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Running Head: EFFECTS OF CONCURRENT PLANNING

> The differential effects of concurrent planning practices on child welfare outcomes of reunification and adoption

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Abstract

The child welfare practice innovation of concurrent planning attempts to shorten the length of time abused or neglected children stay in foster care before either returning home or finding a new permanent home through adoption or guardianship. Concurrent planning is expected to decrease children's time in care; however, there is very little quantitative research on concurrent planning's effects. This study uses a sample of 885 children, a retrospective longitudinal design and multivariate analyses to examine the influence of discrete concurrent planning practice elements on child welfare outcomes of reunification and adoption. Findings show some concurrent planning elements to be positively associated with adoption, and others to be negatively associated with reunification. Implications for policy and practice are discussed.

The differential effects of concurrent planning practices on child welfare outcomes of reunification and adoption

Concurrent planning is a child welfare practice innovation that attempts to shorten the length of time abused or neglected children stay in foster care before either returning home or finding a new permanent home through adoption or guardianship. Concurrent planning revises the traditional sequence of permanency planning; instead of waiting until reunification efforts fail, agencies make efforts toward adoption concurrently with reunification efforts (Katz, Robinson & Spoonemore, 1994). The practice is an attempt to deal aggressively with the concern about children's overlong stays in care and need for permanency, while staying true to the historical commitment of child welfare services to family preservation.

In 1997, concurrent planning received national attention and endorsement with the passage of the Adoption and Safe Families Act (ASFA). ASFA required "reasonable efforts" not just to preserve and reunify families, but also to find permanent homes for children should reunification fail; the law clarified that these efforts may be made concurrently with efforts to reunify (Adoption and Safe Families Act, 1997). Concurrent planning appears to be widely used: state administrators report using the practice (Mitchell et al., 2005; Westat 2001), and concurrent planning is mentioned in national summaries of important changes in child welfare practice (e.g., Malm, Bess, Leos-Urbel, Geen & Markowitz, 2001; USGAO, 1997; Westat 2001). Currently, some states require and some states allow concurrent planning (Christian, 1999; Gerstenzang & Freundlich, 2005).

Concurrent planning is expected to decrease children's time in care and reduce the number of placements they experience (Schene, 2001), as well as improve permanency rates (Harden, 2004). In fact there is a paucity of research on concurrent planning's effects, as many have noted (see Edelstein, Burge & Waterman, 2002; Gerstenzang & Freundlich, 2005; Katz, 1999; Lutz, 2000; Monck, Reynolds & Wigfall, 2005; Wattenburg, Kelly & Kim, 2001; Westat, 2001). Findings from the several published studies are generally positive. An outcome study reported a permanency rates of 76%, and an average time to permanency of approximately 13 months (Katz, 1990). A comparison group study found children receiving concurrent planning had shorter lengths of stay and fewer placement changes than children not receiving concurrent planning (Monck, Reynolds & Wigfall, 2004). An observational study of children receiving concurrent planning found that cases with an articulated concurrent plan were more likely to achieve timely permanence (defined as placement in a potentially permanent or permanent home by one year) than those without an articulated plan, while cases in which parents had received "parental options counseling" (a component of concurrent planning practice) were less likely to achieve permanence than cases in which parent had not received this counseling, in a bi-variate analysis (Potter & Klein-Rothschild, 2001).

Although the existent evidence seems to point to mostly beneficial effects for concurrent planning, the literature is limited in number and design. Outcomes studies by definition do not make use of a comparison group. In the comparison group study, the comparison group differed in known and unknown ways from the group receiving concurrent planning services: groups were known to differ by age as well as parental characteristics and capacity (as measured by a "family strengths" scale) (Monck et al., 2004), but potentially confounding factors were not controlled for. The correlational study assessed the association of concurrent planning variables

with timely permanency using a bivariate analysis, also did not control for possible confounders. In addition, studies combine both reunification and adoption into a single "permanent exit from care" for considerations of permanency rates and timing, obscuring any differential effects the practice may have upon different permanency outcomes like adoption and reunification. In sum, although the few published evaluations of concurrent planning suggest the practice may result in improving some permanency outcomes, limitations of the available research prevent definitive conclusions.

This study attempts to fill this gap in the literature. Using a retrospective longitudinal design and a sample of 885 children entering out-of-home care from six counties in California, children who received elements of concurrent planning were compared to children who did not elements of concurrent planning. Potentially confounding independent variables were controlled for in the multivariate analysis. The specific research questions to be pursued were the following: 1) What is the effect of concurrent planning on reunification; and 2) What is the effect of concurrent planning on adoption. No hypothesis regarding the direction of the effect was proposed.

Methods

Research Design

California law mandates concurrent planning (Chapter 793, 1997). Because of this, an experimental study was not possible. A comparison group design was considered, in which outcomes of a cohort entering care prior to passage of the state concurrent planning law would be compared to outcomes of a second cohort entering care after passage of the legislation. However, this design was rejected after it was learned that a substantial portion of cases that entered care after passage of concurrent planning legislation did not have concurrent planning activities occur

on them, and some cases entering care before passage of concurrent planning legislation did have concurrent planning activities occur on them. In addition, the state law mandating concurrent planning was broad, requiring only the description of the concurrent plan on the court report and a statement regarding whether efforts toward the plan were made on the case; otherwise no active concurrent planning efforts were required. Instead, an observational design with statistical controls was used: Children who had received some elements of concurrent planning practice were compared to children who did not receive those elements, and potentially confounding variables, including entry cohort, were controlled via multivariate statistical analysis. Sample

The sample was composed of cases from six California counties; in a previous pilot study, these counties had been identified as fully implementing concurrent planning (D'Andrade, Mitchell & Berrick, 2003). A random sample of cases entering care from 6/1/93-5/31/93 and 6/1/98-12/31/00 were drawn from the longitudinal database of all foster care entries housed at the Center for Social Services Research at the University of California at Berkeley. The overall sample was restricted to children in care over five days, as concurrent planning would not be relevant for children with shorter stays. Additionally, only children under the age of ten were included because the pilot study indicated that California counties target concurrent planning almost exclusively towards younger children. To ensure independent observations, one sibling per family (as identified by case number) was selected. For large counties, a random sample of 400 cases was drawn; for smaller counties, the entire universe of children entering care within the time frame was selected.

