Children Who Return Home From Foster Care: A 6-Year Prospective Study of Behavioral Health Outcomes in Adolescence

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ABSTRACT. Objective. Returning children to their biological families after placement in foster care (ie, reunification) has been prioritized with legislation. Comprehensive studies of child behavioral health functioning after reunification, however, have not been conducted. This study examined outcomes for youth who were reunified after placement in foster care as compared with youth who did not reunify.

Design. Prospective cohort.

Setting. Children who entered foster care in San Diego, California, and who remained in foster care for at least 5 months.

Participants. A cohort of 149 ethnically diverse youth, 7 to 12 years old, who entered foster care between May 1990, and October 1991. Seventy-five percent of those interviewed at Time 1 were interviewed at Time 2 (6 years later).

Outcome Measures. 1) Risk behaviors: delinquent, sexual, self-destructive, substance use, and total risk behaviors; 2) Life-course outcomes: pregnancy, tickets/arrests, suspensions, dropping out of school, and grades; 3) Current symptomatology: externalizing, internalizing, total behavior problems, and total competence.

Results. Compared with youth who were not reunified, reunified youth showed more self-destructive behavior (0.15 vs −0.11), substance use (0.16 vs −0.11), and total risk behavior problem standardized scores (0.12 vs −0.09). Reunified youth were more likely to have received a ticket or have been arrested (49.2% vs 30.2%), to have dropped out of school (20.6% vs 9.4%), and to have received lower grades (6.5 vs 7.4). Reunified youth reported more current problems in internalizing behaviors (56.6 vs 53.0), and total behavior problems (59.5 vs 55.7), and lower total competence (41.1 vs 45.0). There were no statistically significant differences between the groups on delinquency, sexual behaviors, pregnancy, suspensions, or externalizing behaviors. Reunification status was a significant predictor of negative outcomes in 8 of the 9 regression equations after controlling for Time 1 behavior problems, age, and gender.

Conclusions. These findings suggest that youth who reunify with their biological families after placement in foster care have more negative outcomes than youth who do not reunify. The implications of these findings for policy and practice are discussed. Pediatrics 2001;108(1).

ABBREVIATIONS. SD, standard deviation; CBCL, Child Behavior Checklist.

Children entering foster care have high rates of emotional, behavioral, developmental, and physical health problems and are in need of many specialized services.1–6 In one California study, children in foster care comprised <4% of Medi-Cal–eligible children, but accounted for 41% of all children who used Medi-Cal mental health services.7 The limited long-term research on children in foster care suggests that they are at risk for continued difficulties, including not finishing high school, incarceration, and chronic problems with employment and housing.5–13

In 1980, Public Law 96–272, the Adoption Assistance and Child Welfare Act, was passed because of the increase in the number of children entering foster care and concerns about child welfare practices.14,15 The goals of this law were to decrease the number of children in foster care, decrease the length of time children spent in foster care, and increase permanent placements.16 This legislation directed child welfare policy toward reunification (defined as the physical reunion of children in foster care with their families of origin17) for almost 2 decades.9 After the passage of Public Law 96–272, the number of children in foster care and the length of time they spent in foster care initially decreased.15,16 By the mid-1980s, however, the number of children entering foster care was rising and increased dramatically by 95.3% (280 000–547 000) from 1986 to 1999.18,19

