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USING PERFORMANCE INDICATORS WITH CHILD WELFARE POLICY MAKERS AND MANAGERS

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**From the Simple to the Sublime:
Using Performance Indicators With Child Welfare
Policy Managers and Policy Makers**

"If you cannot measure it you cannot manage it" has become a mantra for public social service managers. At the same time outcome based management has had increasing popularity and attention because it apparently provides accountability under more flexible funding schemes. Further, it is more in keeping with an entrepreneurial management style. For these reasons the public sector concern about measuring service performance may well be at an all time high. Yet, public service managers and policy makers are often much more certain about what they can no longer use to manage programs and justify budgetary goals--that is, simple descriptions of the numbers of clients served per FTE--than they are about what they do need to measure. Administrators have relatively little understanding of the complexities and challenges of measuring outcomes over time. Nor do they routinely call for assessment of case characteristics so differential outcomes can be measured. They fail to fully understand that case characteristics may be more important determinants of outcomes than the contributions of the service program themselves. Some have learned to use as many outcomes as possible whereas others are still searching for a single outcome that will indicate optimal program performance.

In the last eight years of work with the federal government, the California Department of Social Services, and local county governments in California, we have learned a variety of lessons about developing and communicating indicators of child welfare services performance. We began much of our work simply repackaging publicly available data and have moved on to analyzing massive amounts of highly confidential data. We have been fortunate during these years to have worked with many policy makers and managers who have shaped our strategies for presenting and discussing our data with candor, probing questions, expressions of confusion, and expectations for ever improving work.

The ideas contained within are largely drawn from that experiential base. In this work we have drawn on a wide variety of data sets that are most clearly described to be part of the emerging California Children's Services Archive. This Archive includes both basic demographics and service dynamics for all children who were born in California since 1967; children from 10 counties who have been abused and neglected; wards of the California Youth Authority; children in special education; and children in conventional foster care, kinship foster care, treatment foster care and group home care. The challenges of merging data from different sources with different identifiers in order to create policy and management relevant analyses are invigorating and consequential.

There are also many stimulating challenges about what to do with those data once merged. Choices must be made about the proper analyses, about the level of certainty or robustness of findings required before they are presented to public social service agencies, and about ways to present those data so that they can be optimally understood and minimally misunderstood. These choices have too rarely been discussed in the scholarly literature. Much of our academic discussion has to do with ways to generate statistics with the assumption that those statistics will ultimately be read, understood, and used by public policy makers and managers. This paper is not based on scientific study of the process of research utilization. It is, instead, based on a set of impressions and field notes from countless interactions with public policy makers and managers.

Starting at the Beginning: Client Characteristics at Intake

The most basic aspect of measuring performance has to do with describing the population of interest. In child welfare services this has not always been done. Much of public policy, including the historic PL 96-272, which continues to be the backbone of child welfare law, was based on research that did not distinguish between infants, toddlers, preschoolers, school age children or adolescents (Berrick, et al., in press).

Age

It has been a simple but important advance to conduct analyses of foster care dynamics that include age distinctions. We have learned, for example, that toddlers who enter foster care have only one half the likelihood of adoption as infants from but no less likelihood of exiting foster care in a timely way because so many more are returned to their biological parents (Barth, 1997).

A child's age also serves as an important proxy for other characteristics of children that are unmeasured at intake--especially problem behaviors. Although children of all ages present problems to parents, the likelihood that infants will have their placements changed because the foster parents cannot care for them is much less likely than it is for adolescents because the latter exhibit a wider range of problem behaviors. So age can be used as a proxy for the level of the difficulty of a child's behaviors with reasonable accuracy. A foster care program in which the young children have as many placement moves as do the older children needs closer scrutiny. In the same way, if treatment foster care programs serve children of the same age as conventional foster care and achieve no better outcomes (which we have found) this raises questions about their efficacy. These questions can only be answered by gathering better data about the levels of problem behavior present.

Race and Ethnicity

Race is perhaps the most powerful background factor in all our child welfare services research. Although it is always challenging to explain why the performance dynamics are so different for African American, Caucasian, and Latino children, it is indisputable that the likelihood for African American children to achieve the highest permanency goals of reunification or adoption is significantly less than it is for Caucasian children or Latino children.

Indeed, the myth of minority children as a unitary category is clearly shown in the significant differences between the uses of child welfare services for African American, Latino and Asian clients. Asian and Latino clients are on the whole less likely to use child welfare services than Caucasian families whereas African Americans on the whole are much more likely to become involved in child welfare services than Caucasian families.

Figure and Table 1 shows the powerful effect of combining race and age in a simple presentation of data about children entering foster care. No statistical models are required to witness the interaction between being African American and an infant on the likelihood of entering foster care (although these are certainly many unmeasured contributors to this relationship including substance abuse, arrest policies and procedures, and low birthweights).

Race is a powerful determinant in child welfare analyses and almost certainly carries information about community resources and threats, service availability, culture, service provider bias, typical types and levels of drug and alcohol use, and parenting style. Race is a prominent part of administrative data analyses, yet it

is difficult to use for policy making. A study that we completed two years ago is one exception because it indicated the exceptionally low likelihood of adoption for African American children and had some impact on the passage of the Multiethnic Placement Act and the Interethnic Adoption Provisions (Barth, 1997). But this was research about race being used regarding policies about race. This is rare. Most policies and programs are expected to be silent on race. For example, in California we are developing a structured decision making approach to child welfare services that has actuarial underpinnings that has--for obvious and good reasons--no room for race as a risk factor. Yet race is one of the strongest predictors of outcome models. We have no solutions except to continue to discuss the issue (Courtney, et al., 1996) but we have certainly been struck by the awkwardness of not having a ready explanation for the major differences in service patterns and outcomes by race.

Physical Abuse, Neglect, or Sexual Abuse

In studying foster care dynamics the reason a child was removed from foster care, that is, *physical abuse, neglect, or sexual abuse*, is strongly related to their likely lengths of stay in foster care, the likely reason that they leave foster care, and the likely final placement. Abuse and neglect data must be analyzed separately. Communities that have high levels of neglect are those which are most likely to have high proportions of children in foster care because they are less likely to leave and are more likely to return to care (Berrick, et al., in press).

Comparing States and Counties

As with all performance assessments comparison between administrative units is important. In California we do many analyses comparing counties. We do this in two ways: first we compare counties within five regions comprised of contiguous counties since regions are an organizing concept for county child welfare services providers (e.g., Needell, et al., 1996a). Second, we do this amongst like counties across regions since some regions have counties which are much larger or much smaller than typical in the region and are more like counties their size outside the region. Therefore when we present performance indicators on child welfare dynamics we have four standard groupings: big counties, small counties, Los Angeles and statewide (Needell, et al., 1996b). We create regional reports so that all individual counties in a region can compare themselves not only to big, small and L.A. groupings but also to individual counties within their region and to their regional averages or the accumulative regional performance funding.

County comparisons are very informative and can help to stimulate policy and program changes. Table 2 provides data from a four-county comparison with regard to the exits for foster care for kinship and nonkinship care and the age of the child at intake over 2, 4, and 6 year periods. These data show the vastly different methods and amounts of permanency achieved in four counties and California as a whole. Most striking, is that in California as a whole 18% of infants who are placed into nonrelative foster care remain there at 6 years. Yet, in San Diego and San Mateo counties, the percentage is 1% and 6%, respectively. Also of interest is the low rate of kinship adoption in Santa Clara and Alameda (about 5% of exits at 6 years) in contrast to the rates in San Diego (16%) and San Mateo (26%). These data have been influential in getting counties to reevaluate their approach to kinship foster care.

In addition to analyzing a variety of data from these counties, we have also conducted surveys, focus groups, and case reviews in the counties to try to understand the meaning of these differences (Barth, in press; Berrick, et al., in press). In San Mateo county we learned that they have a strong concurrent planning program and assign adoption workers to reunification cases at a very early point, yet they ultimately have similar rates of adoptions in San Diego which generally forbids referral to the adoption program while

reunification efforts were going on.

Funding of Placements

In child welfare services we have come to learn that foster care dynamics vary dramatically depending on the federal eligibility of the foster families caring for children. Children who are living with relatives and are paid at the higher federal foster care rate (AFDC-FC) are less likely to go home (we will revisit this in Table 9), if they do go home they are more likely to come back into care, and if they do not go home are less likely to be adopted. This finding is provocative for many reasons but certainly calls on us to classify kinship families according to their funding levels so that we can understand those separate dynamics. In essence a county with a large proportion of children in federally-eligible kinship care is likely to have very long median lengths of stay for children in care.

