, Davis Children's Hospital

This study uses social exchange theory as a framework for examining 102 kin and 157 nonkin foster parents' perceptions of their foster children, their relationships with them, and their own functioning. The authors argue that these perceptions reflect perceived costs and benefits of parenting these children, which may influence their investment in them. All children in the study were referred to Parent-Child Interaction Therapy (PCIT) for treatment of the children's behavior problems, participating with their foster parents. Analyses showed that nonkin caregivers rated their foster children's behavior problems as significantly more severe than kin caregivers but rated themselves as significantly less stressed. Analyses predicting early treatment termination showed that kin caregivers were more likely than nonkin caregivers to complete the course of treatment in PCIT, particularly if they reported elevated levels of parental distress. The authors discuss the implications of these findings for foster children's placement stability and long-term success.

Keywords: *foster care; kinship care; foster parent functioning; mental health treatment; PCIT*

Involvement in foster care has been shown to exacerbate (Newton, Litrownik, & Landsverk, 2000) and alleviate the negative effects of maltreatment on children (Jonson-Reid, 2002). Foster care, by its impermanence, is expected to aggravate children's mental health problems, impeding foster children's inability to form meaningful attachments (Newton et al., 2000). At the same time, foster care is believed to improve children's outcomes insofar as it removes them from a pathogenic home environment and increases the amount of supervision the child receives (Jonson-Reid, 2002). As a counterpoint to debates concerning the long-term costs and benefits of foster care, research consistently records high levels of mental health and externalized behavior problems among foster children (e.g., Armsden, Pecora, Payne, & Szatkiewicz, 2000; Clausen, Landsverk, Ganger, Chadwick, & Litrownik, 1998; Fanshel, Finch, & Grundy, 1990). These mental health problems are made worse by multiple placements, an unfortunate characteristic of the foster care experience (Newton et al., 2000).

Research on placement stability has consistently shown differences in the placement stability of children placed with kin caregivers and those placed with nonkin caregivers (Berrick, Barth, & Needell, 1994; Needell et al., 2003, 2004). Policy makers have argued that kin caregivers have a greater investment in the success of their own family members than nonkin foster caregivers (Ehrle & Geen, 2002), while other research has found few differences in the emotional quality of kin and nonkin foster home environments (Berrick, 1997). It is likely, however, that if kin and nonkin foster caregivers vary in their investment in their foster children's success, that the difference would not be visible in a sample containing a sizeable proportion of children with no mental health needs. One would expect differences between kin and nonkin foster caregivers (and children's experiences

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in their care) to be most visible when the foster children have severe behavior problems. Although research has noted that more than 50% of foster children have clinical levels of behavior problems (Clausen et al., 1998), there is little research on the experiences of foster parents and children in foster care that focuses on the children with severe behavior problems. The current study extends previous research by investigating kin and nonkin foster parents' perceptions of their children's behavior, their relationship with their children, and their own distress in a clinic-referred population. We use social exchange theory as a means for using these findings to speculate on their relationship to children's placement stability.

THEORETICAL CONTEXT

Using social exchange theory (Foa & Foa, 1980), it is possible to predict placement stability of foster children by analyzing the costs and benefits to a foster parent of the child's presence in the home. Social exchange theory proposes that relationships are maintained when the benefits of the relationship to the individual outweigh its costs. When a child has extreme behavior problems, the costs of placement stability are high. These children provoke others, causing stress and conflict in their placement. In the absence of counterbalancing visible benefits, there would seem to be little chance that these children would be retained in a placement. When there are benefits (e.g., if caregivers perceive that the children are attached to them and enjoy being with them, Walsh & Walsh, 1990), or if caregivers feel they are fulfilling a personal or family duty to care for the children, then the costs of maintaining disruptive children to a foster parent in a placement may be offset.

When a child is reported to have severe behavior problems, mental health treatment can help foster parents perceive more benefits of caring for foster children by diminishing their behavior problems and by improving the foster parent–foster child relationship. When a child is referred to mental health services for treatment of externalizing behavior problems, and the foster caregiver opts out of those services, then we might assume that either the child's problems are not particularly severe (so the emotional cost to the foster parent of not receiving service is not great), or that the future benefits of participating in treatment with the child are not substantial enough to offset the current costs to the foster parent of coping with challenging behaviors. The current study also explores predictors of kin and foster caregivers' persistence in treatment with their foster children who are referred to Parent-Child Interaction Therapy (PCIT) for treatment of their externalizing behavior problems as a proxy for evaluating caregivers' commitment to their children.

