



Kin adopting kin: In the best interest of the children?

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ABSTRACT

Foster children in the public child welfare system are increasingly likely to find lasting homes through kinship adoption by their relatives. The aim of the present study is to examine how the kinship adoptive experience differs from other adoptive types. Using tobit regression analyses, we examine data from 2382 adopted children (kin placements = 397 and non-kin placements = 1985). We report that kin adoptive parents more negatively assessed adoption's impact on their family and the family's current functioning. However, the family bond with the adoptee also appears to influence positively a kin family's willingness to adopt the same child again, to be generally satisfied with the overall adoption, and to report a positive relationship with the adopted child. Kinship adoptions appear more readily to produce positive outcomes and permanent placements.

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1. Introduction

Increasingly, relatives are taking permanent legal responsibility through kinship adoption for children not living with their parents. While such living circumstances are not novel, wide-scale involvement by the child welfare system and the courts in this form of adoption is a more recent practice. Research is currently scant in this area, and most studies focus on kinship foster care rather than kinship adoption. The aim of the present study is to begin to address this gap in professional knowledge by examining how the kinship adoptive experience differs from other adoptive types.

1.1. History of kinship care

Human groups and social roles are, at their most fundamental level, organized by kinship. By standard usage, the appellation 'kin' most frequently applies to individuals who are affiliated by birth or marriage. The term 'kinship' is common in legal matters dealing with inheritance and familial descent. Such lineal relations, whether matrilineal or patrilineal, can be traced back at least to the legal Code of Hammurabi (The Avalon Project, 2005). Kinship relations as used in foster care practice are structured in contemporary law as well; for example, in Florida Statute 39.01(46) 'next of kin' is defined

as an adult relative of the child who is his or her brother, sister, grandparent, aunt, uncle, or first cousin (Florida Legislature, 2005).

Kinship historically has entailed obligations of care. For example, the Elizabethan Poor Law of 1601 made parents and grandparents, and their children and grandchildren, reciprocally responsible for each others' welfare in cases of indigence (Jansson, 2001, p. 36). Gleeson and Hairston (1999) describe how, more recently, "when parents have not been able to care for their children, kin have stepped in, and, when kin have not been able or willing to do so, the child welfare system has most often taken over" (p. 281). In 1980, the Adoption Assistance and Child Welfare Act (PL 96-272) expressed "a clear preference for children's placement with relatives when possible" (Grogan-Kaylor, 2000, p. 133). Consequently, adult relatives frequently have assumed responsibility for their younger kin for reasons including parental death, permanent incapacity, or lack of capability to care for the child (Gleeson, 1999). In the United States, such arrangements can be informal or may involve a more formal status, such as legal guardianship, foster care, or adoption. Takas and Hegar (1999) have proposed expanded forms of kinship adoption that might be acceptable to more biological parents and their relatives. Due in part to recent changes in federal law, public child welfare agencies in many jurisdictions have begun searching intensively for relatives who might consider adoption of kindred foster children (Eckholm, 2010; H.R. 6893: *Fostering Connections to Success & Increasing Adoptions Act of 2008*).

1.2. Demographics of kinship care

In 2005, authorities determined that approximately 899,000 children experienced child abuse or neglect (U.S. Department of

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Health & Human Services, 2007). Of those children, 311,000 entered the foster care system while 287,000 left care, increasing the total number of children in foster care in 2005 to 513,000 (U.S. Children's Bureau, 2006). Approximately 24% of these foster children were placed with relatives. Another 4% were in pre-adoptive placements, an unknown number of whom also may have been with relatives (U.S. Children's Bureau, 2006). By 2008, the federal government reported that the number of foster children in the U.S. had decreased to 46,300 and that the proportion known to be placed with relatives had held constant at 24% (U.S. Children's Bureau, 2008).

U.S. federal legislation encourages adoption as one of the options available to kinship foster parents (H.R. 6893, 2008). Just as more children are now being placed in kinship foster care, more also are entering into kinship adoptive arrangements (U.S. Children's Bureau, 2006, 2008). Approximately 25% of the 51,000 children adopted from the public foster care system in 2005 entered relative adoptions (U.S. Children's Bureau, 2006). While the legal emphasis on kinship adoptions is a recent phenomenon, it is an increasingly popular choice, as the data illustrate (Howard & Smith, 2003; Main, Macomber, & Geen, 2006).

2. Literature review

As policy and practice have grown to favor kinship arrangements, the research on this family form has grown, and findings are mixed concerning the challenges and successes of kinship foster homes, as reported by comprehensive reviews of the literature (Cuddeback, 2004; Hegar & Scannapieco, 2005). Research on kinship adoption is much more limited than that on kinship foster care. Searches of the databases *Academic Search Complete* and *Social Work Abstracts* for refereed articles published between 2000 and 2010 with abstracts containing the terms “kinship adoption,” “adoption by kin,” or “adoption by relatives” yielded a single article by Lorkovich, Piccola, Groza, Brindo, and Marks (2004). That study and a handful of others known to the authors are summarized in the following section.

2.1. Studies of kinship adoption in the United States

Lorkovich and others (2004) report on a research and service project in Ohio that was designed to study and alleviate barriers to kinship adoption. Of the participants ($n = 71$), a majority encountered barriers related to lack of information about adoption, problems of the children, and housing. Close to half reported difficulties with their own health, the court, or the child welfare system, while smaller proportions experienced difficulties related to family, background checks, and other factors. While informative, the generalizability of this study is limited by its small sample drawn from a single county.