Reliability and Validity

Data for this study came from child welfare court reports written by social workers to inform the juvenile court judge of case happenings. Most of the data extracted from cases files for this study was factual information related to the circumstances bringing the child into care; this type of data is likely to be present in case files, and more likely to be reliable than other kinds of information (Fanshel, Finch & Grundy, 1990). To assess reliability, five pairs of coders were asked to review the same case periodically through the review process. The percent of agreement for each pair was calculated, based upon the number of times both coders agreed upon the presence of an indicator for dichotomous outcomes, entered the same date for date items, or selected the same score for Likert scale items. These percentages were averaged across pairings to arrive at an overall reliability estimate of .88 (Trochim, 2001). The degree to which most control variables have similar effects in these models that they do in previous research provides some evidence of the validity of the data (Fanshel et al., 1990).

Model

The recommended approach in concurrent planning is for case workers to target concurrent planning activities toward families they believe less likely to reunify (Katz et al., 1994). As a result, cases that receive concurrent planning are likely to differ in important ways from cases that do not receive such services. Thus, in examining the question of the effects of concurrent planning via a non-experimental study design, variables representing characteristics social workers may use to target concurrent planning should be controlled for in the analysis; it could be these characteristics rather than the concurrent planning services associated with them that result in any difference in outcomes seen.

Two models were developed, one estimating the hazard of adoption, a second the hazard of reunification. The primary independent variable of interest was concurrent planning. Other

independent variables incorporated into this analysis to address the issue of social worker targeting included child characteristics of age, gender, ethnicity, special need, and maltreatment severity; parental characteristics of incarceration, failure to visit the child, substance abuse issue, criminal history, developmental delay, mental health problem, poverty, and child removed previously. Also controlled for were case characteristics of kin placement, continuances, cohort, and county.

Measures

Dependent variables: A categorical variable indicating whether the child reunified, was formally adopted, or left care for other reason was combined with a time-in-care variable measuring the time in years from the date the child entered care until the experience of a permanency event (or until the end of the observation period) to estimate the respective hazards of reunification and adoption.

Concurrent planning: Concurrent planning introduces a number distinct casework activities which could affect outcomes for children. These activities and their theoretical justification have been described in other literature on concurrent planning (see Katz, 1990; Katz et al., 1994; Katz, 1999; Weinberg & Katz, 1998; Lutz, 2000; Schene, 2001), and include 1) the development of the *concurrent plan* (an alternative plan for permanency for the child); 2) a reunification prognosis (a determination of the likelihood of reunification of each family for the purposes of activating the concurrent plan); 3) full disclosure (explaining to parents the process of concurrent planning and the consequences of failing to complete their case plans); 4) discussions of voluntary relinquishment as an option for parents; and fost-adopt placement (placement of the child in a foster home willing to adopt the child should reunification fail. In this study, concurrent planning practice activities recorded by workers in case files were treated

as a separate independent dichotomous variables. These variables were operationalized in the following manner: A concurrent plan was coded as present when a concurrent plan was articulated in the jurisdictional dispositional report; a reunification prognosis was coded as present when a prognosis of the likelihood of reunification was articulated in the jurisdictional dispositional report; full disclosure was coded as present when the occurrence of an explanation of the consequences of failing to complete the case plan was noted in a case court report; and voluntary relinquishment was coded as present when the occurrence of a discussion of this option was noted in a court case report. Placement of the child in a fost-adopt home -- a primary component of concurrent planning -- unfortunately could not be included in the multivariate analysis due to its very low incidence in the sample (see [Reference removed] for a discussion of this issue).

Independent variables – Child characteristics: Child ethnicity was coded as African American, Asian, Caucasian, Hispanic/Latino, Native American, or Other. Native American, Asian, and "Other" categories were subsumed for the analysis due to low numbers in each. Child age was measured as a categorical variable rather than an interval variable, to allow for any non-linear effects of age. Special needs of the child -- medical, emotional, behavioral, developmental delay, and prenatal drug exposure -- were captured with a set of dichotomous variables indicating the presence of these conditions, as documented by the social worker in the jurisdictional dispositional court report.

Five maltreatment severity Likert-like items estimate the severity of different types of maltreatment suffered by the child: physical abuse, sexual abuse, parental failure to provide, lack of supervision, and emotional maltreatment. Item scores were based upon the social worker's description of the incident prompting the child's entry into care in the jurisdictional dispositional

report or the screening narrative. The coding system provided operationally defined criteria for a five-point rating scale of severity for each maltreatment subtype, based upon the seriousness of the parent's behavior, with higher scores indicating greater severity (Manly, Cicchetti & Barnett, 1994). A previous reliability study of this system indicated high reliability for physical abuse (.90), sexual abuse (1.0), failure to provide (.83), and lack of supervision (.90). Emotional maltreatment was lower (.67), possibly due in part due to the reduced amount of information available in case files regarding parent/child interaction (Manly et al., 1994). Although some other studies have summed the six item scores to provide an overall assessment of maltreatment severity experienced by a child (Manly et al., 1994), here items were considered separately for allow for the possibility of differential effects by maltreatment subtype. This measure was used rather than the legal reason for entry to care, as that more commonly used proxy does not address maltreatment severity and often reflects what parties eventually stipulated to in court, rather than the actual maltreatment experienced by a child.