DIFFERENCES BETWEEN KIN AND NONKIN FOSTER CAREGIVERS

To evaluate the differential effects of negative child behaviors on kin and foster caregivers, it is important to consider the similarities and differences between the two types of caregivers. Research has consistently reported that compared to nonkin foster parents, kin caregivers are more likely to live in poverty (Berrick et al., 1994; Ehrle & Geen, 2002). According to data from the 1997 National Survey of America's Families, 39% of children in kinship foster care lived below the federal poverty line compared to 13% of nonkin foster caregivers (Ehrle & Geen, 2002). Children in kin foster care were less likely than those in nonkin foster care to receive public assistance or Medicaid even though most of the children would have qualified (Ehrle & Geen, 2002). Research has also found that kin foster caregivers have had less formal education than nonkin, were more likely to be non-Hispanic Black, and more likely to be unmarried (Berrick et al., 1994; Ehrle & Geen, 2002; Le Prohn, 1994). Studies have also found that kinship foster caregivers tended to be older than nonkin foster caregivers, and in poorer physical health (Berrick et al., 1994; Le Prohn, 1994). Furthermore, children with suitable kinship placements were likely to be court ordered into placement, non-White, older, without disabilities, and removed from their homes because of parental substance abuse (Beeman, Kim, & Bullerdick, 2000). A study using a national sample of children in foster care found that children in kinship care were more likely than nonkin foster children to have been victims of abuse or neglect (Cook & Ciarico, cited in Ehrle & Geen, 2002). Taken together, these findings describe kin caregivers as more likely than nonkin foster caregivers to bear a burden of stressors (e.g., financial, social), and to be responsible for children with histories of maltreatment.

DIFFERENCES IN KIN AND NONKIN FOSTER PARENTS' PERCEPTIONS OF THEIR FOSTER CHILDREN

In spite of the difference in maltreatment history, children in kinship care were found to have lower levels of behavior problems than children in nonkin care (e.g., Dubowitz & Sawyer, 1994; Keller et al., 2001), although both groups of children have more behavior

problems than the norm (Armsden et al., 2000; Clausen et al., 1998; Fanshel et al., 1990). In addition, research on foster children in San Diego County found that kinship caregivers were less likely than nonkin foster caregivers to seek or receive mental health services for their foster children (Leslie et al., 2000), suggesting that children in kinship care either have fewer problems or are perceived by their kin caregivers as having fewer problems than children in nonkin foster care. Investigations of foster children's psychological functioning found that kin caregivers' and teachers' ratings showed higher levels of agreement than nonkin caregivers' and teachers' ratings (Shore, Sim, Le Prohn, & Keller, 2002). Furthermore, nonkin foster caregivers, in comparison to teachers, rated foster children's behavior problems as more severe (Shore et al., 2002). These findings suggest that previously reported differences in levels of behavior problems between children in kinship and nonkinship foster care may be a function of caregiver differences, or in nonkin caregivers' lower tolerance for children's behavior problems. The tendency for nonkin foster parents to report their foster children's problems as more severe may make them more visible to caseworkers and increase the likelihood that they will ultimately receive mental health services. Children's challenging behaviors may also jeopardize foster caregiver's investment in caring for them, thereby increasing their risk of placement disruptions. In addition, frequent placement changes have been linked with higher levels of behavior problems (Newton et al., 2000), thus creating a negative cycle of instability, disrupted relationships, and externalizing problems for many children in the foster care system.

These findings suggest that, on the whole, kin caregivers are less likely to identify problems in their foster children. However, when kin caregivers do identify problems, it is possible that the children are more severely distressed than children with nonkin caregivers, although their behaviors may be reported as equally severe.

DIFFERENCES IN KIN VS. NONKIN FOSTER CAREGIVERS' USE OF MENTAL HEALTH SERVICES

Research has shown that mental health services delivered to children in foster care account for a substantial portion of mental health services delivered to all children. In a study of children entering foster care for the first time in San Diego County, 41.5% had at least one outpatient mental health visit while in out-of-home placement during an 18-month period (Leslie et al., 2000). Children in nonkinship foster care averaged nearly twice as many visits during this 18-month period as children in kinship foster care. Explanations for this difference in mental health service use have focused on observations that kin caregivers received less supervision by caseworkers (Berrick, 1997; Berrick et al., 1994; Leslie et al., 2000), as well as kin caregivers' lack of training, resources, and understanding about how to gain access to these services (Berrick, 1997; Leslie et al., 2000). These findings reinforce the notion that kin foster parents are less likely to perceive problems or seek mental health services for their children.

BARRIERS TO MENTAL HEALTH SERVICE DELIVERY

Although research suggests that symptom levels of foster parent-foster child dyads will improve with treatment (Fisher, Gunnar, Chamberlain, & Reid, 2000; Timmer, Urquiza, & Sedlar, 2004), various barriers to treatment participation may exist. First, foster parents may not want to give the time and energy necessary for treatment and may question the value in spending time and energy in therapy with a troublesome child. Therapy involving parents and children is time intensive and demanding. This is particularly true for caregivers who might be only marginally or reluctantly invested in improving their foster children's mental health. First, for instance, in a clinic-based treatment such as PCIT, the foster parent must bring the child to therapy, arrange for child care of other children in the household, and practice new parenting skills at home. Second, foster parents may be resistant to adjusting their parenting styles for the sake of one child. Considering the numerous costs to foster parents of participating in PCIT with their foster children, social exchange theory leads us to assume that unless continuing this treatment provided the foster parent substantial benefits, they would be likely to drop out prematurely.