Other studies familiar to the authors also offer insight into the experience of kinship adoption. In comparing kin and non-kin adoptions in California, Magruder (1994) found that 27.3% of adopted children were placed with a relative. Children in this study who were adopted by relatives had spent slightly more time in foster care and had fewer placements prior to adoption. Adoptive relatives were more likely than other adopters to be single parents and to have lower levels of income and education (Magruder, 1994). A significant limitation of this study was the unavailability of household-level data. Since data were reported at the child level, it is not clear how nesting siblings within the same placement may have impacted the results. Partially as a result of the data limitations, only descriptive statistics are presented. Magruder (1994) reaches no conclusions about how the kinship adoptive family form impacts adoption outcomes.

In the largest study of kinship adoptions to date, Howard and Smith (2003) compared kin adopters ($n = 523$), previous foster parent adopters ($n = 589$), and matched adopters and adoptees with no prior relationship ($n = 183$), all of whom adopted special needs children from the Illinois child welfare system. They found that

relative adoptive parents were more likely than their counterparts to be single parents, to have significantly less income, and to be older ($\mu = 52$ years) (Howard & Smith, 2003). Children were placed with kin adopters significantly earlier in their foster care experience than were children placed with unrelated adopters (Howard & Smith, 2003). Although initially placed at an earlier stage of their foster care experience, children waited significantly longer before the adoption was finalized (Howard & Smith, 2003). Though this is the most extensive work on the subject to date, a potentially problematic limitation is that the authors do not analyze how, when controlling for other factors, the prior relationship between the child and adoptive parents impacts various adoption outcomes.

It seems likely that kin relationships also have been captured in adoption research studies that do not focus specifically on kinship adoption. For example, Rosenthal and Groze (1992) conducted a study that specifically mentions older adoptive parents, including grandparents. To assess the impact of the adoption on the family, the authors used a 5-point scale ranging from ‘very positive’ to ‘very negative’ and found that grandparents who adopted grandchildren rated the adoption as ‘very positive’ most frequently (73%), while adoptions were less often rated as ‘very positive’ by other relative adopters (e.g., aunts, uncles, or cousins, 48%; other relatives, 29%). However, this question is limited in its operationalization as a single-item inquiry from the adoptive parent's perspective, and it does not include any additional measures of family or child outcomes in the analyses to assess the possible relationships among key variables. As such, it is difficult to determine the extent of the impact a household headed by an older adult may have in creating positive or negative outcomes for children.

2.2. Selective discussion of kinship foster care studies

Review of the growing literature on kinship foster care would be of only tangential relevance to this study of kinship adoption, and detailed reviews of that literature are available elsewhere (Cuddeback, 2004; Hegar & Scannapieco, 2005). In this section, we comment on two studies of kinship foster care with results particularly relevant to our own study and to which we refer again in the discussion of our findings.

The first study with relevance to our research was conducted by Testa and Slack (2002) in Illinois. The researchers set out to investigate the factors that contribute to lasting kinship foster care placements, but an intervening state-level policy change in the amount of payments to kinship foster parents provided an additional opportunity to consider the effects of that change. Based on their longitudinal study of 983 children in kinship care, the researchers conclude that lasting placements are characterized by full foster care payments, as well as reciprocity, empathy and a sense of duty on the part of kinship caregivers.

As in the United States, children increasingly are being placed in formal kinship care settings in other countries. In Australia, kinship care is now the most likely placement option for indigenous children and for every age group, except for 16–17 year olds (Spence, 2004). Spence (2004) conducted exploratory qualitative interviews with 11 caregivers (i.e., 7 grandmothers and 4 aunts), as well as nine children (ages 5–12 years old) and nine caseworkers. He found three common explanations for the use of kinship care. These include: (1) “perceived psychological benefit that came from the familiarity between caregivers and children”, (2) “strong sense of family obligation”, (3) “the view that alternative forms of care such as foster care were flawed and detrimental to children's interests” (Spence, 2004, p. 268). He further found that the kin carers had strong support needs in order to alleviate the stress of caring for their kin (Spence, 2004). In Section 5.2 below, we refer again to the studies by Testa and Slack (2002) and Spence (2004) and relate their findings to discussion of our own study.

2.3. Conclusions and research questions

As outlined in this review of the literature, studies of kinship foster care are of only limited relevance to the present study, and studies of kin adoption are sparse. Most studies have not attempted to gauge the significance of kinship to the overall adoption experience. To address this gap, this study addresses the following research questions:

1. Do the socio-demographic characteristics differ between kin and non-kin adopters?
2. Do characteristics of the children adopted by kin and non-kin adopters differ?
3. Do kin and non-kin adopters report equally positive parent–child relationships?
4. Controlling for various household, adoptive parent, and adopted child factors, does the existence of a pre-adoptive kinship relationship between the adoptive parent and child predict the quality of the current parent–child relationship or adoption outcomes (e.g., adoption satisfaction, adopt again, family impact, family functioning, and relationship satisfaction)?

3. Design and methods

3.1. Data and procedures

This paper uses the first wave of data from adopted youth and their families participating in the Florida Adoption Project (FAP). The purpose of the FAP is to investigate key indicators of successful and unsuccessful adoptive placements among the population of parents who had adopted a child through Florida's public child welfare system and were receiving a special needs subsidy payment.