Auspices

Children may be placed in out-of-home care in California by the Juvenile Court under the auspices of the Department of Social Services or under the Juvenile Probation program. It is important therefore to look at children separately who come into care to protect them from abuse and neglect under social service auspices versus those who come into probation supervised care because the community requires protection from them. In California as in other states we have other types of legal status for children in foster care. Most come in involuntarily because the state is exercising its responsibility to protect them, although some come in voluntarily because their parents are drawing on the resources of foster care to support them. The importance of this often confuses the interpretation of cross-state statistics. So, in states where they accept voluntary placements for adoption and first place children in foster care, they appear to have adoption rates two or three times what they are in states that only accept children involuntarily into foster care (Flango & Flango, 1996).

Type of Out-of-Home Placement

Perhaps the most important variable in understanding foster care dynamics is the type of placement. We have four major types of placement in California: nonkin foster care, kinship foster care (which has two subtypes--federally eligible and not federally eligible), specialized or treatment foster care (which gets a higher foster care rate) and group care (which has 14 payment levels in California). Almost without regard for research question or analysis we see that there are major differences in outcomes for children in these different types of care.

Figure and Table 3 show that the conventional foster home was the modal kind of care in 1989 but has now lost considerable ground to kinship care and to the growth of specialized foster care provided by foster family agencies (FFAs). This growth varies sharply by county but is, overall, about 5 times. Figure and Table 4 show ages of children in the four main types of care in California. Although this is a simple figure, it clearly shows that children in treatment foster care which is, by state statute, intended to provide an alternative to group care, is being used without much regard for the ages of children. This distribution is far more like conventional foster care than it is like group care which is primarily reserved for children at the higher levels. Policy makers and managers in California are using these data--and other data we have compiled about the permanency outcomes for children in each type of placement (see Figure and Table 5)--to raise significant issues about the efficiency of foster family agencies in achieving public policy objectives.

Multivariate analyses that account for age, race, reason for placement, and cohort do not much mitigate these

graphic effects related to program type. Although we do not carefully abide by it, we do recommend checking out the robustness of high impact bivariate relationships in multivariate models to be sure the findings hold up. (As Table 9 will later show, the negative effects of FFAs on reunification holds true in a much more complete analysis.) Of course, any analysis comparing these outcomes must justify whether it assumes equivalent or different characteristics of the children entering each type of care. This is something which is very difficult to specify without a better assessment of the children. Whereas age and removal gives us a reasonable proxy for the problems that children may be experiencing, within the older age groups, age and removal reason become less clearly associated with high levels of problems.

Describing Population and Service Changes Over Time

Policy makers like to show improvement in service outcomes. Advocates, on the contrary, generally like to show that things are getting worse. As such when we use administrative data to show trends over time because we know that we will always find someone who likes the results. Changes in trends may not, of course, reflect changes in performance as much as they reflect changes in the underlying population. Such would be the case in foster care caused by the unequal growth of kinship care across counties and states. In jurisdictions with growth in kinship foster care, the median length of stay for the overall population over the years is likely to go up. This appears counter to the intent of public policy. Permanency rates must be looked at for kinship and nonkinship care separately over time.

Time trends with regard to race shows substantial progress in terms of the placements of infants into foster care. One such analysis of African American children shows us that in 1989 more than five percent of African American children born in California would enter foster care within their first year of life. Such a high number casts the 3.6% incidence rate observed in Table 1 in 1995 into a more positive light.

Describing population outcomes over time can be done with event history analysis.

Event-history analysis is a favorite tool for analyzing administrative data--especially durations in care (Goerge, Harden, & Wulczyn, 1994) and, using competing risk models, for comparing reunification and adoption (Courtney & Wong, 1996). We have gradually trained our audiences of policy analysts to understand that we really do not mean that going home from foster care is a *hazard* or that a *diminishing survival curve* means that children are dying!

Yet, we also find much benefit in segmenting the outcomes at points at time like 2, 4 or 6 years after placement (as shown in Table 2). Although some would argue that it's best to keep times to exits in a continuous fashion, we often find that it communicates better to the professionals to give them ready markers of time--especially those that compare to their own experience or to the public policy goals. Under federal child welfare law, all children are supposed to have their cases resolved by two years. Thus, using two years as a benchmark is inherently meaningful for that reason. Since many exits from adoption do not occur until four years we suggest using four years as a benchmark for permanency for young children. We have argued elsewhere that should we should embrace the goal that no young child who enters nonkinship foster care will remain there after four years (Barth, in press).

Exits

Although the most common exit from foster care is reunification to the home of the parent there are many other exits that also occur. Figure 7 shows placement moves for infants in foster care for six years--showing that 46% of infants living in nonkinship care will have four or more homes in six years. This is what we

might call *self-explanatory* findings. Most adults recognize that they temporarily lose a substantial number of IQ points every time they move offices or homes and could not tolerate a new home every six months.

Child welfare services administered data has had the advantage over most public assistance data of recording the type of exits from the service in a way that for the most part administrative data in the AFDC program has not. Thus, we can go well beyond simply recording the lengths of services in child welfare services and instead can compare the types of exits. For example we can understand the ratios of remaining in care versus adoption for young children or we can create an index of outcomes which include reunification, adoption, exit to guardianship and we can have that index calculated so it subtracts any children who reenter to foster care. We then compare the achievement of the permanency index (shown in Figure 5 for placement type alone) by entry year, by type of placement, by organizational unit, by auspices and so on.

Cross Systems Outcomes

Perhaps the greatest challenge for any administrative data set is to determine the outcomes for children when they leave one administrative data system and move on to another. For example children who are reunified from foster care but then are incarcerated or are placed in a mental health hospital would not be covered by the foster care data base unless they were exited from foster care to go immediately to those other systems. In the same way there are nonsystem outcomes which need to be covered. For example, the reason that some children who have been reunified from foster care for some years and do not re-enter foster care is because they have died (Barth & Blackwell, in press). Those would be counted as successes because they do not reenter foster care yet these children's deaths suggest that we have not done all we needed to do to protect them.

Lastly, it is critically important to use multivariate statistical models for analyzing outcomes and to present those in a way that is easily interpretable to decision makers. From the popular media, decision makers have become pretty good at hearing about odd ratios. So for example they have learned that the odds of a traffic accident increase four times for people talking on cellular phones (although they may not know whether or not those odds are independent of the characteristics of the driver, the automobile, and the traffic patterns of the highway that the accident occurred on). Those of us in the research community assume that these odds are generated from a multivariate model. In the same way we have trained our audiences over time to understand odds ratios generated out of multivariate models even including those that have interaction terms.

Better communication with policy makers and program managers involves finding new ways to simplify the presentation of the data. In Table 8, we present such a model that includes birth data and is related to the difference between newborn children who enter foster care in California and other infants (Needell, 1997). We see that children are more likely to be in foster care if their mothers are African American, began prenatal care late, do not have a high school education, are single, parents of two or more children. These are also significant interactions with an increased likelihood of being in the foster infant group among older poor women and a lesser likelihood of being in the foster infant group among the older nonpoor women. Also, poverty has a stronger association with foster care for older women than for younger women.

In Table 9, we examine the likelihood that infants who enter foster care will go home. We observe that children with very low birthweight are less likely to go home after foster care as are children with no prenatal care, in larger families, who are African American, neglected, and whose mothers were born in the U.S., and who were placed with relatives or foster care providers receiving higher reimbursement rates.

Concluding Observations

Communicating to policy makers requires considerable clarity and patience. We have, at times, had to explain how rates per thousand could be turned into percents. Yet at the same time, we see steep learning curves and believe that we have educated people to understand odds ratios, hazard ratios, and confidence intervals. We hope that the following observations will be useful to those who make policy about children and those who hope to inform them.

Identify the Questions of Concern. Attending local staff and mid-level manager meetings and finding times to listen rather than talk to line staff and supervisors are all critical to a researcher's ultimate success in identifying performance indicators that communicate policy makers. By the time a child welfare issue becomes a policy concern, we expect that we will have long ago begun an investigation of related performance indicators or be able to develop them rather quickly. Such anticipatory action requires that policy makers provide funding for core support or via some other mechanism that allows researchers to initiate research efforts without waiting for a 12-month grant review and funding cycle.