PURPOSE

In the current study, we argue that the factors that contribute to retaining challenging foster children in placements may be similar to those factors contributing to participation in PCIT with foster children. We compared kin and nonkin foster parents' perceptions of their children with behavior problems, their relationships with them, and the stress of caring for the children. We also compared kin and nonkin foster parents' persistence in a treatment that required their active participation (i.e., PCIT) and explored the barriers to their treatment completion. Previous

research led us to hypothesize that even when their foster children are referred to mental health treatment, kin foster caregivers will report lower levels of problems. If kin foster caregivers have a greater personal investment in their foster children's welfare, we would expect kin foster parents to endorse greater parenting stress and personal psychological distress. We would also expect them to persist in a personally demanding therapy that promised to reduce behavior problems and improve the caregiver-child relationship. We argue that these factors reflect the perceived costs and benefits that foster caregivers face when parenting challenging foster children.

METHOD

Sample Description

Eligible participants in this study were 259 kin and nonkin foster parents and their foster children who had been referred for PCIT services at a clinic primarily serving children in the child welfare system. Children referred for PCIT had trouble adjusting to placements, and/or were displaying acting-out and disruptive behaviors. The proportion of kin (n = 102, 39.4%) to nonkin (n = 157, 60.6%) foster parents is roughly proportional to the numbers of children in this county in kin versus nonkin foster care in October 2002 (39% vs. 61%) (Needell et al., 2003). Referrals were primarily made by the child's caseworker because the child was either difficult to manage, or had difficulties adjusting to a new caregiver. For example, nearly two thirds of the sample scored in the clinical range on the Eyberg Child Behavior Inventory (ECBI; 65.8%) (Eyberg & Pincus, 1999), and in the clinical range on the Parent-Child Dysfunctional Relationship Scale of the Parenting Stress Index–Short Form (PSI-SF; 62.0%) (Abidin, 1995).

The foster children in the sample ranged in age from 2 to 8 years (Mean age = 4.37 years); 68% were younger than 5 years of age. Approximately two thirds of the children were boys (63.7%), and 94.6% of the caregivers were women. More than one third of caregivers (38.6%) and children (39.0%) were White/Non-Hispanic, one third were African American (caregivers 34.4%, children 38.6%), and nearly 20% were Latinos (caregivers 18.1%, children 19.7%). More than 75% of foster caregivers and foster children matched on ethnicity (kappa = .64).

The kin and foster parents were included in the current study whether or not they had completed all measures of parent and child functioning. Using all kin and nonkin foster parents who attended an initial clinical interview, regardless of the timing of treatment termination or the completeness of standardized assessment measures, maximized our ability to determine the psychological barriers to treatment. In addition, the number of missing measures recorded for participants who complete versus drop treatment showed a clear correlation: 8.8% of treatment completers were missing 4 to 6 (of 6) measures of parent and child functioning, compared to 30.5% of those who had some treatment, and 53.6% of those who never started treatment, $r(259) = .36$, $p < .000$. If we had eliminated those with missing data, we would have lost important information about the processes related to early treatment termination. Instead, we chose to perform an analytic procedure that would allow us to include all participants, and all possible information by including indicators of missing data.

Treatment Description

All dyads were referred primarily for treatment of externalizing behavior problems and were assigned to PCIT because they were younger than 9 years of age and did not have a history of severe trauma. (When we refer to "treatment" in the following sections we refer to the foster parent-foster child dyads' participation in PCIT.)

PCIT is conducted in two phases, with a mid-treatment assessment marking the end of the first and beginning of the second phase. The first phase focuses on enhancing the parent-child relationship (often described as child-directed interaction or CDI), and the second focuses on improving child compliance (often described as parent-directed interaction or PDI). Both phases of treatment begin with an initial didactic training, followed by therapist coaching in dyadic play situations. The coaching is conducted from a separate observation room via a "bug-in-the-ear" receiver that the parent wears like a hearing aid. Parents are taught and practice specific skills of communication and behavior management with their child. In the CDI phase (typically 7 to 10 sessions), the main treatment goal is to enhance the quality of the parent-child relationship through use of specific parenting skills. In the second phase (typically 7 to 10 sessions following CDI), the primary goal is to provide effective parenting skills for parents to use in managing their child's behavior. Often, many of the child's difficult behaviors decrease by the end of CDI, which makes the process of training parents to obtain compliance with commands easier (Eyberg & Matarazzo, 1980).

Procedures

During the intake interview, parents completed a battery of standardized measures and a short demo-

graphic questionnaire. Dyads were considered to have completed treatment when the parents were able to meet mastery criteria for the Relationship Enhancement portion of PCIT (i.e., CDI), obtain compliance with commands from their children, and successfully negotiate a discipline procedure, continuing to maintain skills learned in the first phase of treatment. Graduation from PCIT was marked by a final treatment session, where parent and child were videotaped playing together and received a special certificate. If a parent chose to terminate treatment before they had fulfilled these tasks, they were considered to have terminated early. Dyads that did not attend any treatment sessions past the initial intake session were also considered as having terminated early. The average number of treatment sessions to treatment completion was 13.6 (SD = 7.4). The average number of coaching sessions for dyads terminating early was 7.1 (SD = 6.7).