3.1.1. Sample

Adoptive parents in Florida receiving an adoption subsidy for at least one adopted child in their care (at the start of data collection) were eligible for the study. The state provided the adoption subsidy roll from each district, which comprised the sampling frame ($n = 9,170$ parents and $n = 14,746$ children). Parents electing to be removed from the survey mailing, those with incorrect addresses, and children ineligible for the study (e.g., over the age of 18) were excluded from the frame. As a result, 6782 families with 10,923 children were eligible to participate. Of these, 1694 families (25%) returned surveys concerning 2382 children (21.8%). Adoptive parents were asked if and in what capacity they knew the child prior to placement. Adopters were classed as kin families ($n = 397$) if one or both parents reported a pre-adoptive familial relationship with the child.

3.1.2. Research instruments

The FAP survey was developed in partnership with an advisory panel to obtain a broad range of data. The variables included adoptive parent demographics, family composition and dynamics, and the child's characteristics (e.g., gender, age, race, siblings), pre-adoptive history (e.g., history of abuse and neglect, learning problems), and current emotional and behavioral characteristics. Standardized measures included the Family Functioning Style Scale (Trivette, Dunst, Deal, Hamer, & Propst, 1990; Trivette, Dunst, Deal, Hamby, & Sexton, 1994) and the Child Behavior Checklist (Achenbach & Rescorla, 2001).

3.1.3. Diagnostics/data integrity

Data were cleaned by examining univariate statistics for each variable used in the analyses. In cases where data entry problems were identified, the hardcopy survey was checked and the data corrected. In addition, skewness and kurtosis scores were evaluated. Those falling outside of ± 2 were identified and transformed prior to inclusion in our regression models (George & Mallery, 2001).

3.1.4. Missing values

Item non-response, which occurs when some respondents do not answer every required item, is common in survey research (Dillman, 2000). Preliminary analyses revealed missing data among all study variables, ranging up to 7% on single items. The overall proportion of missing data across all cases and variables was less than 10%. We used multiple random imputation (MRI) to address this problem (Rubin, 1996). MRI is a preferred approach to representing missing values, because it is non-deterministic and incorporates uncertainty into the final imputed values. MRI also enables the imputed data sets to be analyzed with any technique appropriate to complete data (Allison, 2002; Fichman & Cummings, 2003; Schafer & Graham, 2002; Sihharay, Stern, & Russel, 2001). This method enhances statistical power while not affecting the validity of analyses with large sample sizes, even when the missing data cannot be considered missing-at-random or exhibit problems with multivariate normality (Abraham & Russell, 2004; Schafer, 1997; Wang, Sedransk, & Jinn, 1992). Based on these advantages, this method was utilized to represent the data fully and validly. All analysis variables in this study, as well as related, auxiliary variables, were used in the imputation procedure (Schafer & Graham, 2002). Our analyses are based upon the first of five imputates of the data produced.

3.2. Data analysis

3.2.1. Overview

We first describe the study sample and use chi-square and *t*-test methods to compare the sub-samples on each study variable. These are standard statistical procedures to compare two groups on discrete (e.g., race, gender) and continuous variables (e.g., age, mean CBCL, or relationship satisfaction scores). Our dependent variables were right-censored, with a large proportion of participants reporting the highest positive value. Ordinary least squares regression can produce biased estimates under this condition. Two effects are evident in these data: 1) the decision by respondents to report the most positive response; and 2) for those reporting a less positive response, a decision to respond marginally less positively. We assumed that the factors influencing these decision components were not identical. Thus, we used tobit regression to estimate the effects of kin status of adoptive parents on five outcomes, controlling for other household, parent, and child factors. Tobit regression accounts for these selection processes and the censoring in the dependent variable (Roncek, 1992). We used SAS 9.1 (PROC QLIM) to estimate our models.

Tobit regression coefficients reflect the relationship between the independent variables and latent measures of our outcomes. This does not allow for a direct interpretation of the two decision components. We employ the strategy proposed by Roncek (1992) to decompose the estimates into a part indicating the probability of providing the highest positive response and a part indicating the effect of our independent variables on the probability of offering a less positive response. That is, we are able to estimate simultaneously the effects of each independent variable on producing the most positive adoption outcomes (probability) and its marginal relationship with the outcomes at lower values. We report for each model the original coefficients and its two components. Finally, we correlate the observed and predicted values of each dependent measure to produce an approximate measure of explained variance for each model.

In addition, we fit null hierarchical linear models using unique family ID number as the second-level factor to assess whether the clustering of adopted children within families impacted our analyses, and we found the clustering effect was not significant. This means that the effect of being in a family with one or more other adopted children included in our sample did not significantly affect the analyses; rather, individual-level child and parent variables impacted the selected outcomes more than the shared family context. We also tested for but did not find problematic multicollinearity among our independent measures. Subscript notations identify sub-sample statistics: K = kin, NK = non-kin.

3.2.2. Control variables

Based upon prior empirical studies of adoption outcomes, we include several control measures in our regression models: household income and size, severity of children's needs and externalizing behavior, years to adoption (from placement to finalization), child age, adoption with siblings, parental education and race.

In traditional adoption practice, parents with higher incomes and education frequently are preferred for adoptive placements. In reality, according to Rosenthal (1993), "What would once have been barriers to adoption (low income and education, minority ethnicity, single-parent family structure) do not increase risk and, when studies of intact families are also considered, may be modest predictors of increased success in special needs adoption" (p. 82). We control for these differences with the inclusion of household size and income. Adoptive parent race is coded white (0) vs. non-white (1), with mixed-race couples classified as non-white ($n = 87$). Adoptive parent education is categorical and reflects the highest level of formal schooling completed by either parent (1 = less than high school to 6 = advanced degree).