Independent variables – Parent characteristics: Parent variables were measured in regards to the primary custodial parent of the child. For two parent families and families in which the constellation was coded "other," the mother was considered the primary parent.

Information regarding parent characteristics was gathered from the social study included in the dispositional report, which described the situation of the parent at the time of the subject child's removal. These characteristics included prior removal of a child, current substance use, criminal history, AFDC/TANF receipt, a current mental health problem, developmental delay, failure to visit the child prior to the dispositional hearing, and incarceration during the first 3 months of the case. These characteristics were captured with a set of dichotomous variables coded "1" if the

condition was noted by the worker as present on the jurisdictional dispositional court report, and "0" otherwise.

Independent variables – Case characteristics: Kin placement was measured with a dichotomous variable indicating whether a child was placed with kin during the first 3 months of the case. Continuances were measured with an interval level variable equaling the total number of continuances that occurred after the initial detention hearing and before the dispositional hearing. Entry cohort was measured with a dichotomous variable indicating whether the child entered in 93-94 or 98-00. County was captured with a categorical variable, and incorporated into the model as the stratification variable (Allison, 1995).

Procedures

A technical advisory committee composed of staff from county child welfare agencies and the state Department of Social Services, juvenile court personnel, foundation representatives and other child welfare researchers assisted in developing research strategies and refining measures. A data collection instrument was developed and reviewed by the Technical Advisory Committee, and a pilot test conducted using approximately ten cases from a California county not involved in the study. Several questions were reworded or adjusted as a result of the pilot study.

In each county, a research team of 2-4 university students were recruited. Research staff members were provided with two days of training on child welfare procedures, case files, court reports, and data collection. Coding rules were established prior to data collection, and coders were provided with written guidelines detailing these rules. Each coder completed one test case also reviewed by the primary researcher, and areas of incorrect coding were corrected and clarified prior to that coder collecting any data. As a general rule, a characteristic was coded as

present only if the condition was specifically noted in the court report. Data files from all coders were loaded onto a single database, and transferred to SAS software for data cleaning and analysis.

Proportional hazards regression analysis was used to examine the influence of concurrent planning elements on reunification and adoption. The analysis produces estimated hazard ratios, showing the multiplicative effect of a one-unit increase in an independent variable on the hazard of the event of interest, and allows for the incorporation of multivariate controls (Allison, 1995). The nature of the sample was such that the observation period varied by county in the second cohort; proportional hazards regression analysis allows for this situation, censoring cases at the end of the observation period and using available information in estimates of risk without requiring any assumption that the event of interest did or did not happen (Allison, 1995) (Cases were also censored when the child moved out of the county, or died).

A competing risks model was used. This model is employed in proportional hazards regression when there are more than two possible outcomes or events, the experience of any one of which removes a subject from the risk of experiencing any other event. For example, a child who has been reunified is no longer "at risk" of being adopted. Separate analyses are run for each outcome, and in each case, observations are censored at the end of the observation period or at the point the subject experiences any one of the other possible outcomes. This strategy is advantageous because it allows for the timing, occurrence, and influences of different permanency outcomes to vary; subsuming all permanency outcomes into a single "exit" event can obscure important differences that may exist in predictors and processes (Courtney & Wong, 1996).

The proportional hazards model assumes that the ratio of the probabilities of exit for two individuals is fixed at every point in time. While this is never strictly true, if the assumption is grossly violated the coefficient estimates will be biased. To test the assumption of proportional hazards, graphic plots of the log-log survival functions for each of the discrete elements of concurrent planning with each permanency outcome were created and reviewed (Allison, 1995). For variables where the functions did not appear approximately parallel, an interaction term of that variable with time was created, and tested in the model. None of the interaction terms created to test this assumption were found to be statistically significant at p<.05.

Results

Description of sample

The original sample drawn was 1714. Due to both data entry errors by agency staff and differences by county in data element coding in the statewide database from which the sample was drawn, a considerable number of cases falling outside the study parameters were included in the initial sample draw (n=344), and were eliminated at the point of case file review. In addition, 215 cases were lost or destroyed by county agencies, or found to be incomplete upon review. Since concurrent planning would not be relevant for children who returned home prior to the provision of reunification services, or whose parents did not receive reunification services, the sample was restricted to include only children whose cases continued past the jurisdictional dispositional hearing, and who had at least one parent who received reunification services. This reduced the sample by another 270 children, for a final total sample size of 885.

Over 40% of the children in this sample were Caucasian, just under one-fourth were African American, and just under one-fourth Hispanic. Slightly under half were girls. At placement, about 35% of the children in this sample were infants under a year old, while 22%

were between one and three years old, 16% between 3 and 5, 12% between 5 and 7, and 15% between the ages of 7 and 10. Almost 20% of the children in this sample showed indication of a medical special need: about 10% showed either an emotional problem, a behavioral problem, or a developmental delay; and about one-quarter were prenatally drug exposed. Maltreatment item frequencies indicate children were more likely to experience aspects of neglect – particularly failure to provide – than other types of abuse, although emotional abuse was also common. Mean severity scores for children who experienced each type of maltreatment ranged from 2-3 (Table 1).

Characteristics of the primary parent reveal that over 35% had a child previously removed, 60% had current substance abuse problems, and almost half had some criminal history. Almost 20% were incarcerated at some point during the first 3 months of the case, and almost 40% failed to visit their child prior to the dispositional hearing. Sixteen percent had a mental health problem, almost 6% had some degree of developmental delay, and 25% were receiving AFDC/TANF (Table 1).