The outcome literature examining the effects of Public Law 96–272 has primarily focused on descriptive data, reporting that between 50% and 75% of children placed in out-of-home care eventually reunify, and between 20% and 40% of those reunified subsequently reenter foster care.16,20–26 Research has also examined those factors that predict the likelihood of reunification for children in foster care. The child factors associated with lower rates of reunification include being either an infant or adolescent, being black, and having been removed for neglect.21,22–33 The 2 family-of-origin factors associated with lower rates of reunification include lack of parental visitation while children are in foster care and family poverty.21,26–32,34,35 Finally, the child welfare variables associated with lower rates of reunification include longer time in out-of-home care and having been placed with a relative.21,34–36 Gender has con-
Although the correlates of reunification have been studied, research has not focused on exploring child functioning as an outcome of reunification. The assumption is often made that reunification is the optimal outcome for children placed in out-of-home care, yet there has been no empirical research to support this assertion. Reunification is believed to be the most favorable because 1) youth who do not reunify have less contact with their biological families, believed by many to be necessary for optimal development; and 2) youth who remain in foster care experience more placement changes, and therefore less stability, than youth who reunify. Additionally, there is evidence that youth who have fewer mental health and developmental problems are more likely to reunify.

Despite these arguments and beliefs, there is no coherent evidence that maltreated children who are reunified after placement in foster care do better than children who are not reunified. Although studies have not systematically explored this question, 3 studies have found better outcomes for children who were not reunified including gains in intelligence scores, greater overall well-being, and less criminal recidivism than children who were reunified with their families of origin. These studies, however, did not control for previous behavioral functioning at entry to foster care or comprehensively examine children’s behavioral health outcomes. Using a prospective cohort design, the current study represents the first attempt to systematically compare the behavioral and emotional functioning of children who were reunified from foster care with children who were not reunified, controlling for functioning and symptoms at entry to foster care. Youth entering foster care over an 18-month period were interviewed 6 months and then 6 years after their removal from their homes. Those who were ever reunified over the 6-year period were compared with those who were not reunified on measures of emotional and behavioral health functioning, 6 years after their initial placement.

**METHODS**

**Participants**

**Time 1**

Children between the ages of 7 and 12 who entered the foster care system between May 1990 and October 1991 in San Diego, California were recruited for the Time 1 interview if they met 3 criteria: 1) they were a new referral to the child welfare system; 2) they became legal dependents of the court as a result of substantiated maltreatment; and 3) they remained in foster care for at least 5 months. Thirty-seven (11.4%) of the 324 youth who were placed in foster care during this period reunified within 5 months, and were therefore ineligible for the study. Of the 287 youth who met the recruitment criteria, 214 (74.6%) youth were registered for the Time 1 study, which consisted of interviewing the children and their current caregivers approximately 6 months after their removal from home. Those who were registered did not differ from those who were not registered (N = 73, 25.4%) on age, sex, ethnicity, or type of maltreatment.

**Time 2**

Of the 214 youth interviewed at Time 1, 200 were eligible for the Time 2 interview, which was conducted 6 years subsequent to the children entering out-of-home care. Fourteen participants were ineligible because of their either missing relevant Time 1 data (N = 3), residing outside the United States (N = 6), or having significant developmental delays (N = 5). Of the 200 eligible participants, 13 to 17 years old at the Time 2 interview, 149 (74.5%) were located, recruited, and interviewed at Time 2 (only youth were interviewed at Time 2). Forty-two (21.0%) participants were not located, and 9 (4.5%) participants refused participation.

The average length of time between the participants’ entering out-of-home care and their Time 2 interviews was 6.03 (standard deviation [SD]: 0.46) years. Slightly more than half (57.0%) of the interviewed sample at Time 2 was female. The mean age of the interviewed sample was 15.1 (SD: 0.40) years. The sample was 43.0% white, 31.5% black, 20.1% Hispanic, and 5.4% other ethnicities (primarily Asian). The types of maltreatment these children had sustained were determined in the Time 1 study from a review of case record data, including the legal petitions and narratives. Of the 149 participants, 59.1% had substantiated neglect, 28.2% physical abuse, 18.1% sexual abuse, and 8.1% emotional abuse (nonexclusive categorization). The categories “other ethnicities” and “emotional abuse” were not included in the analyses because of the small number of participants in these groups.