A Child's Case Status is Not the Same as a Child's Well-being. A child who is in a terrific foster home with unusually dedicated foster parents and who remains in long-term foster care may out perform as predicted from our data on the turbulent state of long-term foster care. Administrative data must be buoyed by data from surveys and developmental assessments, to better understand the meaning of case status. Of course, administrative data can also help explain the character of case status as do the data on the high rates of placement moves for young children in long-term foster care and the data suggesting that African American children who return home from foster care have far higher incarceration and mortality rates than other children (Barth & Blackwell, in press; M. Jonson-Reid, personal communication, June 6, 1997).

Performance Indicators Must be Shaped According to the Age of the Child. Developmentalists are indeed on to something--age matters. For example, since adoption is a common outcome for infants but takes a long time, outcome indicators for infants must separately examine the lengths of stay for infants who are adopted or heading for adoption and those who are not. Policy makers often want dramatic across-the-board performance indicators that skirt the distinctions of age (e.g., the President's Adoption 2002 Initiative to double adoptions or guardianships by the year 2002 in each state, regardless of the ages of children in your state or their need for adoption).

Default Outcomes Should Not be Treated as Success Indicators. Emancipation is an inevitable result of foster care for children who do not otherwise achieve permanency and should not be rewarded as an indicator of success. Emancipation from foster care may be a positive outcome in a cohort of youth with high likelihood of crossing over to incarceration or hospitalization, but it is not a generally positive outcome of child welfare services. Assessing the quality of preparation for youth who grow up in foster care requires, at minimum, cross-system administrative data from employment, public assistance, corrections, and education. We should aim to have them do as well as the general population or, at least as well as other disadvantaged children (Cook, 1997).

We Must Account For Major Outcome Indicators That are Unrecorded. Claims of success on behalf of children who leave foster care must be qualified depending on the quality of indicators available to monitor post program success. New episodes of failure to supervise infants may not be known to the agency and outcomes for older children like entrance into the juvenile justice system are recorded in systems that have generally not been integrated with child welfare records. These missing measures need to be understood by analysts and be addressed in the interpretation of findings.

Comparisons Between Jurisdictions Should be Meaningful for All Stakeholders. Comparisons of states or of counties within a region or state may not be meaningful if a jurisdiction considers its true comparison jurisdictions to be elsewhere. The more comparisons that are readily available the better.

Different Rates of Changes in Outcome Indicators Across Jurisdictions May Not Reflect Changes in Performance. Unmeasured local factors like a new judge or like a family preservation program that is changing the characteristics of cases that do enter foster care may result in changes in subsequent entrance rates and median lengths of stay respectively. Factors that change the characteristics of intakes unequally across jurisdictions can be tested in statistical models if they are measured. Often they are not, however, and instead must be considered and discussed.

Event-History Analysis is a Powerful Research Toolkit. Using Kaplan-Meier estimates makes it possible to obtain accurate information regarding length of stay. Public policy makers and managers can learn to understand medians and, even, quartiles. Some even understand that length-of-stay estimates based on populations currently are decidedly biased. More complex "competing risk" models of reunification, adoption, and other exits can be used to clarify the relationships among covariates for specific outcomes.

Multivariate Models Can Account for Changes Over Time Without Becoming Hopelessly Complex. Using the predominant placement type rather than a time varying placement variable allows for a straightforward event-history model, though methodologically imperfect. Also, researchers should weigh the importance of model fitting against including only those interactions that are likely to be understood. So, even though we work with tens of thousands of cases and often have enough cases to generate significant four-way interactions, we do not find our usual policy or management audience quite ready to grapple with these. When we do present the findings from logistic models with interaction terms, we display them using odds ratios for the interaction groups instead of expecting the audience to complete the calculations (Table 8 shows examples of this for maternal age and poverty).

There is Still Room for "Old-Fashioned" Methods. Sometimes, simpler analyses that follow entry cohorts over time to track various outcomes (e.g., the proportion of children reunified or adopted at two, four, and six years after entry) provide information that can be readily used by a range of child welfare professionals to set goals for improved performance. These groupings are not, however, sensitive to the effects of more recent management or policy changes.

Accessibility Is More Important Than Visibility. In recent years our data has contributed to the development of substantial amounts of legislation in California, and to a more limited extent, Washington, D.C. Our foster care data is routinely being used by advocates to lobby for the passage of child welfare reform in this Congress. Visibility is important in getting policy makers to use administrative data but accessibility may be more important. That is, decision makers need to know what you are working on and to know how to reach you during legislative crunch times when there are critical decisions to be made and too little data on hand to guide them. We have been most helpful at times when we ran special analyses within a 2-24 hour time frame to answer questions that plagued legislators or their aides. Of course, if we are both personally accessible and can also make our findings accessible, we have the greatest chance of making an impact.

Cautiousness Before Ambitiousness. The work we do requires cautious interpretation but will not be supported by the government or other funders if we qualify the results so much that we appear to have nothing to say. As one of my federal colleagues is fond of saying, "If you don't have real numbers for me it's okay; I'll just make some up." This suggests that the price of overcautiousness may not be paid by

researchers but may be paid by whomever uses services based on the fabricated numbers. As unfortunate as this is, researchers must not oversell our findings.

A performance benchmark for researchers using administrative data would be a 50% reduction in erroneous interpretation of length-of-stay, prevalence and incidence, and causality by the year 2000. On the other side, we should work toward getting a doubling of the number of requests for data runs received more than 24 hours prior to their use in testimony or memo, and a doubling of the likelihood that results presented by researchers will not be assumed to represent their political leanings and will be taken on their merits.

Certainly using administrative data to shape policy and to aid managers is not entirely the same. Yet the overlap is substantial as managers often turn to policy makers to fix their problem and vice versa--whether they are largely created by policy or management shortcomings. Both must help instruct researchers to present information in ways they can use. We are all in this high stakes game together.

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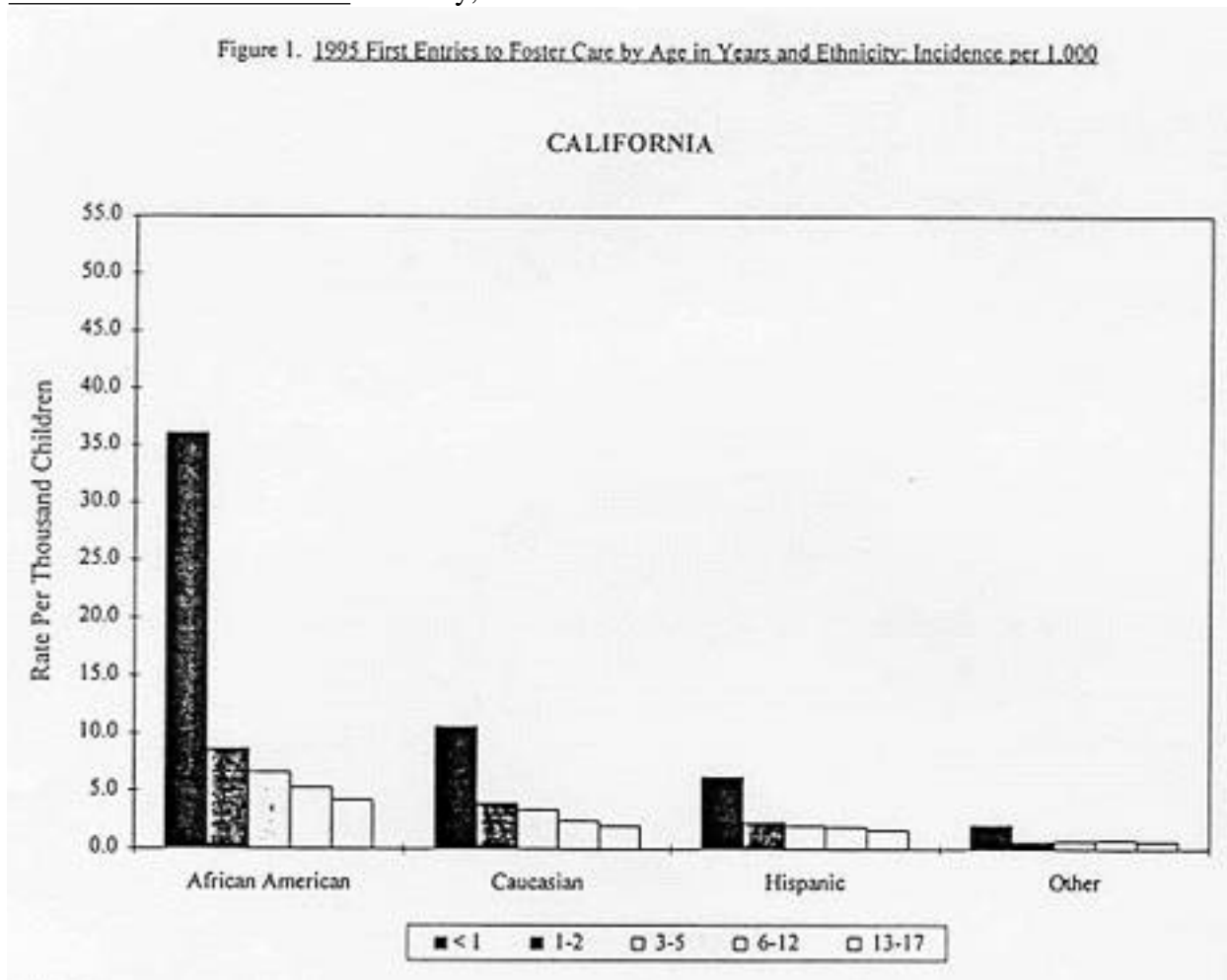