--- Insert Table 1 about here ---

Almost 60% of the sample experienced a placement with kin at some point, and almost half did so in the first 3 months of the case. There were an average of 1.4 continuances at the jurisdictional dispositional hearing(s) for the sample overall, with the total number of continuances ranging from 0 to 25. Forty-three percent of the children reunified, almost 14% were adopted, 7% entered into legal guardianship relationships, 4% were placed with the nonoffending parent, and over 30% were still in care at the end of the study period.

Regarding concurrent planning, almost 35% of cases had a concurrent plan at the jurisdictional dispositional hearing(s), almost 23% had a reunification prognosis at the

jurisdictional dispositional hearing(s), almost half had full disclosure, and about 16% had discussions of the option of voluntary relinquishment (Table 2).

--- Insert Table 2 about here ---

Research Question 1: Effect of Concurrent Planning Upon Reunification

Table 3 displays hazard ratios for all variables included in the reunification model. The concurrent planning element of full disclosure was associated with a lowered likelihood of reunification (HR=0.74). No other concurrent planning variables were associated with reunification.

In terms of other independent variables, children of Hispanic/Latino (HR=0.71) or "Other" ethnicity (HR=0.57), and children who experienced parental "Failure to Provide" (HR=0.87) or "Emotional Maltreatment" (HR=0.87) were less likely to reunify. Children whose parent did not visit (HR=0.73), had a child removed previously (HR=0.60), had current substance abuse issues (HR=0.69), or had a development delay (HR=0.37), were less likely to reunify than children whose parent did not have these characteristics. Placement with kin (HR=1.4) and entry in the later cohort (HR=1.39) were both associated with an increased hazard of reunification, while continuances were associated with a reduced hazard of reunification (HR=0.93).

Research Question 2: Effect of Concurrent Planning Upon Adoption

Table 3 displays hazard ratios for all variables included in the model of adoption. The concurrent planning element of "discussion of voluntary relinquishment" was associated with an increased likelihood of adoption (HR=1.89). No other concurrent planning variables were associated with this outcome.

In terms of other independent variables, African American children (HR=0.33) and children with behavior problems (HR=0.17) were much less likely to be adopted, while infants (HR=6.08) and children with medical special needs were more likely to be adopted (HR=1.66). No parental characteristics were associated with the likelihood of adoption. Placement with kin (HR=0.47) and continuances (HR=0.85) were associated with a reduced likelihood of adoption.

--- Insert Table 3 about here ---

Discussion

As noted previously, considering the outcome of permanency overall can obscure important differences in the influences upon individual child welfare outcomes. This study focuses upon the two primary avenues by which young children leave care, reunification and adoption. The competing risks analysis revealed that the apparent effects of concurrent planning elements differed across these two permanency outcomes.

The element of full disclosure was associated with a lower likelihood of reunification. Full disclosure discussions ensure parents understand that the agency will proceed with alternative permanency plans for the child if they are unable to successfully make use of reunification services; the goal of the discussions is to prompt the parents into action. "In many instances, the worker's frankness and resolve helps to mobilize a dysfunctional family because it provokes a crisis, while at the same time, offers a road map to family reintegration" (Katz et al., 1994, p.13). It may be that the social work practice of full disclosure is difficult to do well and hence effectively, as is suggested by Weinberg & Katz (1998). Qualitative studies of concurrent planning have explored and discussed some of the challenges for workers involved with these types of discussions (see Gerstenzang & Freundlich, 2005; Monck, Reynolds & Wigfall, 2005). It is also possible that such discussions dishearten parents and hinder reunification, regardless of

the skill with which they are undertaken. Training on the conduct of this challenging social work practice activity may be a necessary component of a concurrent planning program.

Concurrent planning literature recommends a discussion of voluntary relinquishment, to ensure parents are aware of this option: "Parents need to know all of their alternatives from the outset if they are to be truly empowered to choose the future that's best for themselves and their children" (Katz et al., 1994, p.12). In this study, the concurrent planning element of voluntary relinquishment was associated with an almost doubled hazard of adoption, supporting the idea that specifically articulating this option to parents facilitates their use of it. While this may be promising if this is the best option for the family, certainly care should be taken to ensure parents are truly ready and willing to take such an action.

It is important to consider the possibility that these concurrent planning activities were taken by workers on behalf of parents whom, as the case progressed, they had come to believe were not going to successfully reunify. Although the multivariate analysis controlled for parental characteristics that seemed likely to influence a worker's impression of a parent's reunification potential at case outset, if these actions were taken later in the case once parental inaction or lack of progress suggested reunification failure, the apparent "effect" of these concurrent planning activities on permanency outcomes would be in fact a reverse effect; not the *cause* of the difference in outcomes, but rather a *result* of the worker's view of a likely outcome. However, there was evidence from the co-occurring qualitative concurrent planning study of the same counties suggesting that these elements often did occur early on (L. Frame, personal communication); and in at least one county, the jurisdictional dispositional court report(s) reported upon these elements, thus establishing their occurrence early in the case.

The development of a concurrent plan, or plan for alternative permanency, serves as a continual reminder of the alternative goal and the means to attain it. "...By keeping the focus on permanence (rather than one particular outcome) the agency's ambivalence is minimized" (Katz et al., 1994, p.13). Unlike in Potter & Klein-Rothschild's 2001 study, here the variable representing an articulated concurrent plan was not associated with either permanency outcome. In their co-occurring qualitative study of concurrent planning, Frame et al. (2006) discuss that even in those cases in which a concurrent plan was articulated, often the reporting was perfunctory and not truly reflective of actions taken on a case. Additionally, the concurrent planning on the court report by state law was to required to be implemented; only if the parents' likelihood of reunification was determined to be poor was the plan to be put in place.