Measures

Child Abuse Potential Inventory (CAPI). The CAPI (Milner, 1986) is a 160-item inventory that features an Abuse Potential scale, and several validity scales. The Abuse Potential scale is a 77-item measure that combines six subscales: Rigidity of Beliefs (especially expectations for children's behavior), Distress (a state-like indicator of personal adjustment problems), Unhappiness (a trait-like indicator of unhappiness vs. happiness), Problems With Child, Problems With Family, and Problems With Other People. The scales are normed and validated by a multitude of studies (Milner, 1986). In addition to the abuse scale, we also use the rigidity subscale as an indicator of foster parents' beliefs about the rigidity and traditional nature of parents' and children's family roles. The clinical cutoff for the abuse scale is a raw score of 166, and for the rigidity scale, a raw score of 30 (Milner, 1986).

Child Behavior Checklist (CBCL). The CBCL (Achenbach, 1994; Achenbach & Rescorla, 2001) is a standardized instrument that lists 112 problem behaviors that children display. Parents or primary caregivers of children between the ages of 4 through 16 years completed the earlier version, and the later version between the ages 5 through 18. There is a separate version of the CBCL for young children: The age range for the early version is 2 to 4 years, and 1½ to 5 years for the later version. Separate norms are provided for boys and girls in different age groups. Normative data is derived from a large sociologically diverse population of nonreferred and clinically referred children and their parents. All versions of the CBCL contain two broadband scales (Internalizing and Externalizing), and a Total Problems score. Approximately 97% of the caregivers used the early version of the CBCL. Other analyses of all foster caregivers showed that the early and late versions of the externalizing scale correlated similarly with the ECBI, (Early version, $r(N = 306) = .74$; Later version, $r(N = 18) = .7$), so we did not distinguish between the two versions in subsequent analyses. The clinical cutoff for the three broadband scales is a T score of 65.

Eyberg Child Behavior Inventory (ECBI). The ECBI is a 36-item scale that measures behavior problems exhibited by children 2 to 16 years of age. Parents indicate the frequency of certain behaviors (Intensity scale) and whether they are problems for them (Problem scale) (Eyberg & Pincus, 1999; Eyberg & Ross, 1978). Raw Intensity scale scores above 130 and Problem scale scores above 14 are clinically significant (Eyberg & Pincus, 1999).

Parent Stress Inventory (PSI-SF). The PSI (Abidin, 1995) was designed to identify parent-child dyads that are experiencing stress and are at risk for developing dysfunctional parenting and child behavior problems. The PSI-SF is a 36-item scale consisting three scales: the Parental Distress, Parent-Child Dysfunctional Relationship, and Difficult Child scales. Raw scores above 33 on the Parent Distress and Difficult Child scales, and above 27 on the Parent-Child Dysfunctional Relationship scale are considered clinically elevated (Abidin, 1995). The PSI-SF also has a reliability scale (Defensive Responding) consisting of seven items from the Parental Distress scale. Respondents scoring in the lowest 15th percentile of this scale (less than a raw score of 11) also scored lower on other standardized measures of parent functioning: the CAPI abuse scale, $F(1, 155) = 6.65$, $p < .02$, $\eta^2 = .04$, observed power = .73; and the SCL-90-R global severity index, $F(1, 152) = 9.01$, $p < .01$, $\eta^2 = .06$, observed power = .85. Defensive responding is thought to signify either that parents are minimizing parenting stress, that they are more competent than the average parent and unusually sanguine, or that they do not care enough about the child to feel stressed by the difficult behavior (Abidin, 1995).

Symptom Checklist 90-R (SCL-90-R). The SCL-90-R (Derogatis, 1994) is a 90-item self-report symptom inventory designed to assess current presence of psychological symptom patterns. Each item is a brief description of a psychological symptom, and is rated on a 5-point scale (0 = *no discomfort* to 4 = *extreme discomfort*). The SCL-90-R has nine symptom subscales. We focused on the measure of depressive symptoms, as these symptoms are noted as possible contraindi-

cators of success in PCIT (Hembree-Kigin & McNeil, 1995). T scores above 62 on the depression scale are considered to be clinically significant (Derogatis, 1994).

Maltreatment history. Information about the children's history of abuse, neglect, and their prenatal exposure to toxic substances was obtained by research staff's review of court records, and by therapists' and social workers' reports. Children were noted as either having a suspected or documented history of abuse, neglect, or having no history of maltreatment. Further information on the details of abuse that would allow a judgment of severity was only available for a few children, so that abuse-related variable was not included in analyses.

Patterns for treatment termination. As part of the process of closing cases, therapists were required to complete a discharge summary and noted who initiated treatment termination.

Analysis Plan

We began our analyses by comparing kin and nonkin foster parents' and children's demographic characteristics, foster parents' perceptions of their foster children, and their own levels of functioning, using ANOVAs and nonparametric statistics (e.g., chi-square). Next, omitting dyads whose treatment Child Welfare Services (CWS) terminated ($n = 30$), we used Cox regression to model the influences of perceptions of foster children's behavior, the foster parent-foster child relationship, and parents' own functioning on their persistence in PCIT. Cox regression procedures were selected because of their capacity for modeling the likelihood that a "hazardous" event (e.g., attrition) might occur. Cox regression is similar to a binary logistic regression but differs in an important way. Although logistic regression would produce estimates of the log odds of treatment attrition, the dependent variable in a Cox regression is an expression of the time between the onset of treatment and attrition, incorporating the fact that not all participants terminate treatment early (i.e., censored events). This strategy also allows the investigator to determine whether the hazard of dropping out is proportional across time for both groups of foster parents. The time variable in the current study noted if dyads ever started PCIT, dropped during CDI, or dropped during PDI (this type of delineation was necessary to account for variations in the speed with which treatment progressed). Coefficients are expressed as exponentiated betas, reflecting the increasing (coefficients above 1.0) or decreasing likelihood (coefficients below 1.0) that the hazardous event will occur with each unit increase in the independent variable. The fact that missing data might not be a random occurrence suggested that we take missing data into account when modeling attrition from treatment (National Institute of Child Health and Human Development Early Child Care Research Network & Duncan, 2003). Therefore, we created missing value dummy variables for the measures of foster parents' perceptions of children's behavior, the caregiver-child relationship, and their own psychological functioning, and assigned sample mean values to individuals with missing data on each variable. This strategy allowed us to test the importance of missing data on attrition from PCIT.