Table 1. 1995 First Entries to Foster Care by Age in Years and Ethnicity

| | African American | Caucasian | Hispanic | Other | Total |
|-------|------------------|-----------|----------|-------|--------|
| < 1 | 1,582 | 2,441 | 1,743 | 140 | 5,906 |
| 1-2 | 775 | 1,862 | 1,301 | 89 | 4,027 |
| 3-5 | 907 | 2,320 | 1,558 | 138 | 4,923 |
| 6-12 | 1,447 | 3,683 | 2,478 | 294 | 7,902 |
| 13-17 | 735 | 1,976 | 1,311 | 167 | 4,189 |
| Total | 5,446 | 12,282 | 8,391 | 828 | 26,947 |

Table 1a. 1995 Percent First Entries to Foster Care by Age in Years and Ethnicity

| | African American | Caucasian | Hispanic | Other | Total |
|-----|------------------|-----------|----------|-------|-------|
| < 1 | 29.1 | 19.9 | 20.8 | 16.9 | 21.9 |

| | | | | | |
|-------|-------|-------|-------|-------|--------|
| 1-2 | 14.2 | 15.2 | 15.5 | 10.8 | 14.9 |
| 3-5 | 16.7 | 18.9 | 18.6 | 16.7 | 18.3 |
| 6-12 | 26.6 | 30.0 | 29.5 | 35.5 | 29.3 |
| 13-17 | 13.5 | 16.1 | 15.6 | 20.2 | 15.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.00 |

Table 1b. 1995 First Entries to Foster Care by Age in Years and Ethnicity: Incidence per 1,000

| | African American | Caucasian | Hispanic | Other | Total |
|-------|------------------|-----------|----------|-------|-------|
| < 1 | 36.1 | 10.7 | 6.3 | 2.1 | 9.6 |
| 1-2 | 8.7 | 4.0 | 2.4 | 0.7 | 3.3 |
| 3-5 | 6.7 | 3.4 | 2.1 | 0.8 | 2.8 |
| 6-12 | 5.3 | 2.5 | 1.9 | 0.8 | 2.3 |
| 13-17 | 4.3 | 2.0 | 1.6 | 0.7 | 1.9 |
| Total | 7.6 | 3.2 | 2.3 | 0.8 | 2.9 |

Table 2. State and County Outcomes in Kin and Non-Kin care at 2, 4 and 6 Years After Placement by Age at Entry (%)

| CALIFORNIA | KIN | | | | NON-KIN | | | |
|-------------------|-------------------|---------------------|---------------------|--------------------|-------------------|---------------------|---------------------|--------------------|
| | 0 yrs (n=5400) | 1-2 yrs (n=3748) | 3-5 yrs (n=4278) | Total (n=13426) | 0 yrs (n=7774) | 1-2 yrs (n=4044) | 3-5 yrs (n=4509) | Total (n=16327) |
| <u>At 2 years</u> | | | | | | | | |
| Adopted | 1 | 1 | 0 | 1 | 8 | 2 | 1 | 5 |
| Guardianship | 5 | 4 | 4 | 5 | 1 | 1 | 1 | 1 |
| Reunified | 38 | 44 | 47 | 43 | 38 | 55 | 58 | 47 |
| Still in care | 55 | 50 | 47 | 51 | 51 | 40 | 40 | 45 |
| <u>At 4 years</u> | | | | | | | | |
| Adopted | 7 | 4 | 3 | 5 | 26 | 10 | 6 | 17 |
| Guardianship | 10 | 8 | 7 | 9 | 1 | 2 | 1 | 1 |
| Reunified | 47 | 54 | 57 | 52 | 41 | 60 | 63 | 52 |
| Still in care | 34 | 32 | 32 | 32 | 28 | 26 | 28 | 27 |
| <u>At 6 years</u> | | | | | | | | |
| Adopted | 11 | 6 | 4 | 7 | 34 | 15 | 9 | 22 |

| | | | | | | | | |
|---------------|----|----|----|----|----|----|----|----|
| Guardianship | 11 | 10 | 8 | 10 | 1 | 2 | 1 | 2 |
| Reunified | 50 | 57 | 61 | 56 | 42 | 61 | 65 | 53 |
| Still in care | 26 | 25 | 25 | 25 | 18 | 18 | 22 | 19 |

ALAMEDA

| | KIN | | | | NON-KIN | | | |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 0 yrs | 1-2 yrs | 3-5 yrs | Total | 0 yrs | 1-2 yrs | 3-5 yrs | Total |
| Outcome | (n=208) | (n=178) | (n=166) | (n=552) | (n=393) | (n=189) | (n=187) | (n=769) |
| <u>At 2 years</u> | | | | | | | | |
| Adopted | 1 | 1 | 0 | 1 | 7 | 1 | 0 | 4 |
| Guardianship | 16 | 10 | 8 | 12 | 1 | 2 | 1 | 1 |
| Reunified | 22 | 29 | 36 | 28 | 31 | 48 | 54 | 41 |
| Still in care | 58 | 58 | 53 | 56 | 55 | 47 | 44 | 51 |
| <u>At 4 years</u> | | | | | | | | |
| Adopted | 3 | 4 | 0 | 3 | 20 | 2 | 0 | 11 |
| Guardianship | 24 | 14 | 11 | 17 | 1 | 2 | 2 | 1 |
| Reunified | 29 | 37 | 43 | 36 | 36 | 54 | 60 | 46 |
| Still in care | 38 | 40 | 41 | 39 | 27 | 35 | 35 | 31 |
| <u>At 6 years</u> | | | | | | | | |
| Adopted | 6 | 5 | 0 | 4 | 24 | 3 | 0 | 13 |
| Guardianship | 26 | 16 | 13 | 19 | 1 | 2 | 3 | 0 |
| Reunified | 30 | 40 | 49 | 39 | 38 | 57 | 61 | 48 |
| Still in care | 30 | 33 | 31 | 32 | 20 | 30 | 33 | 25 |

SAN DIEGO

| | KIN | | | | NON-KIN | | | |
|-------------------|---------|---------|---------|----------|----------|---------|---------|----------|
| | 0 yrs | 1-2 yrs | 3-5 yrs | Total | 0 yrs | 1-2 yrs | 3-5 yrs | Total |
| Outcome | (n=665) | (n=280) | (n=375) | (n=1320) | (n=1026) | (n=489) | (n=554) | (n=2069) |
| <u>At 2 years</u> | | | | | | | | |
| Adopted | 3 | 1 | 1 | 2 | 14 | 1 | 0 | 7 |
| Guardianship | 5 | 3 | 2 | 3 | 0 | 1 | 1 | 0 |
| Reunified | 51 | 54 | 58 | 54 | 42 | 62 | 62 | 52 |
| Still in care | 40 | 41 | 39 | 40 | 43 | 35 | 36 | 39 |
| <u>At 4 years</u> | | | | | | | | |
| Adopted | 19 | 10 | 7 | 14 | 42 | 15 | 10 | 27 |

| | | | | | | | | |
|-------------------|----|----|----|----|----|----|----|----|
| Guardianship | 11 | 11 | 6 | 10 | 0 | 2 | 1 | 1 |
| Reunified | 58 | 64 | 68 | 62 | 44 | 65 | 67 | 55 |
| Still in care | 11 | 14 | 18 | 14 | 12 | 16 | 18 | 14 |
| <u>At 6 years</u> | | | | | | | | |
| Adopted | 21 | 13 | 9 | 16 | 46 | 19 | 12 | 31 |
| Guardianship | 12 | 11 | 6 | 10 | 0 | 2 | 2 | 1 |
| Reunified | 59 | 67 | 71 | 64 | 45 | 67 | 71 | 57 |
| Still in care | 6 | 7 | 11 | 8 | 6 | 9 | 12 | 8 |