Analyses below focus on comparing those youth who were reunified over the 6-year period (n = 63, 42.3%) with nonreunified youth (n = 86, 57.7%). Of the youth who were reunified, the mean number of years from entry to reunification was 2.2 (SD: 1.6). At the Time 2 interview, the reunified group had been reunified an average of 4.1 years (SD: 1.6). Only 1 participant had been reunified and subsequently reentered foster care. She was included in the reunified group. Two individuals were reunified during our Time 2 recruitment phase. Because they had not been living with their biological parents for >2 weeks, they were included in the nonreunified group. The reunified group had experienced an average of 4.7 (SD: 5.1) placements (eg, foster, kinship, group home, crisis shelter) during their episode of out-of-home care, before reunification.

The majority (81.4%) of nonreunified youth still had open child welfare cases an average of 6 years after they were removed from their homes. Of the 70 youth with open cases, 37 were in nonrelative foster care, 22 were in relative foster care, and the remaining 11 were in some type of group placement at the Time 2 interview. Of the 16 nonreunified youth with closed child welfare cases, 6 had been adopted, 4 permanently placed with guardians, and the remaining cases closed because of running away (N = 3), incarceration (N = 2), or emancipation (N = 1). The nonreunified group had experienced an average of 8.0 (SD: 6.1) placements between their first out-of-home placement and the Time 2 interview, significantly more (P < .001) than the reunified group.

**Attrition Analyses**

A greater percentage (P < .001) of nonreunified youth (86.9%) were recruited and interviewed at Time 2 than reunified youth (62.4%). We conducted a series of comparisons to determine if there were differences between the interviewed/noninterviewed groups, and whether these differences varied by reunification status. A series of 1-way analysis of variance (with planned comparisons) and χ² analyses were conducted to compare 4 groups: reunified/interviewed, reunified/not interviewed, nonreunified/interviewed, and nonreunified/not interviewed. Of the 30 statistical tests conducted, comparing the samples on demographic factors, maltreatment types, and Time 1 adaptive, cognitive, and behavioral functioning (as rated by both youth and their caregivers), only 1 attained statistical significance (P < .05). Youth in the reunified/noninterviewed group had higher scores on a measure of receptive vocabulary (the Peabody Picture Vocabulary Test) at Time 1 than did children in the nonreunified/interviewed group. Scores on the Peabody Picture Vocabulary Test, however, were unrelated to any of the outcome measures.

**Measures**

The current study analyzes data collected at both the Time 1 and Time 2 interviews. All questions were administered in a confidential interview format to the youth and their caregivers.
Institutional review board approval was obtained from all institutions involved in the study, and informed consent and assent were obtained.

Time 1 Data

Demographic and Maltreatment Information

Birthdate, gender, ethnicity, and maltreatment data were obtained from chart abstraction of child welfare records and administrative databases.

Time 1 Emotional and Behavioral Symptomatology

The Child Behavior Checklist (CBCL) was completed by each youth's current caretaker at the Time 1 interview. The children had been living with their current caregivers an average of 6.3 (SD: 4.7) months at the time the interview was conducted. The CBCL is a well-normed and validated instrument that is comprised of questions regarding number of sexual partners, frequency of intercourse, and use of protection to avoid sexually transmitted diseases and pregnancy. The Delinquency Scale (a measure of delinquent/violent behaviors) and the Substance Use Scale (domains: sexual, substance use, self-destructive/suicidal, and delinquent/violent behaviors) are used to indicate whether a female had ever become pregnant, or if a male had impregnated a female. Seventeen items comprise the Sexual Behaviors Scale (a measure of sexual behaviors), and Time 1 total risk behavior problems. All variables were entered representing mostly D's and F's, to a score of 11, representing mostly A's.