Understanding a parent's likelihood of reunification should help agencies craft an alternative plan for permanency for the child most likely to facilitate the swift attainment of that end. In this study, the presence of a recorded reunification prognosis was not associated with either outcome. However, it is not clear that workers are able to accurately make this prognosis. While a structured tool for reunification prognosis making exists (Katz & Robinson, 1991), and was used by several counties, it has never been validated. Workers' assessments of the likelihood of parental reunification made either with or without the use of this tool may not be valid, or it may be that simply making such a prognosis has no influence on the timing of permanency processes.

Findings regarding other independent variables for the most part are similar to those found in other studies. Regarding reunification, many studies have found that children of minority ethnic heritage are less likely to reunify (Connell, Katz, Saunders & Tebe, 2006; Courtney & Wong, 1996; Kortenkamp, Geen & Stagner, 2004; Wells & Guo, 1999) - though in

this study a statistically significant reduction in likelihood was seen only for Hispanic children and children of "other" non-white ethnicities. Other studies have also found children entering care for neglect less likely to reunify than those entering for physical abuse and other reasons (Courtney & Wong, 1996; Kortenkamp et al., 2004; Wells & Guo, 1999). In this study, maltreatment severity items differentiate between two different types of neglect: lack of supervision, and failure to provide. Only failure to provide appeared to have an effect. It may be that there are critical distinctions between these two aspects of neglect; a parent who is unable to ensure even the minimal standards of food, hygiene and shelter may ultimately have greater parenting problems than a parent who has difficulty arranging adequate supervision. Not surprisingly, the likelihood of reunification decreased as the severity of the parent's failure to provide increased.

Emotional maltreatment was negatively associated with reunification. Emotional maltreatment has rarely been considered in child welfare research. It is almost never used as a reason for entry to care, perhaps because it is difficult both to define (Pecora, Whittaker, Maluccio & Barth, 2000), and to establish its occurrence. However, emotional maltreatment occurred with relative frequency and severity in this sample. The category is somewhat broad, and captures a range of phenomenon, such as belittling or name calling, exposing the child to domestic violence, or abandoning the child with no contact information provided (Barnett, Manly & Cichetti, 1993). These behaviors may identify parents with seriously damaged relationships with their children, who might be less likely to invest the necessary energy to reunify, or those with severe drug habits that hinder reunification efforts.

Other studies have also found parents' failure to visit (Leathers, 2002; McMurty & Lie, 1992; Testa & Slack, 2002), prior removal of the child (Connell et al., 2006 [two or more

removals]; Fraser, Walton, Lewis, Pecora, & Walton, 1996), and problems with substance use (Brook & McDonald, 2007; Eamon, 2002) to be associated with a lower likelihood of reunification. The dramatically lower likelihood of reunification for parents with developmental delays found here was perhaps not surprising, though little previous work considers this issue. These parents may require more specialized and intensive services than are generally provided to them, and/or they may not have the capacity to improve their parenting to the degree necessary for them to be reunified.

Two variables positively associated with reunification in this study were found to be negatively associated with reunification in other studies: kin placement (Connell et al., 2006; Courtney & Wong, 1996; Kortenkamp et al., 2004), and poverty or economic hardship (Courtney & Wong, 1996; Eamon, 2002). These differences may be due to differences in how the variable was operationalized. Measures of poverty used in other studies include AFDC-eligibility (Courtney & Wong, 1996), and indicators of economic hardships from risk and family assessment instruments (Eamon, 2002). This study used "active receipt of AFDC/TANF at time of removal" as the measure for poverty. Rather than acting as a proxy for poverty, the variable may instead be identifying AFDC/TANF-eligibles who have the wherewithal to complete an application and maintain an active stable address to receive checks, and who thereby have a fairly steady and reliable, albeit meager, source of income. Similarly, the measure of kin placement used in this study differs somewhat from those used in other studies, which include placement in a kin home at any time during the case (Kortenkamp et al., 2004) or a time-varying covariate (Connell et al., 2006; Courtney & Wong, 1996). The measure used here, "early kin placement," may be acting as a proxy for a related but different characteristic, something along

the lines of "a supportive local family member or network," a characteristic that may facilitate reunification.

Stein (2000) voiced concern about the potential for ASFA's focus on alternative permanency to negatively affect reunification. Some research has noted a recent decrease in reunification rates (Wells & Guo, 2004; Wulcyzn, 2004). In this study, however, children entering care in the later cohort (1998-2000) were more likely to reunify than children entering care in 1994. Other research has found similar results: an Illinois study found that reunification was more likely for children entering care in 1997, 1998 or 1999 than for children entering in 1996 (Eamon, 2002), while Rockhill, Green & Furrer (2007) found no change in reunification rates pre- and post-ASFA.

Regarding adoption, findings found here that are similar to those found in other studies include the negative effect of kin placement (Berrick et al., 1998; Courtney & Wong, 1996). African American heritage (Berrick et al., 1998; Courtney & Wong, 1996), and behavior problems (Connell et al., 2006), and the positive effect of younger age (Berrick et al., 1998; Connell et al., 2006; Courtney & Wong, 1996) and entry into care post-ASFA (Rockhill et al., 2007). Parental characteristics were not associated with the likelihood of adoption; this makes sense, as while parental characteristics would drive the process of reunification, child and agency characteristics are likely to have more influence on the outcome once adoption efforts are underway.