RESULTS

Table 1 presents the demographic differences between kinship and foster caregivers in our sample. The only significant difference between these two groups lies in the greater likelihood for kin caregivers versus nonkin caregivers to have brought male foster children to treatment. In addition, nonkin caregivers were slightly more likely to be married than kin caregivers. There were no significant differences between the age and level of educational attainment of the two groups of caregivers, nor were there differences between the children's age, ethnicity, or amount of time in placement.

Table 2 shows the percentages of kin and nonkin foster caregivers who completed treatment, the number of coaching sessions needed to complete treatment, the percentage terminating treatment early and the timing of treatment termination (during CDI vs. PDI), and who initiated treatment termination. Kin foster caregivers were significantly more likely to complete treatment than nonkin caregivers, $\chi^2(1, N = 259) = 8.09$, $p < .01$. When analyses controlled for kin foster caregivers' greater likelihood of finishing treatment, the two groups of foster parents did not differ in the number of coaching sessions attended, $F(3, 240) = 1.23$, n.s. Among those terminating treatment early ($n = 145$), approximately two thirds of kin and nonkin caregivers were likely to leave treatment during the first phase (CDI). The remainder was equally divided between those who never started treatment and those terminating treatment during the second phase of treatment (PDI). Caregivers initiated treatment termination in nearly one half of all cases of early treatment termination. Approximately one fourth of cases were terminated by CWS (e.g., if a child were to be moved imminently to a new preadoptive home, CWS would terminate PCIT with the current foster parent). Nonkin foster caregivers were

TABLE 1: Descriptive Statistics - Differences Between Kin and Nonkin Foster Parents

N = *259*	*Kinship/Foster Child Dyads* n = *102 (39.4%)*	*Nonkin/Foster Child Dyads* n = *157 (60.6%)*	*Effect*
Sex of child (% male)	72.5	53.0	*
Mean age of child (years)	4.5 (1.62)	4.3 (1.96)	n.s.
Mean age of caregiver (years)	47.4 (11.9)	44.9 (11.8)	n.s.
Child's ethnicity			n.s.
% White	41.2	37.6	
% African American	33.3	42.0	
% Latino/Latina	21.6	18.5	
% Other	3.9	1.9	
Caregiver's ethnicity			n.s.
% White	39.2	45.2	
% African American	31.4	32.2	
% Latino/Latina	21.6	15.9	
% Other	7.8	9.6	
Female caregiver's educational attainment			n.s.
% High school graduate or less	42.1	34.0	
% Some college	32.5	35.1	
Caregiver marital status (% married)	37.3	49.0	+
% Child physical abuse history	48.9	47.4	n.s.
Time in placement 1 year or more (%)	47.4	39.7	n.s.

NOTE: +$p < .10$. *$p < .05$.

TABLE 2: Patterns for Early Treatment Termination by Foster Parent Status

	Kin	*Nonkin*	*Effect*
% Completed treatment	54.9	36.9	**
Number of treatment sessions to complete	14.4	12.7	n.s.
Number of treatment sessions to drop	5.6	5.9	
Timing of treatment termination			n.s.
% Drop before treatment	17.4	20.2	
% Drop during CDI	67.4	57.6	
% Drop during PDI	15.2	22.2	
Who initiates early treatment termination (%)			n.s.
Child Welfare Services (CWS)	11.9	29.4	* (CWS vs. else)
Caregiver	47.6	37.6	
Therapist	28.6	27.1	
Other	11.9	11.9	

NOTE: CDI = child-directed interaction; PDI = parent-directed interaction.
*$p < .05$. **$p < .01$.

significantly more likely to have had treatment terminated by CWS than kin caregivers, $\chi^2(1, N = 127) = 4.78$, $p < .05$.