Current Emotional and Behavioral Symptomatology

The Youth Self-Report is a parallel version of the CBCL, which assesses behavior problems and competencies. All youth completed this well-validated and normed instrument at Time 2. The t-scores from the broad-band scales of Externalizing Behaviors (consisting of the Delinquent and Aggressive Behavior subscales), Internalizing Behaviors (consisting of Anxious/Depressed, Withdrawn, and Somatic Complaints subscales), Total Behavior Problems, and Total Competence (consisting of Activities, Social, and School Performance) were used as dependent measures. According to the youths' self-reports, 18.1% were above the clinical cutpoint on the Internalizing scale, 26.2% on the Externalizing scale, and 24.8% on the Total Behavior Problems scale (t-scores >63). On the Total Competence scale, lower scores represent worse functioning, and 10.1% of the Time 2 sample scored below the clinical cutpoint (t-scores <37). In normative samples, 10.0% of youth score above the clinical cutpoint on these Youth Self-Report scales.

Statistical Models and Methods of Analysis

χ² and t test analyses were conducted to examine the bivariate relationships between reunification status and 1) Time 1 variables, and 2) Time 2 outcome variables (ie, lifetime risk behaviors, life-course outcomes, and current symptomatology) for those participants with Time 2 data (N = 149). A series of multiple and logistic regression equations were then constructed to explore the independent effect of reunification status over and above the control variables. The control variables consisted of Time 2 age, gender, and Time 1 total behavior problems. All variables were entered simultaneously into the regression equations.

RESULTS

Comparisons Between Nonreunified and Reunified Youth on Time 1 Variables

Analyses were conducted to determine if there were differences between the reunified and nonreunified youth in age, gender, ethnicity, types of maltreatment, or behavior problems at Time 1. Table 1 displays the descriptive statistics and the results of the χ² and t tests analyses. As shown, there were no statistically significant differences among the reunified and nonreunified groups on any Time 1 variables.

Comparisons Between Nonreunified and Reunified Youth on Time 2 Outcome Variables

As Table 2 indicates, the reunified youth reported more engagement in self-destructive (0.15 vs −0.11; P = .04), substance use (0.16 vs −0.11; P = .02), and total risk behavior problems (0.12 vs −0.09; P = .03) than did nonreunified youth. There was also a trend (P = .11) for the reunified youth to engage in more delinquent behaviors (0.09 vs −0.06). There was no statistically significant difference between the groups on sexual behaviors, although the reports of sexual risk behaviors were in the same direction (0.08 vs −0.06). Reunified youth were also more likely to have received a ticket or have been arrested (49.2% vs 30.2%; P = .02), to have dropped out of school (20.6% vs 9.4%; P = .05), and to have received lower grades (6.5 vs 7.4; P = .03). There was no difference between the groups on pregnancy or suspensions. Reunified youth reported more current problems in internalizing behaviors (56.6 vs 53.0; P = .04), total behavior problems (59.5 vs 55.7; P = .04), and total competence (41.1 vs 45.0; P = .04) than nonreunified
There was no statistically significant difference between the 2 groups on externalizing behavior problems. Overall, the results of this set of bivariate analyses suggested that reunified youth self-reported more risk behaviors, negative life-course outcomes, and greater current symptomatology on 9 of the 14 indices examined. These 9 outcome variables were used as dependent variables in regression analyses.

### Multivariate Regression Analyses

Table 3 displays the $\beta$ coefficients or odds ratio coefficients, and total $R^2$ and $\chi^2$ values for each of the models constructed. The first 3 rows display the $\beta$ coefficients for models predicting lifetime risk behaviors. In the model predicting self-destructive behaviors, gender, Time 1 behavior problems and reunification status were significant predictors over and above the others in the model. Specifically, females were more like to engage in self-destructive behaviors, as were those who had higher Time 1 behavior problems, and those who were reunified. In examining the coefficients for the regression equations predicting substance use and total risk behaviors, we find that age, Time 1 behavior problems, and reunification status are independent predictors. Older youth reported greater use of substances and higher total risk behaviors, as did those with higher Time 1 behavior problems, and those who were reunified. Gender was not a significant predictor of substance use or total risk behaviors, after controlling for the other variables in the model.