Table 2. Continued. State and County Outcomes in Kin and Non-Kin care at 2, 4 and 6 Years After Placement by Age at Entry (%)

| <u>SAN MATEO</u> | KIN | | | | NON-KIN | | | |
|-------------------|-----------------|-------------------|-------------------|-----------------|------------------|-------------------|-------------------|------------------|
| | 0 yrs (n=53) | 1-2 yrs (n=21) | 3-5 yrs (n=17) | Total (n=91) | 0 yrs (n=113) | 1-2 yrs (n=40) | 3-5 yrs (n=49) | Total (n=202) |
| <u>Outcome</u> | | | | | | | | |
| <u>At 2 years</u> | | | | | | | | |
| Adopted | 0 | 0 | 0 | 0 | 17 | 8 | 4 | 12 |
| Guardianship | 4 | 14 | 6 | 7 | 2 | 0 | 0 | 1 |
| Reunified | 36 | 33 | 35 | 35 | 54 | 65 | 69 | 60 |
| Still in care | 60 | 48 | 59 | 57 | 25 | 28 | 27 | 26 |
| <u>At 4 years</u> | | | | | | | | |
| Adopted | 30 | 10 | 0 | 20 | 36 | 15 | 8 | 25 |
| Guardianship | 8 | 19 | 6 | 10 | 2 | 0 | 0 | 1 |
| Reunified | 40 | 43 | 59 | 44 | 54 | 65 | 76 | 61 |
| Still in care | 23 | 24 | 35 | 25 | 4 | 18 | 16 | 10 |
| <u>At 6 years</u> | | | | | | | | |
| Adopted | 40 | 10 | 6 | 26 | 39 | 25 | 12 | 30 |
| Guardianship | 9 | 24 | 6 | 12 | 2 | 0 | 0 | 1 |
| Reunified | 40 | 43 | 71 | 46 | 54 | 65 | 76 | 61 |
| Still in care | 8 | 14 | 6 | 9 | 1 | 3 | 12 | 4 |

SANTA
CLARA

KIN

NON-KIN

| | 0 yrs (n=164) | 1-2 yrs (n=162) | 3-5 yrs (n=203) | Total (n=529) | 0 yrs (n=201) | 1-2 yrs (n=118) | 3-5 yrs (n=129) | Total (n=448) |
|-------------------|------------------|--------------------|--------------------|------------------|------------------|--------------------|--------------------|------------------|
| <u>Outcome</u> | | | | | | | | |
| <u>At 2 years</u> | | | | | | | | |
| Adopted | 1 | 0 | 1 | 1 | 13 | 5 | 2 | 8 |
| Guardianship | 16 | 9 | 6 | 10 | 1 | 0 | 0 | 0 |
| Reunified | 44 | 56 | 57 | 52 | 29 | 39 | 49 | 38 |
| Still in care | 38 | 35 | 36 | 36 | 55 | 56 | 48 | 53 |
| <u>At 4 years</u> | | | | | | | | |
| Adopted | 10 | 1 | 1 | 4 | 45 | 34 | 16 | 34 |
| Guardianship | 30 | 22 | 18 | 23 | 2 | 2 | 0 | 1 |
| Reunified | 48 | 60 | 63 | 57 | 30 | 41 | 53 | 40 |
| Still in care | 12 | 16 | 18 | 15 | 21 | 24 | 29 | 24 |
| <u>At 6 years</u> | | | | | | | | |
| Adopted | 13 | 2 | 2 | 6 | 55 | 41 | 22 | 42 |
| Guardianship | 30 | 24 | 18 | 23 | 3 | 3 | 2 | 3 |
| Reunified | 49 | 61 | 66 | 59 | 30 | 41 | 54 | 40 |
| Still in care | 7 | 12 | 15 | 11 | 10 | 15 | 20 | 15 |

Percentages are rounded so columns may not total to 100%.

Figure 3. 1989-1995 Children < 18 in Foster Care by Placement Type

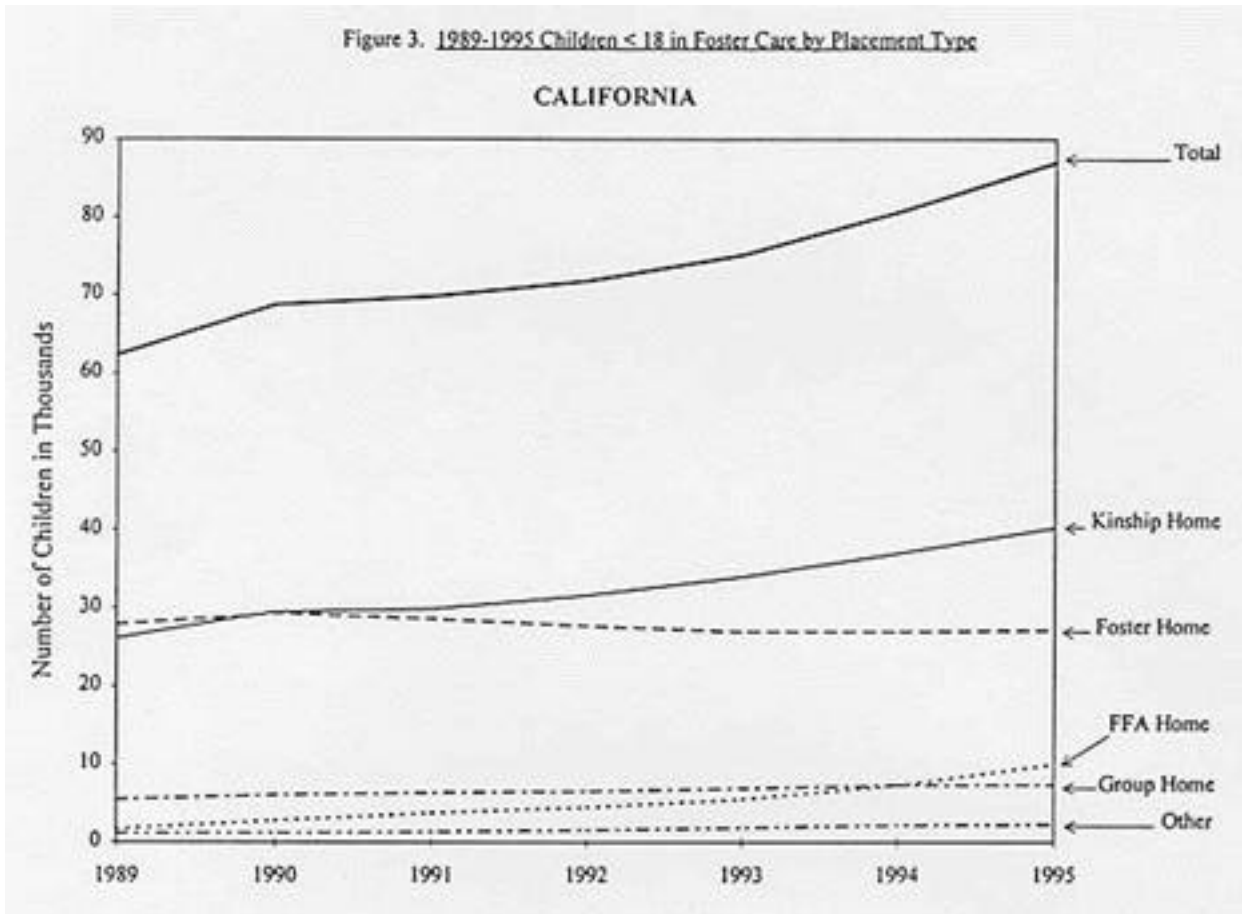


Table 3. 1989-1995 Children < 18 in Foster Care by Placement Type

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| Kinship Home | 26,141 | 29,523 | 29,859 | 31,625 | 33,961 | 36,954 | 40,251 |
| Foster Home | 27,906 | 29,267 | 28,608 | 27,685 | 26,970 | 26,947 | 27,127 |
| FFA Home | 1,698 | 2,760 | 3,714 | 4,483 | 5,495 | 7,275 | 9,990 |
| Group Home | 5,474 | 6,044 | 6,335 | 6,514 | 6,921 | 7,307 | 7,348 |

| | | | | | | | |
|------------|-------|-------|-------|-------|-------|-------|-------|
| Group Home | 8.8 | 8.8 | 9.1 | 9.1 | 9.2 | 9.1 | 8.4 |
| Other | 1.8 | 1.7 | 1.9 | 2.2 | 2.5 | 2.7 | 2.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