3.2.3. Sibling status as a variable

Family constellation also may be related to adoption outcomes. Sibling placement in foster care and adoption is an aspect of family constellation that has been explored in numerous studies and summarized in two recent reviews of the research literature. These reviews concerning sibling placements (Hegar, 2005; Washington, 2007) conclude that the balance of the research shows either better outcomes for shared sibling placements or no difference between outcomes for sibling and non-sibling placements. Although a few studies have reached the opposite conclusion (Kadushin & Seidl, 1971; Thorpe & Swart, 1992), much recent research shows positive or mixed outcomes, often complicated by interaction effects (e.g. Hegar & Rosenthal, 2009; Leathers, 2005; Linares, Li, Shrout, Brody, & Pettit, 2007; Smith, Howard, Garnier, & Ryan, 2006; Tarren-Sweeney & Hazzell, 2005; Webster, Shlonsky, Shaw, & Brookhart, 2005; Wulczyn & Zimmerman, 2005). Researchers have assessed outcomes variously as disruption of placement, outcomes seen as positive such as adoption or reunification, adjustment as measured by the CBCL and other instruments, and satisfaction of the children. Because sibling placements are an important theme in the literature on child placement, we include a dichotomous measure indicating whether the child was adopted with siblings.

3.2.4. Child adjustment variables

As mentioned previously, all of the children in this study were classified as children with special needs. The meaning of this term varies from state to state but typically refers to children who are more difficult to place due to adoption at an older age, minority status, sibling group membership, or emotional, physical, behavioral or educational disabilities due to their maltreatment histories. Adopted children with special needs, especially those with abuse histories, are at higher risk for more profound emotional and behavioral problems than children without special needs (Smith & Howard, 1999). While it is heartening that adoptive parents report positive feelings about their children with special needs (Barth & Miller, 2000; Rosenthal & Groze, 1992), once they are adopted these children may be extremely difficult to parent because "their emotional problems – anger, irritability, inability to attach – will continue to be the most challenging problem for families to accept and manage over time" (McKenzie, 1993, p. 70). The emotional and behavioral challenges of these youth place them at risk for adoption disruptions, displacements, and dissolutions.

Respondents were asked whether the adopted child exhibited behavioral, emotional, physical, or educational needs at the time of adoption, and to rate the severity of each need type from mild (1) to severe (10). A composite measure of need was created from these

responses. Severity of need is the child's average z-score (in relation to the entire sample) across the four severity measures. The observed range was -1.9 to 2.1 , with higher scores indicating a greater need for support services. Johnson (2006) found that all four need types (i.e., behavioral, educational, emotional, and physical) were found to be more prevalent among adopted adolescents, compared to younger adoptees. Other studies also have found that adopted adolescents tend to have the same types of special needs (e.g., Barth & Berry, 1988; Cordell, Nathan, & Krymow, 1985; Smith & Brodzinsky, 2002; van Ijzendoorn, Juffer, & Poelhuis, 2005; Wierzbicki, 1993; Yoest, 1997).

The Child Behavior Checklist (CBCL) is one of the most common scales measuring child behavior, used in over 6000 publications (Achenbach System, 2006). A review of the adoption literature finds that numerous studies published between 1998 and 2010 used the CBCL (e.g., Groza, 1999; Groza & Ryan, 2002; Gunnar, & Van Dulmen, 2007; Myeroff, Mertlich & Gross, 1999; O'Connor, Caspi, DeFries, & Plomin, 2003; O'Connor, Deater-Deckard, Fulker, Rutter, & Plomin, 1998; O'Connor, Caspi, DeFries & Plomin, 2000; Rosnati, Barni, & Montiroso, 2008; Simmel, Brooks, Barth, & Hinshaw, 2001; Smith & Brodzinsky, 2002; Smith, Howard, & Monroe, 1998; Smith-McKeever, 2004; Tan, 2006; Tan, Marfo, & Dedrick, 2007). Patterns on the CBCL profiles show that children who have been placed in a child welfare setting demonstrate behavioral problems that are more commonly of an externalizing nature (e.g. delinquent or aggressive behaviors) than of an internalizing nature (e.g., depression, withdrawal) (Stukes Chipungu & Bent-Goodley, 2004). Reliability testing for the scale with this sample yielded a Chronbach's alpha (α) = .94.

Rosenthal (1993) reported that nearly 10% to 15% of placements involving older children disrupt. Kagan and Reid (1986) found 50% of their sample of older adopted children to be residing at a place other than their adoptive homes at the time of follow-up. As such, time is a critical factor in adoption success. To capture this important variable, we use both the child's current age and delay in finalization (difference in years between the date on which the child was first placed with the family and when the adoption was finalized).

3.2.5. Dependent variables

The first three dependent variables (adoption satisfaction, adopt again, and family impact) are all single-item measures. Parents were asked the following three questions regarding their assessment of the adoption: "How satisfied are you with your overall adoption experience with this child?"; "If you had it to do over again, would you adopt this child?"; and "Overall, the impact of this adopted child's placement on your family has been?" Each item allowed for a response ranging from very negative (-2) to very positive (2). While these measures have face validity, it is impossible to determine the reliability of a single indicant (Zellar & Carmines, 1980). However, questions such as these have been utilized in several other studies (Howard, Smith, & Ryan, 2004; Johnson, 2006; Rosenthal & Groze, 1992).