In examining the life course outcomes (odds ratios shown in the table for all variables except grades), older age and being female were independent predictors of dropping out of school. Reunification status was not significantly related to dropping...
out of school ($P = .13$). Finally, the continuous variable, grades, was predicted by reunification status, such that reunified youth had lower self-reported grades than nonreunified youth.

In examining the results of the equations predicting Current Symptomatology, being female and reunified were independent predictors of greater internalizing problems, greater Time 2 total behavior problems, and lower total competence. Age and Time 1 behavior problems were not significant independent predictors.

Being reunified was a significant predictor of negative outcomes in the regression models for each dependent variable except dropping out of school (which approached significance). All of the overall models, except for the one predicting grades, were significant, with $R^2$ ranging from 0.06 to 0.23, and $\chi^2$ values at 26.2 and 28.0.

## DISCUSSION

The current study’s findings suggest that youth who reunify with their biological families after placement in foster care have more behavioral and emotional health problems than youth who do not reunify. These findings were consistent across the range of outcomes examined: engagement in risk behaviors, life-course outcomes, and current emotional and behavioral symptomatology. Reunified youth had higher problem scores on 9 of the 14 indices examined, and reunification status was a significant predictor of negative outcomes after controlling for age, gender, and Time 1 behavior problems in 8 of the 9 regression equations. These findings are strengthened by the study design, as children were followed prospectively for 6 years, they had been reunified for a lengthy period of time (4 years on average) before the Time 2 assessment, and we controlled for initial behavioral functioning.

Multiple explanations are possible for these findings. One hypothesis is that the factors that led to the youths’ initial removal (e.g., inadequate parenting) were still present when the youth returned home. In theory, the decision to reunify is based on the reme-
recognize that reunification is best for children.\textsuperscript{14,15} Despite the lack of research to support this assertion,\textsuperscript{37,38} Although the current findings are consistent with the limited previous research, additional research is needed to replicate or dispute the current study’s findings, to broaden the range of behavioral and emotional health outcomes examined, and to explore why some children who are reunified are functioning well, whereas others are having difficulty. Evaluation of child welfare policy and practice should be based not only on system outcomes (eg, rates of reunification), but also on the impact of such policy and practice directives on behavioral health outcomes for children.\textsuperscript{35,38} Indeed, if one had examined only child welfare system outcomes in the current study, reunification would have been found to be a success, because of the low rate of reentry into foster care.

The current study’s results should not be misconstrued as an argument against reunification. Rather, the study’s findings strongly caution us against assuming that children who return to live with their birth parents have achieved positive outcomes.\textsuperscript{24} Too often legislation goes into effect based on ideology, without a strong research basis, and without necessary resources for implementation and evaluation. Recent legislation, the Adoption and Safe Families Act (ASFA, Pl.105–89, 1997),\textsuperscript{60} requires states to expedite permanent placement decisions for children in foster care. Although the implications of ASFA are not yet fully understood (and may vary by region), anecdotal reports indicate that social workers and judges are feeling pressure to reunify children swiftly, rather than begin proceedings to terminate reunification. These results should also serve to heighten pediatric monitoring of the behavioral health of children who have returned home from foster care.

Finally, an often missed voice in the debate about what is in the best interest for children in foster care is the voice of the youth themselves.\textsuperscript{61} Studies that have interviewed current and former foster children report that the youth generally have positive feelings about being placed in foster care.\textsuperscript{61,62} Most youth thought it was in their best interest and reported that things would have gotten worse at home without child welfare intervention.\textsuperscript{10,63} On the other hand, children reported missing their biological families, and had many suggestions for improving the foster care system.\textsuperscript{10,61–65} These studies perhaps best underscore the mixed emotions, concerns, and perspectives that need to be balanced by all in making weighty decisions that so pervasively affect the lives of children and families.

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