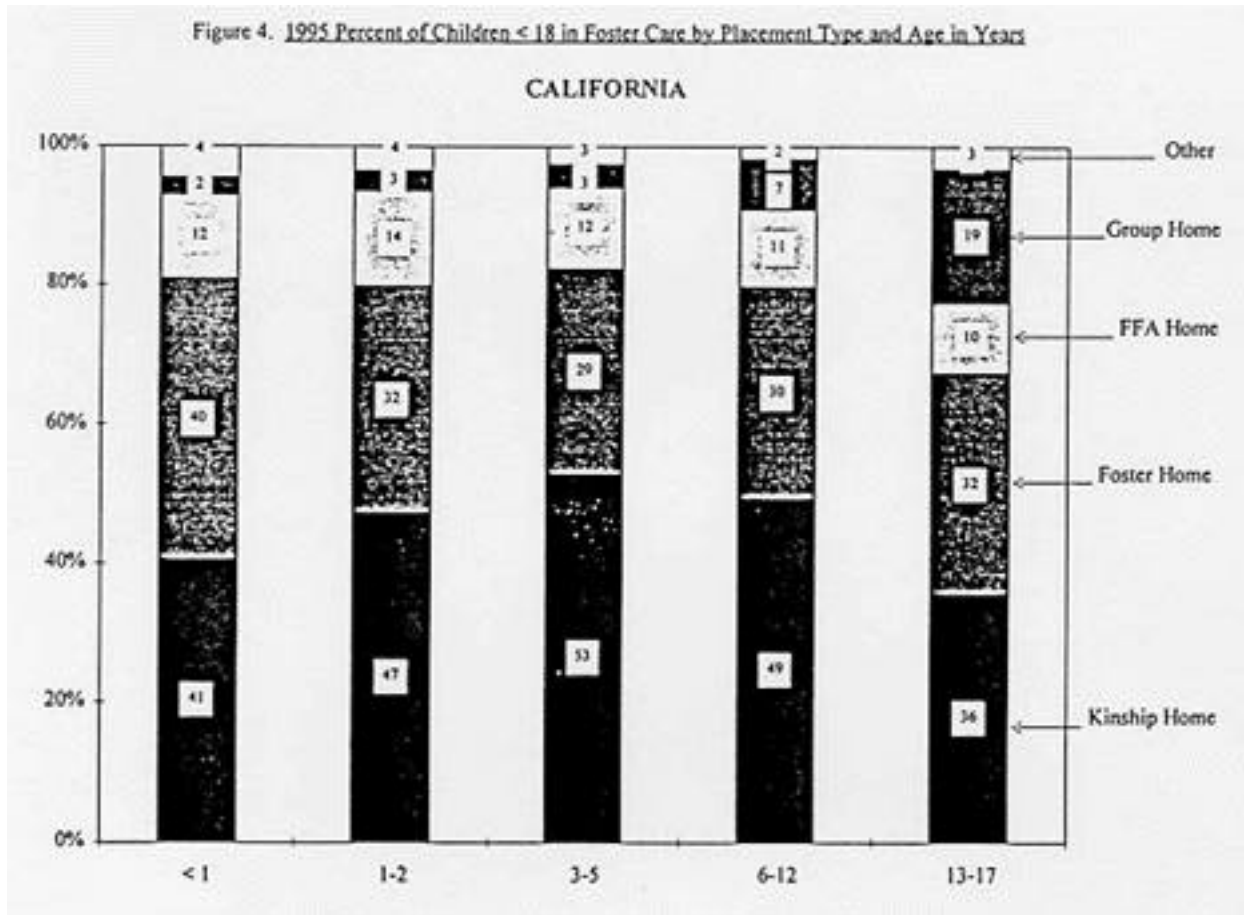


Table 4. 1995 Children < 18 in Foster Care by Placement Type and Age in Years

| | < 1 | 1 - 2 | 3 - 5 | 6 - 12 | 13 - 17 | Total |
|--------------|-------|--------|--------|--------|---------|--------|
| Kinship Care | 1,675 | 5,127 | 9,120 | 17,152 | 7,177 | 40,251 |
| Foster Care | 1,660 | 3,513 | 5,060 | 10,519 | 6,375 | 27,127 |
| FFA Home | 503 | 1,486 | 2,047 | 3,915 | 2,039 | 9,990 |
| Group Care | 102 | 316 | 547 | 2,511 | 3,872 | 7,348 |
| Other | 185 | 384 | 451 | 615 | 659 | 2,294 |
| Total | 4,125 | 10,826 | 17,225 | 34,712 | 20,122 | 87,010 |

Table 4a. 1995 Percent of Children < 18 in Foster Care by Placement Type and Age in Years

| | < 1 | 1 - 2 | 3 - 5 | 6 - 12 | 13 - 17 | Total |
|--|-----|-------|-------|--------|---------|-------|
|--|-----|-------|-------|--------|---------|-------|

| | | | | | | |
|--------------|-------|-------|-------|-------|-------|-------|
| Kinship Care | 40.6 | 47.4 | 53.0 | 49.4 | 35.7 | 46.3 |
| Foster Care | 40.2 | 32.5 | 29.4 | 30.3 | 31.7 | 31.2 |
| FFA Home | 12.2 | 13.7 | 11.9 | 11.3 | 10.1 | 11.5 |
| Group Care | 2.5 | 2.9 | 3.2 | 7.2 | 19.2 | 8.5 |
| Other | 4.5 | 3.6 | 2.60 | 1.8 | 3.3 | 2.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Figure 5. 1988-1991 Entries: Permanence Index at Four Years by Placement Type