Limitations

Because state law requires consideration of concurrent planning on every case, an experimental design was not possible. Therefore, cause and effect cannot be established. Generalizability is limited because a random sample of all children in out-of-home care in California was not used; this would have required separate contractual agreements with up to 58 counties and heavy travel on the part of the research staff, and therefore was not feasible. Standardized measures of complex constructs, such as mental health, socio-economic status, or substance abuse, were not possible given the data source. Additionally, case files are not created for research purposes, and vary in depth, content, and quality by both county and worker (Fanshel et al., 1990).

The assumption of non-informative random censoring (and independence of events) cannot be tested, but a sensitivity analysis can provide some sense of the degree to which estimates might be affected if the assumption is violated (Allison, 1995). The sensitivity analysis conducted for this study suggested that if the assumption of independent events is violated, estimates of hazard ratios for a number of variables may be somewhat biased, particularly for the outcome of adoption. However, the competing risks proportional hazards model has been previously used by researchers in the field to better understand pathways to child welfare permanency (see Courtney & Wong, 1996; Kortenkamp et al., 2004; McMurty & Lie, 1992; Testa & Slack, 2002), and the problem of event dependence is reduced here with the inclusion of variables affecting multiple outcomes (Allison, 1995; Testa & Slack, 2002). Additionally, treating permanency outcomes as competing risks, or separate processes, while imperfect, should provide an improved understanding of child welfare phenomena over considering all outcomes as a single "permanency event." For example, in this study, concurrent planning is revealed to have distinctly different effects upon adoption and reunification when these are analyzed separately; this distinction would be obscured were the events to be combined into a single "exit from care" variable.

Other measures of concurrent planning may make sense to consider. Using distinct practice elements as separate variables allows any distinct effects of these elements to be identified; however, it may be that the practice is effective only when all the elements of concurrent planning are practiced together on a case. Or concurrent planning practice elements may have a cumulative effect. In addition, a primary element of concurrent planning, fost-adopt placement, could not be included in multivariate analysis due to its low incidence in this sample.

The study has a number of strengths. Much of the research on permanency in child welfare uses administrative data, which generally lacks information on parental and child characteristics other than gender and ethnicity; this study's use of case files rather than administrative data allowed the inclusion of additional important characteristics as control variables. The case files allowed a longitudinal examination, over a period of up to three years. Additionally, this study uses a multivariate approach to control for confounding factors, and relatively large samples.

Findings suggest the effects of concurrent planning as practiced in public child welfare agencies may be less than fully positive. A number of recent qualitative studies have described the implementation of concurrent planning, and provide some context for the findings here. Effective concurrent planning as outlined by these researchers is complex, involving skillful social work and intensive service provision, as well as systems changes such as structured collaboration between adoption and reunification workers (Frame et al., 2006; Gerstenzang & Freundlich, 2005). Linda Katz emphasizes the importance of a fully realized concurrent planning program in her article on the "benefits and pitfalls" of concurrent planning practice, asserting that concurrent planning "...is based upon an expectation of high-functioning foster families, social workers and supervisors. To this end, training and workload levels must be congruent with this expectation" (1999, p.84). Yet qualitative studies find that necessary supports and services for concurrent planning can be inadequate (Gerstenzang & Freundlich, 2005) and implementation and start-up slow and challenging (Wigfall, Monck & Reynolds, 2006). Concurrent planning state policy in California does not facilitate a program of intensive services; minimal action is required to avoid any fiscal penalty, and no funding is provided. It may be that substantive benefits from concurrent planning are only seen when intensive services and supports are available and provided.

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Table 1: Child and Parent Characteristics

| Table 1: Child and Parent Child characteristics | n | % | Parent characteristics | n | % |
|---|------|-------|---|-----|-------|
| Child characteristics | 11 | 70 | ratent characteristics | n | 70 |
| Ethnicity | | | Prior removal of a child | | |
| African American | 196 | 22.2 | Yes | 322 | 36.4 |
| Caucasian | 376 | 42.5 | No | 561 | 63.4 |
| Hispanic | 205 | 23.2 | Missing | 2 | 0.2 |
| Other | 72 | 8.1 | Ç | 885 | 100.0 |
| Unknown | 36 | 4.1 | Current substance abuse | | |
| | 885 | 100.1 | Yes | 535 | 60.4 |
| Age | | | No | 337 | 38.1 |
| <1 | 311 | 35.0 | Missing | 13 | 1.5 |
| 1-<3 | 196 | 22.2 | | 885 | 100.0 |
| 3-<5 | 144 | 16.3 | On AFDC/TANF | | |
| 5-<7 | 106 | 12.0 | Yes | 220 | 24.9 |
| 7-10 | 128 | 14.5 | No | 630 | 71.2 |
| | 885 | 100.1 | Missing | 35 | 3.9 |
| Gender | | | | 885 | 100.0 |
| Male | 480 | 54.2 | Failed to visit child <dispo< td=""><td></td><td></td></dispo<> | | |
| Female | 405 | 45.8 | Yes | 346 | 39.1 |
| | 885 | 100.0 | No | 501 | 56.6 |
| Child Special Needs | | | Missing | 38 | 4.3 |
| (not mutually exclusive) | | | | 885 | 100.0 |
| Medical | 169 | 19.1 | Criminal history | | |
| Emotional | 99 | 11.2 | Yes | 403 | 45.6 |
| Behavioral | 109 | 12.3 | No | 449 | 50.7 |
| Developmental delay | 86 | 9.7 | Missing | 33 | 3.7 |
| Prenatal drug exposure | 234 | 26.4 | | 885 | 100.0 |
| | | | Incarcerated first 3 mos | | |
| Maltreatment Occurrence | | | Yes | 172 | 19.5 |
| (not mutually exclusive) | | | No | 688 | 77.7 |
| Physical maltreatment | 138 | 15.6 | Missing | 25 | 2.8 |
| Sexual maltreatment | 28 | 3.2 | 1 | 885 | 100.0 |
| Failure to provide | 596 | 67.3 | Current mental health prob | | |
| Lack of supervision | 352 | 39.8 | Yes | 142 | 16.1 |
| Emotional maltreatment | 304 | 34.4 | No | 709 | 80.1 |
| | | | Missing | 34 | 3.8 |
| Maltreatment Severity | Mn | Med | | 885 | 100.0 |
| Physical maltreatment | 2.43 | 2 | Developmental delay | | |
| Sexual maltreatment | 2.68 | 3 | Yes | 52 | 5.9 |
| Failure to provide | 2.96 | 3 | No | 797 | 90.0 |
| Lack of supervision | 2.66 | 2 | Missing | 36 | 4.1 |
| Emotional maltreatment | 3.02 | 3 | | 885 | 100.0 |
| | | | | | |