Table 3 presents mean scores of kin and nonkin foster parents' evaluations of their children's behavior problems, their own functioning, and the nature of the parent-child relationship. We also present the percentage of kin and nonkin foster parents whose scores fall beyond the clinical cutoffs for these measures and label these percentages "at risk." A multivariate ANOVA of the three broadband scales of the CBCL (Internalizing, Externalizing, and Total Behavior Problems) showed a significant overall difference between behavior problems of children in kin and foster care, $F(3, 228) = 2.70$, $p < .05$, $\eta^2 = .03$, observed power = .65. When the univariate F statistics were examined, it appeared that the significance was largely a result of differences in reported levels of externalizing behavior problems, $F(1, 230) = 5.45$, $p < .05$, $\eta^2 = .02$, observed power = .64. Nonkin foster parents rated their foster children as having significantly higher levels of externalizing behavior problems than kin care-

TABLE 3: Differences Between Kin and Nonkin Foster Parents' Perceptions of Self and Child Functioning

	Kinship Foster Care		*Nonkin Foster Care*		
	M (SD)	*% at Risk*	M (SD)	*% at Risk*	*Effects*
Child Behavior Checklist (CBCL; All scales, $n = 233$)					
Internalizing	58.6 (12.1)	31.9	59.1 (11.2)	35.3	n.s.
Externalizing	64.2 (12.6)	53.2	68.0 (12.3)	61.2	**
Total score	63.7 (12.2)	54.3	66.0 (11.9)	59.0	n.s.
Eyberg Child Behavior Inventory (ECBI; Intensity, $n = 222$;					
Problems, $n = 206$)					
Intensity of problems	138.8 (38.4)	57.3	155.3 (44.1)	71.4	***
Number of problems	15.2 (8.9)	50.6	16.3 (9.4)	53.8	n.s.
Symptom Checklist (SCL-90-R; $n = 180$)					
Depression	51.2 (9.7)	20.0	48.4 (8.9)	3.6	*
Parenting Stress Index–Short Form (PSI-SF; $n = 171$)					
Parental distress	26.3 (8.4)	17.9	24.4 (6.0)	5.6	*
Dysfunctional relationship	28.5 (7.6)	57.7	30.3 (6.8)	64.8	n.s.
Difficult child	38.0 (9.0)	64.3	40.1 (8.3)	77.6	n.s.
Defensive responding	15.6 (4.8)	21.4	14.2 (3.8)	22.0	*
Child Abuse Potential Inventory (CAPI; $n = 180$)					
Abuse scale	80.5 (75.8)	10.0	63.2 (34.4)	1.8	*
Rigidity	15.6 (19.0)	18.1	12.8 (11.8)	8.8	+

NOTE: $+p < .10$. $*p < .05$. $**p < .01$. $***p < .001$

givers, but similar levels of internalizing behavior problems, $F(1, 230) = .26$, n.s. Similarly, nonkin foster caregivers reported that their children exhibited more frequent behavior problems on the ECBI than did kin caregivers, $F(1, 219) = 10.99$, $p < .001$, $\eta^2 = .05$, observed power = .70. However, the number of problem behaviors did not vary by foster parent group. An ANOVA of the Difficult Child scale of the PSI-SF, which reflects the caregivers' perception of the child's difficult behavior as a source of parenting stress, showed no significant mean differences, though nonkin foster parents were slightly more likely to rate their foster children in the clinical range than kin foster parents, $\chi^2(1, 170) = 3.73$, $p < .10$.

Results of univariate ANOVAs, and mean levels of parent functioning are also presented in Table 3. At pretreatment, kin foster parents reported themselves as significantly more distressed than nonkin foster parents, as indicated by scores on the Depression scale of the SCL-90-R, $F(1, 177) = 5.23$, $p < .05$, $\eta^2 = .02$, observed power = .62; the Parent Distress scale of the PSI-SF, $F(1, 168) = 3.96$, $p < .05$, $\eta^2 = .02$, observed power = .51; and the CAPI Abuse scale, $F(1, 177) = 4.95$, $p < .05$, $\eta^2 = .03$, observed power = .60. Results of an ANOVA of the Rigidity scale of the CAPI showed no significant difference between kin and nonkin foster parents, $F(1, 177) = 1.61$, n.s.. Kin foster parents were marginally more likely than nonkin foster parents to score in the clinical range of this scale, $\chi^2(1, N = 180) = 3.51$, $p < .10$. More interesting, an ANOVA of the Parent-Child Dysfunctional Relationship scale of the PSI-SF showed no differences in levels of perceived relationship problems. Kin and nonkin foster parents showed high levels of perceived relationship dysfunction. It should be noted here that nonkin foster parents showed significantly greater defensive responding than kin caregivers (lower scores indicate higher levels of defensive responding, $F(1, 168) = 6.4$, $p < .02$, $\eta^2 = .04$, observed power = .71).

To test whether levels of caregiver or child functioning, or perceptions of the parent-child relationship, differentially influenced kin versus nonkin foster parents' early treatment termination, we ran three hierarchical Cox regressions (see Table 4), omitting dyads whose treatment CWS terminated ($n = 30$). In the first analysis, we regressed early treatment termination versus treatment completion on kin versus nonkin foster status, sex and age of child, and ethnicity of caregiver. Because sex and age of child were nonsignificant predictors, we excluded them and reran the analysis using only the significant predictors: foster parent status and caregiver ethnicity. Findings showed that nonkin caregivers were 51% more likely to end treatment early than kin caregivers, African American caregivers were 77% more likely to end treatment early, and caregivers of Other ethnicities were nearly 3 times more likely to end treatment early. We checked next for variations in proportional hazard functions by foster parent status by including a term indicating an interaction between length of time

TABLE 4: Results of a Binary Logistic Regression of Early Treatment Termination on Foster Parent Status, Ethnicity, and Parent-Child Relationship Dysfunction