Each respondent also completed the Family Function Style Scale (FFSS) (Trivette, et al., 1994). The FFSS is based on the strengths perspective (Early, 2001) and measures the extent to which the respondent believes her family is represented by different strengths and capabilities. The FFSS consists of 26 items with a total score derived by summing all items. This study used the total score to obtain a global assessment of family functioning. Family respondents were asked to rate items on a five-point Likert-type scale with written anchor points ranging from "Not at all like my family" to "Sometimes like my family" to "Almost always like my family." Elevated scores are reflective of positive family functioning, whereas low scores indicate more negative family functioning. With this sample, the coefficient alpha for the total scale is .92.

Lastly, to gauge the overall level of parent-child relationship satisfaction, we employ a slightly modified version of a previously developed scale based on concepts related to attachment (Groza &

Ryan, 2002; Groza, Ryan, & Cash, 2003; Groze, 1996; Groze & Rosenthal, 1993; Hirschi, 1969; Johnson, 2006; Nalavany, 2006; Rosenthal & Groze, 1992; Ryan & Groza, 2003). In this theory, a close parent–child relationship is strongly related to attachment and the child's close identification with the parent, such that "Higher levels of attachment result in behaviors that are congruent with the parental value system and that increase the affection between parent and child" (Groze & Rosenthal, 1993, p. 6). This scale assesses how well the parent and child get along, how much time they spend together, how well they communicate, how much trust and respect the parent has for the child, and how close they are. Responses to each question were based on a four-point Likert scale, with higher scores representing greater parent–child relationship satisfaction, as reported by the primary respondent. Reliability testing for the scale yielded a Chronbach's alpha (α) = .88.

4. Results

4.1. Preliminary analysis

4.1.1. Adoptive parent and family characteristics

Table 1 shows the descriptive statistics for the full sample ($n=2,382$) and two sub-samples. Among all adoptive families, 16.7% ($n=397$) were headed by one or more parents with a pre-adoptive kinship relationship to the adopted child. Kin and non-kin adoptive parents and families differed significantly across all socio-demographic variables. Kin adoptive parents in this sample were significantly older, more likely to be white, reported lower levels of education and household income ($M_K=\$36,611$, $M_{NK}=\$52,485$), and were less likely to be married than non-kin parents (62% vs. 75%). They also were responsible for fewer children and headed smaller households ($M_K=4.06$, $M_{NK}=4.68$).

4.1.2. Child characteristics

Children adopted into kin families also differed from those adopted by non-kin (see Table 2). They were more likely to be female and younger at the time of the survey. Kin adoptees experienced fewer total placements ($M_K=2.0$, $M_{NK}=2.8$) despite being placed in their adopted families at the same age as non-kin adoptees; however, they also waited longer prior to finalized adoption ($M_K=2.9$ years, $M_{NK}=1.8$ years). We observed no differences in the rates at which

Table 2

Adopted child characteristics within kin and non-kin families.

Variable	All <i>n</i> = 2382	Non-Kin <i>n</i> = 1985	Kin <i>n</i> = 397	
Gender (% female)	48	47	53	*
Age at survey (years)	10.3 (4.2)	10.4 (4.3)	9.7 (4.0)	**
Placement age (years)	3.2 (3.4)	3.2 (3.4)	3.2 (3.5)	
Finalization delay (years)	2.0 (1.9)	1.8 (1.7)	2.9 (2.2)	*
Number of placements (M)	2.7 (2.2)	2.8 (2.2)	2.0 (1.6)	***
CBCL externalizing	10.9 (10.9)	10.9 (11.1)	10.7 (10.3)	
Adopted with siblings (% yes)	45	45	48	
Need severity at adoption				
Physical	5.1 (2.5)	5.1 (2.6)	5.0 (2.3)	
Behavioral	5.2 (2.2)	5.3 (2.2)	5.1 (2.3)	
Emotional	5.4 (2.4)	5.4 (2.4)	5.4 (2.4)	
Educational	5.7 (2.5)	5.7 (2.5)	5.9 (2.6)	
Total needs (M)	2.0 (1.4)	2.1 (1.4)	1.9 (1.5)	
Mean severity (z-score)	−0.1 (0.9)	−0.1 (0.9)	−0.1 (0.9)	

* $p<.05$, ** $p<.01$, *** $p<.001$.

Mean (SD).

these groups were adopted with other siblings, nor in special needs at the time of adoption, nor in current levels of externalizing behavior.

4.1.3. Adoption outcomes

Kin and non-kin adoptive parents differed in their post-finalization attitudes toward the adoption (see Table 3). Kin adoptive parents offered more negative assessments of their family's current functioning. Yet, they were more likely than non-kin adopters to indicate a willingness to adopt the same child again (93% vs. 87%), to be generally satisfied with the adoption overall ($M_K=0.85$, $M_{NK}=0.80$), and to report a positive relationship with their adopted child ($M_K=1.63$, $M_{NK}=1.50$).

4.2. Multivariate analysis findings

We estimated separate tobit regression models to assess the effects of adoption by kin parents on five outcome measures: willingness to adopt the child again, adoption satisfaction, impact on the family, Family Functioning Style Scale (FFSS), and satisfaction with parent–child relationship. In each model, we controlled for: household size and income; the child's age at survey, needs severity, CBCL externalizing score, finalization delay, and adoption with siblings; as well as parental education and race. Pre-adoptive kinship status was entered separately. The unstandardized tobit regression coefficients are presented in Tables 4–6, along with decomposed effects reflecting the independent variable's contribution to the probability of parents providing the most positive assessment of each outcome and marginal differences in less positive assessments. Each model predicted a significant proportion of the observed variance in the dependent measure, ranging from 7.4% (FFSS) to 49% (relationship satisfaction).