Table 2: Case Characteristics and Concurrent Planning Variables

| Case characteristics | n | % | Concurrent planning | n | % |
|--------------------------|------|-------|--------------------------|-----|-------|
| Case outcomes | | | Concurrent plan | | |
| | 204 | 12.4 | Yes | 202 | 24.2 |
| Reunification | 384 | 43.4 | | 303 | 34.3 |
| Adoption | 123 | 13.9 | No | 564 | 63.7 |
| Guardianship | 62 | 7.0 | Missing | 18 | 2.0 |
| With non-off par | 36 | 4.1 | | 885 | 100.0 |
| Still in care | 280 | 31.6 | Reunification prognosis | | |
| | 885 | 100.0 | Yes | 201 | 22.7 |
| Kin placement | | | No | 672 | 75.9 |
| (not mutually exclusive) | | | Missing | 12 | 1.4 |
| At any time | 518 | 58.5 | | 885 | 100.0 |
| In first 3 months | 424 | 47.9 | Consequences of failure | | |
| | | | discussed | | |
| | | | Yes | 411 | 46.5 |
| County | | | No | 449 | 50.7 |
| A | 197 | 22.3 | Missing | 25 | 2.8 |
| В | 50 | 5.7 | | 885 | 100.0 |
| C | 81 | 9.2 | Voluntary relinquishment | | |
| D | 212 | 23.9 | Yes | 142 | 16.0 |
| E | 255 | 28.8 | No | 722 | 81.6 |
| F | 90 | 10.2 | Missing | 21 | 2.4 |
| | 885 | 100.1 | | 885 | 100.0 |
| Continuances at JD | | | | | |
| Mean | 1.4 | | | | |
| Median | 1.0 | | | | |
| Range | 0-25 | | | | |

| Table 3: Multivariate Model for | | | T | T | T |
|---------------------------------|----------------|-------------------|------------|--------------|---------|
| | Parameter Est. | Standard Error | Chi-Square | Hazard Ratio | P-Value |
| Child Characteristics | | | | | |
| Ethnicity | | | | | |
| African Amer | -0.267 | 0.158 | 2.841 | 0.77 | .092 |
| Hispanic/Latino* | -0.350 | 0.151 | 5.353 | 0.71 | .021 |
| Other* | -0.566 | 0.219 | 6.663 | 0.57 | .010 |
| Caucasian | | | | 1.00 | |
| Age | | | | | |
| <1 | -0.127 | 0.196 | 0.422 | 0.88 | .516 |
| 1-<3 | 0.150 | 0.183 | 0.674 | 1.16 | .412 |
| 3-<5 | 0.120 | 0.193 | 0.384 | 1.13 | .535 |
| 5-<7 | -0.003 | 0.212 | 0.000 | 1.00 | .991 |
| 7-10 | | | | 1.00 | |
| Gender | | | | | |
| Boy | 0.074 | 0.113 | 0.423 | 1.08 | .516 |
| Girl | | | | 1.00 | |
| Special Need | | | | 1100 | |
| Medical | -0.298 | 0.167 | 3.169 | 0.74 | .075 |
| Emotional | -0.091 | 0.230 | 0.158 | 0.91 | .691 |
| Behavioral | -0.136 | 0.224 | 0.366 | 0.87 | .545 |
| Developmental delay | -0.187 | 0.214 | 0.767 | 0.83 | .381 |
| Prenatal Drug Exposure | -0.068 | 0.170 | 0.162 | 0.93 | .688 |
| Maltreatment | 0.000 | 0.170 | 0.102 | 0.73 | .000 |
| Physical | 0.006 | 0.057 | 0.011 | 1.01 | .919 |
| Sexual | -0.129 | 0.129 | 1.000 | 0.88 | .317 |
| Failure to Provide* | -0.129 | 0.129 | 12.544 | 0.87 | <.001 |
| Lack of Supervision | -0.140 | 0.041 | 0.226 | 0.87 | .635 |
| Emotional* | -0.137 | 0.040 | 12.764 | 0.98 | <.001 |
| Parent Characteristics | -0.137 | 0.038 | 12.704 | 0.67 | <.001 |
| | -0.070 | 0.146 | 0.226 | 0.93 | .635 |
| Early incarceration | | | | | |
| Did not visit | -0.309 | 0.126 | 6.039 | 0.73 | .014 |
| Child previously removed* | -0.506 | 0.127 | 15.952 | 0.60 | <.001 |
| Substance abuse* | -0.377 | 0.127 | 8.833 | 0.69 | .003 |
| Criminal history | -0.138 | 0.121 | 1.300 | 0.87 | .254 |
| Developmental delay* | -0.990 | 0.324 | 9.341 | 0.37 | .002 |
| Mental health problem | -0.023 | 0.162 | 0.021 | 0.98 | .886 |
| AFDC/TANF receipt | 0.217 | 0.130 | 2.764 | 1.24 | .096 |
| Case Characteristics | | | | | |
| Early kin placement* | 0.335 | 0.118 | 8.034 | 1.40 | .005 |
| Continuances* | -0.076 | 0.034 | 5.031 | 0.93 | .025 |
| Cohort | | | | | |
| Second Cohort* | 0.332 | 0.137 | 5.892 | 1.39 | .015 |
| First Cohort | | | | 1.00 | |
| Concurrent Planning | | | | | |
| Reunification Prognosis | 0.068 | 0.157 | 0.189 | 1.07 | .664 |
| Discussion of Consequences* | -0.297 | 0.129 | 5.244 | 0.74 | .022 |
| Voluntary Relinquishment | -0.344 | 0.182 | 3.587 | 0.71 | .058 |
| Concurrent Plan | -0.051 | 0.145 | 0.123 | 0.95 | .726 |
| | | of Global Null Hy | | | |