N = *229*	*Model 1*	*Model 2*	*Model 3*
Kin vs. nonkin caregiver	1.51*	1.52*	1.41+
Caregiver ethnicity (White)			
African American	1.77**	1.62*	1.64*
Latino/Latina	1.22 n.s.	1.13 n.s.	1.10 n.s.
Other	2.98***	2.30*	2.38*
CAPI: Abuse potential (normal/risk)		3.46*	4.61**
Missing data: Abuse potential		1.20 n.s.	1.21 n.s.
PSI-SF Parental distress (normal/risk)		.53 n.s.	.22+
Missing data: PSI-SF Parental distress		1.80**	1.81**
Kin/Nonkin × Parental Distress			6.65+
–2 Log Likelihood	1215.07	1199.05	1195.43
Step χ^2	17.18***	16.02**	3.62+
Model χ^2	18.40***	35.97***	38.12***

NOTE: CAPI = Child Abuse Potential Inventory; PSI-SF = Parenting Stress Index–Short Form.
+$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

in treatment and foster parent status. This analysis did not reveal any significant differences (not shown). Next we included measures of parents' perceptions of their children's behavior, their relationships with their children, and their own psychological functioning in the analysis. Of three predictors of parent functioning (SCL-90-R Parental Depression, PSI-SF Parental Stress, and CAPI Abuse Potential scale), one measure of the quality of the parent-child relationship (PSI-SF Dysfunctional Relationship), and two measures of child behaviors (ECBI Intensity, CBCL Externalizing), only two emerged as significant predictors of attrition and were included in Model 2: the Abuse Potential scale, and the Parental Distress scale. The results of this analysis showed that increases in abuse potential increased the likelihood of ending treatment early, as did failing to complete the measure of parental stress. Foster parent status and caregivers' ethnicity continued to predict attrition in this model. Model 3 tested the likelihood that the influence of abuse potential or parental distress on attrition might vary by foster parent status. Results of this analysis revealed a marginally significant interaction between parental distress and foster parent status ($p < .06$). Post hoc analyses showed that kin caregivers in the normal range of parental distress were more likely to end treatment early than those in the clinical range (normal range, 45.3% drop; clinical range, 18.2% drop). In contrast, the likelihood that nonkin foster parents would end treatment early did not vary by level of parental distress.

DISCUSSION

The purpose of the current study was to examine factors that contributed to kin and nonkin foster parents' perceived costs and benefits of parenting foster children who are referred to PCIT for treatment of behavior problems. In a sample of kin and nonkin foster parents who were surprisingly well-matched on measures of socioeconomic resources, we found that nonkin foster parents perceived their foster children as having more intense externalizing problems, and that kin foster parents showed moderately higher levels of depressive symptoms, parental distress, and abuse potential than nonkin caregivers. Last, our findings showed that kin caregivers were more likely to complete PCIT than nonkin caregivers, however that kin caregivers with clinical levels of parent distress were more likely to stay in treatment than nonkin foster parents and kin caregivers scoring in the normal range on this indicator. The current study extends previous research by focusing on the highest risk children in foster care in an effort to discover more about the psychological dimensions of challenging foster caregiving.

We found few demographic differences between the kinship and nonkin foster care dyads in our sample. We were surprised at the similarity of these two groups, considering the amount of previous research documenting distinct differences between kin and nonkin caregivers, and the children who go into kin versus nonkin foster care. This natural selection of a well-matched kin and nonkin sample enabled us to focus on the influence of the kinship connection on attitudes, perceptions, and behavior without having to statistically control for commonly found differences between the groups (e.g., marital status, education). Introducing many statistical controls can increase the possibility of making a Type II error, as many control variables can overly constrain variation in the dependent variables.

Overall, analyses revealed that kin and nonkin foster parents reported high levels of perceived problems in their relationships with the children in their care. Yet, as in other studies (e.g., Shore et al., 2002), nonkin caregivers reported more externalizing problem behaviors in their foster children than kin caregivers, although the percentage of children falling in the clinical range did not differ by group. It is possible, as in other studies, that nonkin foster parents exaggerated the severity of their children's problems (e.g., Shore et al., 2002).

Although rating child behaviors as less severe than nonkin caregivers, kin caregivers reported more parenting-related distress and personal distress and had higher scores on the Abuse Potential scale than nonkin caregivers. These differences were consistent, though not particularly powerful. These findings could indicate kin caregivers' greater emotional investment in their foster children, and the greater distress that results from the children's unhappiness, anger, and lack of responsiveness to them. In addition, kin caregivers' greater distress might be the factor that helps motivate kin caregivers to seek treatment for their foster children in the same way that the perceived severity of their foster children's behavior problems seems to motivate nonkin caregivers to obtain treatment for their foster children.