Controlling for parent, child, and family characteristics, adoption by kin was a significant predictor of greater willingness to adopt the child again ($b=0.796$, $SE=0.197$, $p<.001$), higher satisfaction with the adoption ($b=0.422$, $SE=0.215$, $p=.05$), and less positive family functioning ($b=-0.112$, $SE=0.036$, $p<.01$). Decomposition of these effects reveals that kinship was the strongest effect on parents'

Table 1
Kin and older non-kin adoptive parent and family characteristics.

Variable	All <i>n</i> = 2382	Non-Kin <i>N</i> = 1985	Kin <i>n</i> = 397	
Adoptive parents				
Mothers (n)	2249	1870	379	
Mother age (SD)	47.9 (9.7)	47.3 (9.5)	50.9 (10.1)	***
Mother education (SD)	3.6 (1.4)	3.8 (1.4)	2.8 (1.3)	***
Mother race (% white)	69	64	77	***
Fathers (n)	1514	1310	204	
Father age (SD)	49.2 (10.3)	48.7 (10.0)	52.4 (11.4)	***
Father education (SD)	3.6 (1.5)	3.70 (1.5)	2.9 (1.5)	***
Father race (% white)	76	73	81	***
Married (%)	73	75	62	***
Family income (in thousands)	\$49,840 (\$38,634)	\$52,485 (\$39,693)	\$36,611 (\$29,503)	***
Household size (adults and children) (SD)	4.66 (2.35)	4.68 (1.9)	4.06 (1.65)	***
Number of other children in home (SD)	1.94 (2.17)	3.05 (2.3)	2.24 (1.92)	***

* $p<.05$, ** $p<.01$, *** $p<.001$.

Mean (SD).

Table 3
Parent–child relationship and adoption outcome measures.

Variable	All	Non-kin	Kin	
	n = 2382	N = 1985	n = 397	
Adoption satisfaction: At this time, how satisfied are you with your overall adoption experience concerning this adopted child?	0.81 (0.39)	0.80 (0.40)	0.85 (0.35)	*
Adopt again: If you had it to do over again, would you adopt this child?	0.88 (0.32)	0.87 (0.33)	0.93 (0.25)	***
Family impact: Overall, the impact of this adopted child's placement on your family has been?	1.54 (0.81)	1.57 (0.83)	1.52 (0.73)	**
Family Functioning Style Scale (FFSS)	109.3 (15.7)	109.6 (14.7)	107.3 (19.8)	*
Parent–child Relationship Satisfaction Scale	1.52 (0.71)	1.50 (0.73)	1.63 (0.54)	***

* $p < .05$, ** $p < .01$, *** $p < .001$.

Mean (SD).

likelihood to offer the most positive assessment of the outcome measure. For example, kin adoptive parents were 10% more likely to indicate the strongest willingness to adopt the child again, and averaged 0.394 points higher on this measure than non-kin adoptive parents, after accounting for their greater propensity to offer the most positive response. Kin parents were 5.9% more likely to express the highest satisfaction with the adoption, but also 0.233 points higher on average than non-kin when controlling for this positive bias. The results for family functioning were less dramatic, with kin parents 1% less likely to offer the most positive evaluation, and only slightly more negative than non-kin (-0.017).

Other control measures exhibited strong relationships with adoption outcomes. Externalizing behavior consistently was predictive of more negative outcomes, as was the child's current age, even when controlling for the period of time in the home. The severity of the child's needs at the time of adoption was associated with more negative outcomes, apart from relationship satisfaction ($b = 0.009$, $p = 0.72$) and more positive family functioning ($b = 0.09$, $p < .001$). Longer periods of delay prior to final adoption were related to a greater willingness to adopt again and more positive assessments of family impact and satisfaction with the parent–child relationship. This may be attributable to both longer delays and reports of greater satisfaction being associated with kinship adoption.

Adoption of sibling groups exerted a negative influence on the expressed likelihood of re-adoption and on relationship satisfaction, in both instances reducing the probability of reporting the highest positive assessment by 5% and 6% respectively and with significant marginal effects. Parent and household characteristics varied in their association with these outcomes. Household income was unrelated with any outcome in the controlled setting, and household size was associated with less positive family impact but better family functioning. Compared with white adoptive parents, non-white parents were more likely to report: a willingness to readopt the child ($b = -0.277$, $p < .05$); poorer family functioning ($b = -0.070$,

$p < .01$), and lower parent–child relationship satisfaction ($b = 0.158$, $p < .001$), while also indicating that the adoption had a more positive impact on their family ($b = 0.210$, $p < .05$). Higher parental education was not predictive of willingness to readopt or of adoption satisfaction, but parents with more education experienced significantly worse family impacts from the adoption ($b = -0.114$, $p < .001$), poorer family functioning ($b = -0.027$, $p < .01$), and lower parent–child relationship satisfaction ($b = -0.068$, $p < .001$).

Finally, decomposed tobit regression estimates attribute a constant portion of the relationship for all independent variables in a single model with the dependent measure. This proportion reflects the influence of bounded responses on the estimated relationships. For example, in predicting relationship satisfaction, approximately two-thirds of the effect is attributed to parents providing the most positive response and one-third to the marginal component which estimates the effect of falling below that limit. This contrasts with the proportions attributed to maximal replies on the other DVs of only 13% (readopt), 14% (adoption satisfaction), 21% (family impact), and 10% (family functioning).