Test of Global Null Hypothesis Beta=0: LR=149.40, df=33, p-value<.0001 County is stratification variable (6 stratum)

^{*=}p<.05

Table 4: Multivariate Model for Hazard of Adoption

| | Parameter | Standard Error | Chi-Square | Hazard Ratio | P-Value |
|----------------------------|-----------|----------------|------------------------|--------------|--------------|
| Child Characteristics | Est. | | | | |
| Ethnicity | | | | | |
| African American* | -1.124 | 0.303 | 13.740 | 0.33 | <.001 |
| Hispanic/Latino | -0.378 | 0.303 | 1.885 | 0.69 | .170 |
| Other Ethnicity | -0.378 | 0.273 | 0.184 | 0.85 | .668 |
| Caucasian | -0.100 | 0.366 | 0.164 | 1.00 | .000 |
| | | | | 1.00 | |
| Age <1* | 1.806 | 0.575 | 9.851 | 6.08 | .002 |
| 1-<3 | 1.101 | 0.592 | 3.453 | 3.01 | .063 |
| | -0.225 | 0.693 | 0.105 | 0.80 | |
| 3-<5 | -0.225 | | 0.103 | 0.80 | .746 .446 |
| 5-<7 | -0.5/1 | 0.748 | 0.582 | | .440 |
| 7-10 | | | | 1.00 | |
| Gender | 0.072 | 0.215 | 0.117 | 1.00 | 722 |
| Boy | 0.073 | 0.215 | 0.117 | 1.08 | .733 |
| Girl | | | | 1.00 | |
| Special Need | 0.505 | 0.245 | 1.245 | 1.66 | 020 |
| Medical* | 0.505 | 0.245 | 4.245 | 1.66 | .039 |
| Emotional | 0.951 | 0.601 | 2.505 | 2.59 | .114 |
| Behavioral* | -1.775 | 0.611 | 8.427 | 0.17 | .004 |
| Developmental delay | 0.115 | 0.324 | 0.126 | 1.12 | .723 |
| Prenatal Drug Exposure | -0.388 | 0.302 | 1.643 | 0.68 | .200 |
| Maltreatment | 0.100 | 0.122 | 0.675 | 1 10 | 411 |
| Physical | 0.109 | 0.133 | 0.675 | 1.12 | .411 |
| Sexual | -0.252 | 0.308 | 0.666 | 0.78 | .414 |
| Failure to Provide | 0.068 | 0.079 | 0.757 | 1.07 | .384 |
| Lack of Supervision | 0.043 | 0.078 | 0.297 | 1.04 | .586 |
| Emotional | 0.034 | 0.073 | 0.219 | 1.04 | .640 |
| Parent Characteristics | 0.4.4 | 2.20 | | | |
| Early incarceration | -0.164 | 0.287 | 0.327 | 0.85 | .568 |
| Did not visit | -0.004 | 0.240 | 0.000 | 1.00 | .986 |
| Child previously removed | 0.415 | 0.223 | 3.469 | 1.52 | .063 |
| Substance abuse | 0.401 | 0.310 | 1.675 | 1.49 | .196 |
| Criminal history | 0.185 | 0.229 | 0.655 | 1.20 | .418 |
| Developmental delay | -0.673 | 0.450 | 2.243 | 0.51 | .134 |
| Mental health problem | -0.042 | 0.268 | 0.025 | 0.96 | .874 |
| AFDC/TANF receipt | -0.171 | 0.292 | 0.344 | 0.84 | .558 |
| Case Characteristics | | | | | |
| Early kin placement* | -0.749 | 0.240 | 9.745 | 0.47 | .002 |
| Continuances* | -0.163 | 0.066 | 6.168 | 0.85 | .013 |
| Cohort | | | | | |
| Second Cohort* | 0.696 | 0.259 | 7.238 | 2.01 | .007 |
| First Cohort | | | | 1.00 | |
| Concurrent Planning | | | | | |
| Reunification Prognosis | 0.064 | 0.316 | 0.040 | 1.07 | .841 |
| Discussion of Consequences | 0.317 | 0.245 | 1.678 | 1.37 | .195 |
| Voluntary Relinquishment* | 0.638 | 0.295 | 4.690 | 1.89 | .030 |
| Concurrent Plan | -0.231 | 0.267 | 0.750 pothesis Beta=0: | 0.79 | .386 |

Test of Global Null Hypothesis Beta=0: LR=120.56, df=33, p-value<.0001 County is stratification variable (6 stratum)

^{*=}p<.05