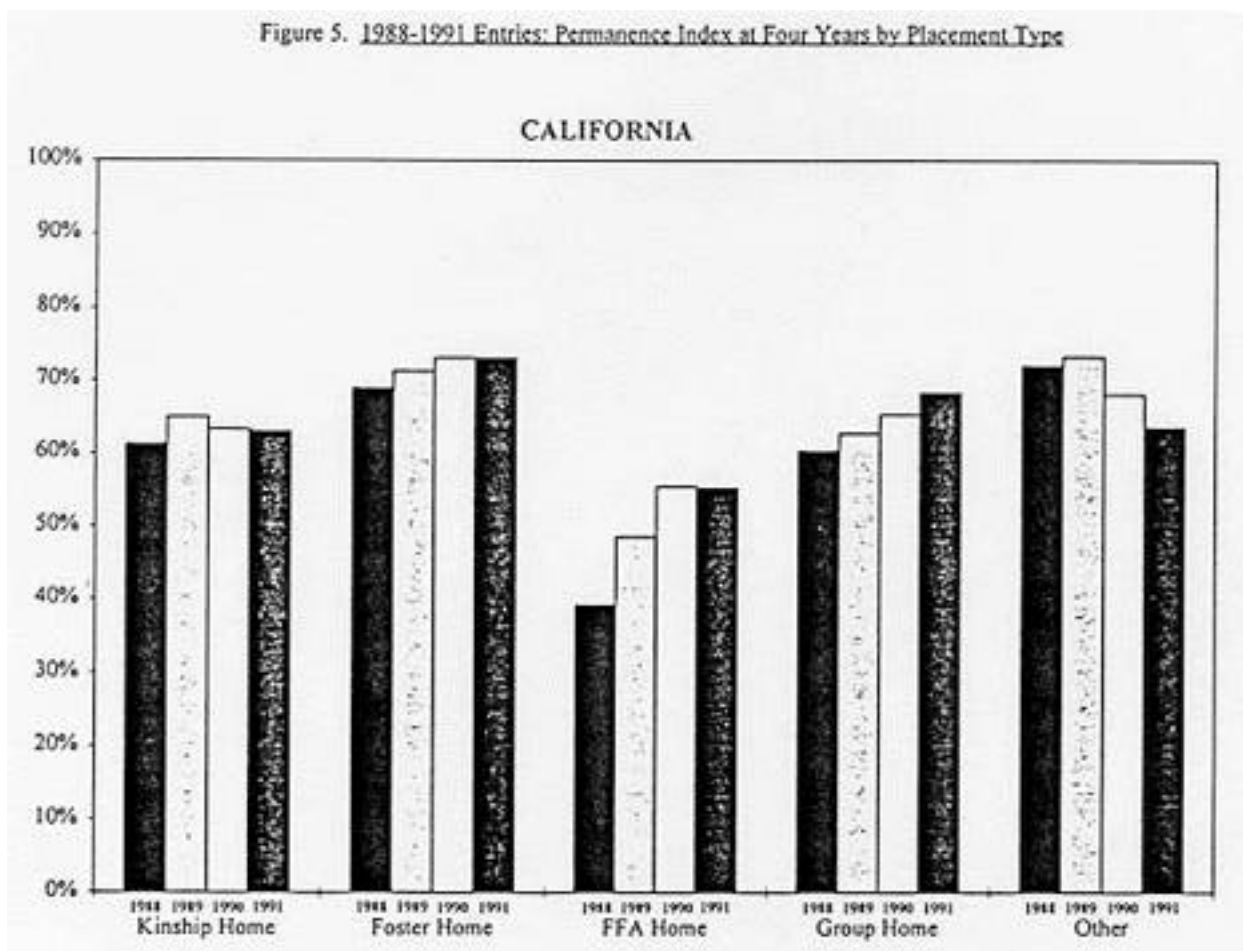


Table 5. 1988-1991 Entries: Permanence Index at Four Years by Placement Type

| | 1988 | | 1989 | | 1990 | | 1991 | |
|--------------|--------|------|--------|------|--------|------|-------|------|
| | n | % | n | % | n | % | n | % |
| California | | | | | | | | |
| Kinship Home | 9,278 | 61.3 | 11,131 | 65.0 | 10,072 | 63.3 | 9,646 | 63.0 |
| Foster Home | 10,845 | 69.0 | 10,773 | 71.3 | 9,439 | 73.1 | 8,330 | 73.1 |

| | | | | | | | | |
|------------|-------|------|-------|------|-------|------|-------|------|
| FFA Home | 601 | 39.3 | 798 | 48.6 | 970 | 55.5 | 1,108 | 55.3 |
| Group Home | 1,456 | 60.4 | 1,530 | 62.8 | 1,341 | 65.3 | 1,464 | 68.4 |
| Other | 301 | 72.1 | 430 | 73.3 | 474 | 68.1 | 500 | 63.6 |

n = Denominator of Index

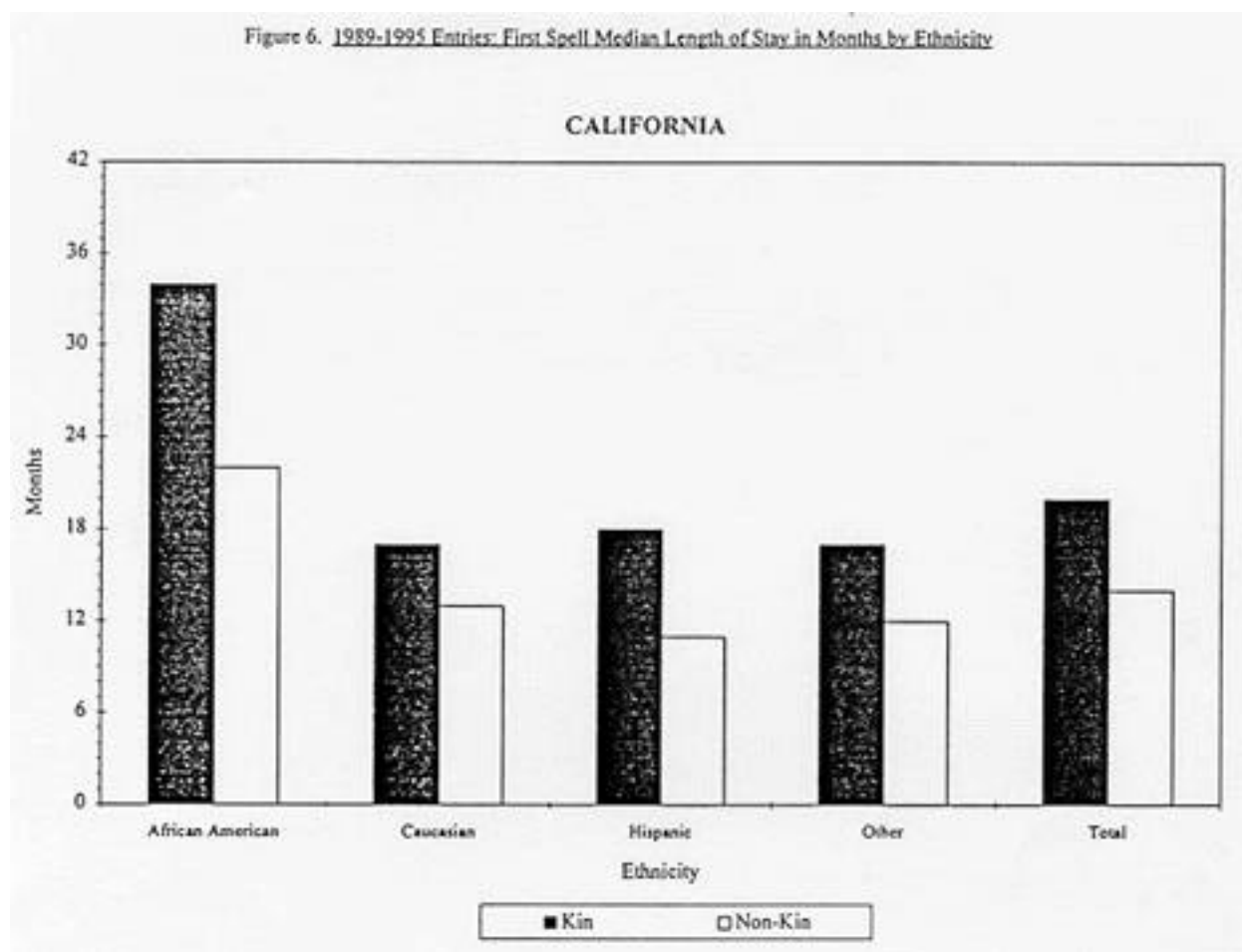


Table 6. 1989-1995 Entries: First Spell Median Length of Stay (with First & Third Quartiles) in Months by Ethnicity

| | African American | | Caucasian | | Hispanic | | Other | | Total | |
|------------|------------------|----------|-----------|----------|----------|----------|-------|----------|-------|----------|
| | Med. | (Q1, Q3) | Med. | (Q1, Q3) | Med. | (Q1, Q3) | Med. | (Q1, Q3) | Med. | (Q1, Q3) |
| California | | | | | | | | | | |
| Kin | 34 | (13, .) | 17 | (7, 40) | 18 | (7, 52) | 17 | (6, 38) | 20 | (8, 66) |
| Non-Kin | 22 | (4, 70) | 13 | (2, 36) | 11 | (2, 36) | 12 | (2, 33) | 14 | (2, 42) |