5. Discussion

5.1. Study limitations

This study advances our understanding of adoptive families headed by kin, an important and increasingly prevalent family form. Some salient limitations do affect interpretation of the findings. For example, some parents with a pre-adoption kinship relationship to the child may have been overlooked. It is possible that some kin who were licensed foster parents for a child prior to an adoption may have identified themselves as such and been miscoded for the study, resulting in an underestimate of the prevalence of these families and possible contamination of the kin and non-kin groups. Also, we achieved a low response rate to the initial invitation to participate.

Table 4
Results of adoption outcomes regressed (tobit) on kinship status and control variables: adopt again and adoption satisfaction.

Variable	Adopt again				Adoption satisfaction			
	β	SE	Probability	Marginal	β	SE	Probability	Marginal
Kin status (1 = yes)	0.796	***	0.197	0.100	0.394	0.422	*	0.233
Household income	-0.001	0.001	0.000	0.000	-0.001	0.001	0.000	-0.001
Household size	0.041	0.035	0.005	0.020	0.040	0.041	0.006	0.022
Mean need	-0.172	*	0.088	-0.022	-0.085	-0.373	***	-0.205
CBCL externalizing	-0.098	***	0.006	-0.012	-0.049	-0.087	***	-0.048
Adoption delay	0.123	***	0.036	0.015	0.061	0.036	0.041	0.020
Child age	-0.160	***	0.017	-0.020	-0.079	-0.106	***	-0.058
Adopted with siblings (1 = yes)	-0.358	**	0.131	-0.045	-0.177	-0.175	0.152	-0.097
Parent race	-0.277	*	0.142	-0.035	-0.137	-0.112	0.164	-0.062
Parent education	0.033	0.048	0.004	0.016	-0.084	0.057	-0.012	-0.046
Intercept	6.465	***			5.952	***		
R ²	0.192				0.105			

CBCL = Child Behavior Checklist. N = 2326. Unstandardized coefficients (β) and standard errors are presented with decomposition of the effect into probability of highest positive response and differences in adoption assessment.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed test).

Table 5

Results of adoption outcomes regressed (tobit) on kinship status and control variables: family impact and family functioning.

Variable	Family impact				Family functioning			
	β	SE	Probability	Marginal	β	SE	Probability	Marginal
Kin status (1 = yes)	−0.169	0.131	−0.037	−0.078	−0.112	**	0.036	−0.010
Household income	−0.001	0.001	0.000	0.000	0.000		0.000	0.000
Household size	−0.089	***	0.025	−0.019	0.025	***	0.007	0.002
Mean need	−0.186	***	0.063	−0.040	0.086	***	0.018	0.008
CBCL externalizing	−0.097	**	0.004	−0.021	−0.010	***	0.001	−0.001
Adoption delay	0.108	***	0.026	0.023	0.050		0.007	0.001
Child age	−0.167	***	0.012	−0.036	−0.024	***	0.003	−0.002
Adopted with siblings (1 = yes)	−0.129		0.094	−0.028	−0.011		0.026	−0.001
Parent race	0.210	*	0.104	0.046	−0.070	**	0.028	−0.006
Parent education	−0.114	***	0.035	−0.025	−0.027	**	0.010	−0.002
Intercept	5.853	***			4.642	***		
R ²	0.192				0.074			

CBCL = Child Behavior Checklist. $N=2326$. Unstandardized coefficients (β) and standard errors are presented with decomposition of the effect into probability of highest positive response and differences in adoption assessment.

* $p<.05$; ** $p<.01$; *** $p<.001$ (two-tailed test).

However, Yoon (2001) states that low response rate for adoption research is expected for this type of survey method and study population. The possible effect of this sampling bias on our findings is unclear, and no prior research indicates whether particular types of adoptive parents are more likely to respond. It is probable, however, that respondents are more likely than non-respondents to be satisfied with their adoption experience and relationship with the adopted child or children.

Another limitation that may merit some consideration is the difference in sample size between the kin and non-kin groups. Consequently, caution needs to be taken in interpreting effect sizes. Also, as with the Magruder (1994) study, our data were cluster-correlated at the child level. Therefore, one potential method for analysis would have been General Estimating Equations (GEE). We chose instead to use tobit regression since it could aid in accounting for the fact that the responses were skewed towards the positive end of the scale.

Despite these limitations, this study exhibits several important features that enhance its contribution. The data analyzed are drawn from one of the largest adoption-focused samples in the literature. This allows us to compare several sub-sets of adoptive parents, including those headed by kinship adoptive parents. The sample also exhibits distribution of kinship and non-kinship families similar to national data reported by the Administration for Children and Families' Children's Bureau (2006, 2008). As such, while the study's

findings cannot be generalized, the distribution appears to mirror the overall population of public child welfare adoptions.

5.2. Kinship adoptive families

This cross-sectional study identified descriptive and outcome differences between kin and non-kin adoptive families. Kinship families were somewhat smaller in overall size, more likely to be white, contained fewer children, and reported an average of \$15,874 less yearly household income than non-kin families. Like Magruder (1994) and Howard and Smith (2003), we also found that kin were more frequently single parents and had lower levels of income and education compared to non-kin. Children adopted into kin families also differed from those adopted by non-kin. They were more likely to be female and younger at the time of the survey. Kinship adoptees also experienced fewer total placements, despite being placed in their adopted families at the same age as non-kin adoptees; however, they also waited longer prior to finalization of the adoption.