One of the more interesting findings from the current study was that kin caregivers who reported high levels of parental distress were more likely to persist in treatment than all nonkin foster caregivers, and kin caregivers in the normal range of scores for this measure. This effect was only marginally significant ($p < .06$), however the inclusion of this interaction term reduced the size of the coefficient for kin versus nonkin distinction in the same analysis, suggesting that the difference in the influence of parental distress on attrition for kin versus nonkin foster parents explains some of the differences in overall attrition between the two groups. It is possible that kin caregivers' parental distress reflected their frustration and helplessness in the face of their foster children's behavior problems. This distress may also have served as a motivating force for obtaining treatment for their foster children. In contrast, few nonkin foster parents endorsed high levels of parental stress. They were more likely to minimize the stresses of parenting, which possibly protects nonkin foster parents from experiencing too much distress or anxiety in their parental roles. The parental stress nonkin foster parents endorsed might be more related to underlying life stressors than the problems of the particular foster child in treatment.

A troublesome finding in the current study was the relationship between elevated abuse potential scores and early treatment termination. Parents scoring high in abuse potential are typically highly distressed, have somewhat rigid expectations for themselves and their children, and experience other interpersonal problems. These individuals would be considered at risk for abusing their foster child, and in need of therapeutic support. Findings from the current study raise the possibility that foster parents matching this profile may have had a difficult time being "helped." Thus, caregivers who seemed to be most in need of PCIT appeared to be the same parents who were least likely to complete treatment. It is also interesting that foster parents who avoided completing the PSI-SF (or who left blanks on the parent-role items) were more likely to terminate treatment early. It is possible that the title of the measure, Parenting Stress Index or the specific items conveyed a sense that therapists were concerned about foster parents' mental health rather than the mental health of their difficult foster children, which foster parents perceived as threatening.

Limitations and Directions for Future Research

The current study has limitations that should be noted. The participants in this study were foster parents of 2- to 8-year-old children referred to PCIT for treatment of their externalizing behavior and adjustment difficulties. They are not representative of all foster parents with children in this age group, nor are they representative of all foster children this age referred to mental health services. In fact, participation in PCIT is very likely more demanding for the parent than treatment as usual (e.g., individual play therapy, group therapy). However, foster parents' participation in PCIT allowed us to obtain information about foster parent functioning and behavior that would not be available in a less demanding therapy. As such, we view the current study as a contribution to our understanding of the psychological dimension of the foster caregivers when the behavioral challenges of their young foster children have driven them to seek mental health treatment. Future research should further examine whether the current study's findings apply to interventions for foster children and caregivers other than PCIT. Future research might also examine the mediating and moderating effects of parent and child characteristics on treatment outcomes, mental health service delivery, and subsequent effects on foster placement stability.

CONCLUSION

It is our belief that minimizing placement changes is key to the future success of young foster children, and that understanding the perceived costs and benefits of foster caregiving is essential to developing strategies for increasing placement stability. Findings from the current study showed that kin and nonkin foster caregivers in PCIT with their foster children were similarly likely to perceive that the parent-child relationship was dysfunctional, though they perceived somewhat different costs as caregivers. Kin caregivers' costs were perceived as drains on their own emotional resources as the primary caregiver of a difficult foster child rather than the child's behavior problems per se. In addition, the findings from the current study suggest that if the emotional connection with their foster children makes kin caregivers vulnerable to feeling distress, it also might promote help-seeking behavior, and persistence in PCIT. In contrast, nonkin foster caregivers appeared to be more focused on the difficulty of the child's behaviors than on feelings of personal distress. In fact, nonkin foster parents' defensive responding suggested that they might be less responsive to a therapy designed to teach them new parenting skills. There could be some cost to their self-esteem in acknowledging that they needed help to parent a difficult child. Taken together, the findings of the current study underline the importance of considering the differences in perceived costs and benefits to kin versus nonkin foster parents of caring for their foster children when attempting to provide the foster children mental health services. To the extent that PCIT and similar mental health services can reduce costs and increase the benefits of caring for foster children (and thus improve foster children's experiences), change can only be effected if dyads stay in treatment. It is the kin and nonkin foster caregivers that ensure foster children's participation in treatment and support their positive mental health outcomes.

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Susan G. Timmer, Ph.D., is a research scientist and assistant clinical professor at the CAARE Diagnostic and Treatment Center, UC Davis Children's Hospital. Her research focuses on treatment evaluation, and parent-child processes and their relationship to social and personality development and psychopathology. Central to these efforts is an investigation of foster care experiences and their influence on development.

Georganna Sedlar, Ph.D., is an assistant clinical professor and psychologist at the CAARE Center at UC Davis Children's Hospital. Her primary research interests include the impact of trauma and abuse on children, children's experiences in foster care, and the use of empirically supported interventions within the child welfare system. Currently, she is involved in research and training activities related to the use of Parent-Child Interaction Therapy with abusive and high-risk families. She also provides direct clinical service to abused and neglected children.

Anthony J. Urquiza, Ph.D., is a clinical psychologist and director of Mental Health Services and Clinical Research at the CAARE Center, Department of Pediatrics, University of California Davis Medical Center. He earned undergraduate and graduate degrees at the University of Washington, and completed an internship at Primary Children's Medical Center in Salt Lake City, Utah. During the past decade, he has been adapting Parent-Child Interaction Therapy (PCIT) to families involved in child welfare systems (i.e., physically abusive families, foster families, adoptive families). His empirical research has supported the benefits of PCIT with abusive families and foster families. In addition, he has been instrumental in developing PCIT as an intervention for Spanish-speaking families. He is currently involved in a PCIT dissemination training project, which is training 40 community mental health agencies throughout the state of California.