Figure 7. Number of Placements for Children Still in Care at 2, 4, and 6 Years

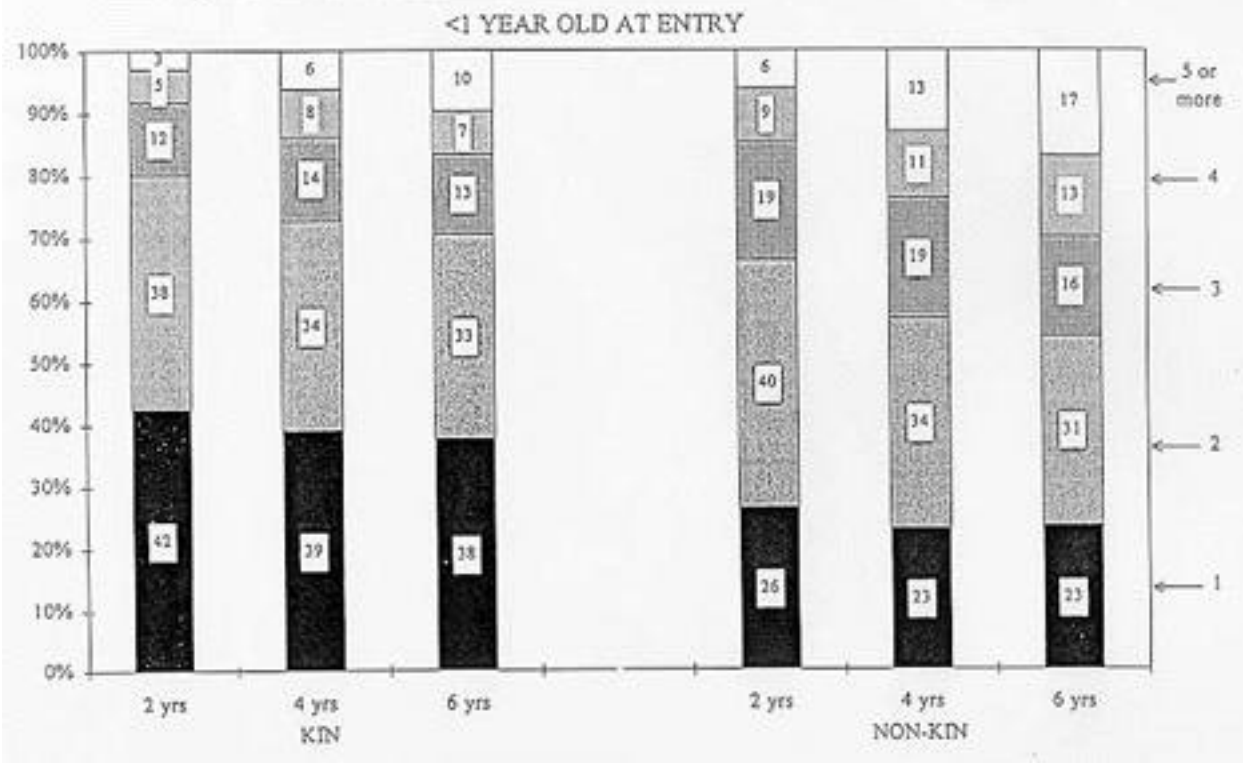


Table 8. Odds ratios and 95% CIs from Logistic Regression for Entrance into Foster Care as Infant
(n = 26460 foster care vs 68401 other)

| Sex | | | Ethnicity of Mother (native) | | |
|-----------------------------|-------------|--------------|--|-------------|--------------|
| boy vs girl | 1.09 | (1.05, 1.13) | African American vs White | 2.52 | (2.39, 2.66) |
| | | | Hispanic vs White | 0.64 | (0.61, 0.68) |
| <i>Marital Status</i> | | | Other vs White | 0.97 | (0.84, 1.11) |
| single vs married | 2.64 | (2.53, 2.75) | <i>Ethnicity of Mother (immigrant)</i> | | |
| | | | African American vs White | 2.34 | (1.80, 3.05) |
| <i>Education</i> | | | Hispanic vs White | 0.15 | (0.13, 0.17) |
| not vs high school graduate | 1.88 | (1.79, 1.97) | Other vs White | 0.37 | (0.31, 0.45) |
| <i>Birthweight</i> | | | | | |

| | | | | | |
|--|-------------|-----------------|---|-------------|--------------|
| low vs normal | 2.77 | (2.61, 2.93) | <i>Immigrant vs Native (by ethnicity)</i> | | |
| | | | African American | 0.39 | (0.31, 0.49) |
| <i>Birth Abnormality</i> | | | Hispanic | 0.15 | (0.14, 0.16) |
| any abnormality vs none | 1.96 | (1.82, 2.11) | Other | 0.16 | (0.13, 0.19) |
| | | | White | 0.42 | (0.37, 0.48) |
| <i>Trimester Prenatal Care Began</i> | | | | | |
| second vs first | 1.74 | (1.67, 1.82) | | | |
| third vs first | 2.95 | (2.75, 3.17) | | | |
| no care vs first | 8.36 | (7.66, 9.12) | | | |
| <i>Total Children Born Alive</i> | | | | | |
| two vs one | 1.58 | (1.50, 1.67) | | | |
| three vs one | 2.95 | (2.79, 3.11) | | | |
| <i>Economic Status (poor vs not)</i> | | | | | |
| 12-17 | 2.10 | (1.76, 2.49) | | | |
| 18-20 | 1.33 | (1.19, 1.52) | | | |
| 21-29 | 2.53 | (2.39, 2.71) | | | |
| 30+ | 5.01 | (4.63, 5.41) | | | |
| <i>Age of Mother (poor)</i> | | | | | |
| 12-17 vs 30+ | 0.63 | (0.57, 0.71) | | | |
| 18-20 vs 30+ | 0.49 | (0.45, 0.53) | | | |

21-29 vs 30+ **0.76** (0.72,
0.80)

Age of Mother (not poor)

12-17 vs 30+ **1.52** (1.23,
1.81)

18-20 vs 30+ **1.82** (1.61,
2.07)

21-29 vs 30+ **1.50** (1.39,
1.61)

-2 LOG L CHISQ = 44195.009 with 24 DF (p=0.0001)

Table 9. Hazard Ratios and 95% CIs for Reunification of Infants from Foster Care
(n=22560, 9875 reunified)

| | | | | | |
|-----------------------------|-------------|--------------|------------------------------------|-------------|--------------|
| <i>Sex</i> | | | <i>Age at Entry to Foster Care</i> | | |
| boy vs girl | 1.02 | (0.98, 1.06) | newborn vs 1-11 months | 0.79 | (0.76, 0.83) |
| <i>Marital Status</i> | | | <i>Placement Type</i> | | |
| single vs married | 0.91 | (0.87, 0.96) | kin/IV-E vs foster | 0.89 | (0.84, 0.94) |
| | | | kin/Not IV-E vs foster | 1.18 | (1.12, 1.24) |
| <i>Education</i> | | | group vs foster | 1.44 | (1.29, 1.61) |
| not vs high school graduate | 0.89 | (0.85, 0.92) | ffa vs foster | 0.72 | (0.65, 0.80) |
| | | | other placement vs foster | 0.94 | (0.83, 1.06) |
| <i>Birthweight</i> | | | <i>Removal Reason</i> | | |
| low vs normal | 0.94 | (0.89, 0.99) | neglect vs physical/sexual | 0.78 | (0.74, 0.82) |
| very low vs normal | 0.71 | (0.63, 0.79) | | | |
| <i>Birth Abnormality</i> | | | <i>Location</i> | | |
| any abnormality vs none | 0.93 | (0.87, 0.99) | LA vs LANOT | 0.71 | (0.68, 0.74) |

Trimester Prenatal Care Began

| | | |
|------------------|-------------|--------------|
| second vs first | 0.97 | (0.92, 1.01) |
| third vs first | 0.96 | (0.90, 1.02) |
| no care vs first | 0.74 | (0.70, 0.79) |

Total Children Born Alive

| | | |
|--------------|-------------|--------------|
| two vs one | 0.98 | (0.92, 1.04) |
| three vs one | 0.85 | (0.80, 0.90) |

Economic Status

| | | |
|------------------|-------------|--------------|
| poor vs not poor | 0.96 | (0.91, 1.01) |
|------------------|-------------|--------------|

Age of Mother

| | | |
|--------------|-------------|--------------|
| 12-17 vs 30+ | 0.95 | (0.86, 1.06) |
| 18-20 vs 30+ | 0.98 | (0.91, 1.06) |
| 21-29 vs 30+ | 1.01 | (0.97, 1.06) |

Ethnicity of Child

| | | |
|---------------------------|-------------|--------------|
| African American vs White | 0.77 | (0.73, 0.81) |
| Hispanic vs White | 1.02 | (0.96, 1.08) |
| Other vs White | 0.92 | (0.83, 1.02) |

Birthplace of Mother

| | | |
|---------------------|-------------|--------------|
| immigrant vs native | 1.39 | (1.31, 1.49) |
|---------------------|-------------|--------------|