One interesting result was that kin adoptive parents more negatively assessed the family's current functioning. One possible explanation for this is that kin families may have felt more obligated to take on additional family members, despite unpreparedness or ambivalence. If the ongoing kinship adoptions in this study were motivated, at least in part, by a sense of duty to family, it would be consistent with Spence's (2004) conclusions and with Testa and Slack (2002) findings concerning the features of lasting kinship foster placements, as presented in literature review Sections 2.1 and 2.2. In contrast to some kinship adoptions that may be motivated by a sense of obligation, non-kin adoptions take place with special effort and are entirely volitional, perhaps increasing the likelihood of positive post-finalization assessment of satisfaction with the placement. A second possible explanation for this finding is that kin and non-kin adopters may have perceived differently the question about adoption's effects on family functioning. As extended family members of the child's family of origin, kin adopters may have reflected in their response negative effects on the child's original family, or on the entire extended family system. For example, they may have considered in their responses extended family conflict concerning the adoption or divided loyalties within the extended family due to the adoption.

The family bond also appears to impact the kinship families' willingness to adopt the same child again, be generally satisfied with the overall adoption, and to report a positive relationship with their adopted child. This willingness to adopt the same child again also was found in previous studies on kinship adoptions by grandparents (e.g., Hayslip & Shore, 2000; Hinterlong & Ryan, 2008). Interestingly, we found household income to be unrelated with any outcome in the

Table 6

Results of adoption outcomes regressed (tobit) on kinship status and control variables: relationship satisfaction.

Variable	Relationship satisfaction			
	β	SE	Probability	Marginal
Kin status (1 = yes)	−0.003	0.049	−0.001	−0.001
Household income	0.000	0.000	0.000	0.000
Household size	−0.001	0.009	0.000	0.000
Mean need	0.009	0.024	0.005	0.003
CBCL externalizing	−0.051	***	0.002	−0.017
Adoption delay	0.041	***	0.010	0.022
Child age	−0.091	***	0.004	−0.049
Adopted with siblings (1 = yes)	−0.105	**	0.035	−0.056
Parent race	0.158	***	0.039	0.085
Parent education	−0.068	***	0.013	−0.037
Intercept	3.392	***		
R ²	0.487			

CBCL = Child Behavior Checklist. $N=2326$. Unstandardized coefficients (β) and standard errors are presented with decomposition of the effect into probability of highest positive response and differences in adoption assessment.

* $p<.05$; ** $p<.01$; *** $p<.001$ (two-tailed test).

analysis. Likewise, parent education was not predictive of willingness to adoption again or of adoption satisfaction, but parents with more education experienced significantly worse family impacts from the adoption, poorer family functioning, and lower satisfaction with the parent–child relationship.

5.3. Policy and practice implications

One of the stated goals of the Adoption and Safe Families Act is to encourage timely and permanent placements through adoption. Kinship adoptions may more easily create permanent and successful adoptive placements, judging by our outcome measures. It appears as though, based upon the reported delays in finalization of kinship adoptions, that some barriers are still present that might warrant attention, as they impede the process of creating these generally more permanent and successful placements. For instance, rarely do current kinship caregivers receive the same financial support as non-kinship caregivers (Hegar & Scannapieco, 2000). The Kinship Caregiver Support Act (S. 661/HR. 2188), introduced in 2004 but never enacted, would have allowed increased support to kinship caregivers and so created more permanent homes for children (Lester & Vamvas, 2007). Some of its goals are addressed by the more recent Fostering Connections to Success and Increasing Adoptions Act of 2008, which gives states some options to use federal funds to “to provide kinship guardianship assistance payments to grandparents and other relatives who have assumed legal guardianship of children for whom they have: (1) cared as foster parents; and (2) committed to care on a permanent basis” (H.R. 6893, 2008).

Both policy makers and practitioners would benefit from an increased awareness of the issues illuminated by this study. For instance, children in kinship care interact constantly with certain family members, yet they may not have contact with their biological parents. Contact with kin may pose a continual reminder of loss that in turn may create problems that manifest themselves in educational, behavioral, emotional, and other difficulties. Also, practitioners need to be sensitive to the fact that kinship adoptive parents may have adopted the child out of a feeling of obligation instead of volition.

5.4. Research implications

Additional complexity in the statistical methods used may be useful in providing more latitude for interpretation of the findings, perhaps including GEE or regression with multiplicative interaction effects. More research would be advisable in the effort to discriminate among metrics of adoption success (income, education, race, etc.). Research that adequately considers the pre-placement history of the child and parent would also be beneficial to allow for the partializing out of these factors. Also, more in-depth analysis of the impact of kinship over time (i.e., longitudinally) would be beneficial to explore the long-term advantages and disadvantages of kinship adoption. Studies focusing on the effects of various individuals who play key parts in finalizing kinship adoptions would be beneficial (e.g., adoption caseworkers, teachers, mental health professionals). Finally, an analysis of the willingness of the adoptive parents to adopt the child prior to finalization would be beneficial in determining how that may have impacted the outcome of the adoption.

Drawing from the results of this and previous studies, kinship adoptions appear to produce positive outcomes and permanent placements for many children who otherwise might spend extended time in foster care or be placed permanently outside of their kinship networks. U.S. policy now strongly supports kinship placements for foster children, and it is likely that many future foster children ultimately will enter adoption in the homes of relatives. This trend amplifies the importance of research into all aspects of kinship placements and adoptions.

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