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Educational and Employment Achievements of American Indian/Alaska Native Alumni of Foster Care

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ABSTRACT

Little is known about the outcomes of American Indian/Alaska Native (AI/AN) alumni of foster care. As part of the Casey National Alumni Study, case record reviews documenting youth experiences before and during care were conducted for all youth served by Casey Family Programs between 1966 and 1998. Interviews assessing education, employment, and financial outcomes were conducted for 1,068 alumni, of whom 243 (23%) identified themselves as AI/AN. Few differences were observed between AI/AN and White alumni in demographics, risk factors, and foster care experiences. White alumni, however, had more positive outcomes on most education and employment outcomes. Focused research is needed to develop culturally appropriate practices and better understand the needs and outcomes of AI/AN youth in care and alumni of care.

Implications for Practice

- Social workers, foster parents, teachers, and school administrators should be oriented to issues for AI/AN youth in care, such as child maltreatment trauma; separation from siblings, family, and other clan or tribal members; racism; and frequent moves.

- Child welfare, K–12, and postsecondary education systems need to work together to coordinate and deliver post-foster care supports, such as those required by the Chafee Foster Care Independence Act.

AI/AN Alumni of Care

Little is known about the long-term functioning of adults who were served in the foster care system (*alumni*), especially American Indian/Alaska Native (AI/AN) alumni. The primary purpose of this article is to describe the education, employment, and financial outcomes of AI/AN alumni of care.

Disproportionately High Rates of Child Abuse and Neglect, and Foster Care Placement

In 2006, AI/AN children had one of the highest substantiated rates of child abuse and neglect: 15.9 per 1,000 children, compared to 19.8 per 1,000 for African American children, 14.3 for Pacific Islander children,

10.8 for Hispanic/Latino children, 10.7 for White children, and 2.5 for Asian children. This translated to 10,371 AI/AN victims of child abuse and neglect in 2006 (U.S. Department of Health and Human Services, 2008). There could be a multitude of reasons why substantiated rates are higher among some ethnic groups than others. The next section discusses some of the biases inherent in the system. Additionally, some evidence suggests that substantiation of maltreatment and removal decisions differ for ethnic groups (Hill, 2007).

AI/AN children constitute a small, but disproportionately high share of the number of children in foster care in the United States. In 2005, for example, AI/AN children represented only 0.9% (665,151) of all children under 18 in the United States; yet they represented 10,617 (2.1%) of the 513,000 youth in care (Kids Count, 2006). The overrepresentation ratio (the percentage of youth in care for an ethnic group divided by the percentage of youth in the general population for that ethnic group) for AI/AN youth is 2.3 (for White youth, it is 0.7, meaning that they are underrepresented in foster care).

Ineffective Protection of AI/AN Youth in Care and the Indian Child Welfare Act

The Indian Child Welfare Act (ICWA) was passed in 1978 as a way to better address the needs of AI/AN children. Historically, AI/AN child welfare had at its core traditional beliefs, customs, and values about child rearing and protection. By 1900, events had disrupted the tribes' natural system of child protection. During the mid-1900s, the growing belief was that the tribes could not protect their children and assimilation was the most viable alternative. In 1978, formal responsibility for decisions made about the welfare of children was returned to the tribes with the passing

of ICWA. Consequently, the tribes had to cooperate with existing state child welfare systems and were not equipped with resources to manage the crisis nature of the work (Indian Child Welfare Programs, 2007).[1]

Unfortunately, the racial disproportionality AI/AN youth and families experience has been exacerbated by ineffective implementation and adherence to ICWA (Pub. L. 95-608; Cross, Earle, & Simmons, 2000; Halverson, Puig, & Byers, 2002; Hughes, 2006; Matheson, 1996). In particular, policy mechanisms such as the Indian Family Exception Doctrine allow key functions of ICWA to be circumvented (Cross, 2006). For example, although ICWA specifies that a state cannot remove an AI/AN child from a home without demonstrating evidence of efforts to provide services to prevent removal, a recent study found such efforts were undertaken in only 41% of the cases (Earle & Cross, 2001). The quality of care AI/AN youth and families receive is further diminished by a lack of training on ICWA among child protective services (CPS) and foster care workers, limited understanding of AI/AN culture among CPS and foster care workers, and poor access to Title IV-E funding for tribal child welfare services (Clifford & Mills, 2002; Graham, Cellarius, Clothier, Moore, & Hawkins, 2001).[2] As a result, AI/AN youth in care are not receiving the level of care they deserve.

Placement and adoption disparities. Native children in substitute care tend to be younger than the national average (Donald, Bradley, Day, Critchley, & Nuccio, 2003). Only 1% of children adopted through the public child welfare system were AI/AN children (U.S. Department of Health and Human Services, 2006). Of those children whose plan is adoption, AI/AN and African American children have the longest average time from termination of parental rights to adoption (Derezotes, Poertner, & Testa, 2004). Notably, AI/AN children are overrepresented among children awaiting adoption from foster care (National Indian Child Welfare Association & The Pew Charitable Trusts, 2007).

Service disparities. Not only is there a lack of data concerning supportive services available for AI/AN foster children and their families (e.g., mental health services), but existing research suggests that AI/AN foster children have relatively limited access to such services. Specifically, AI/AN families were less likely than White families to receive mental health services (Libby et al., 2006), family preservation services, family support services, and family reunification services (Cross, 2002).

Outcomes for Alumni of Foster Care

As described in the following sections, there is very little information on alumni functioning later in life and even less information on how that functioning differs by ethnic group. Studies lack the sample size and the intention of analyzing ethnic subgroups. New analyses of differences in outcomes by ethnic group are available by Harris, Jackson, O'Brien, and Pecora (2010) and Dworsky et al. (2010).

Education outcomes. One of the few national foster care follow-up studies found that only 54% of alumni had completed high school (Cook, Fleishman, & Grimes, 1991). In a Wisconsin study, 63% of the alumni had completed high school 12 to 18 months after discharge (Courtney, Piliavin, Grogan-Kaylor, & Nesmith, 2001). Meanwhile, a New York City study found a 65% high school graduation rate for youth in care in New York City, compared with 71% for 18- to 24-year-olds in the city's general population (Festinger, 1983; U.S. Census Bureau, 1980). Due to the varying ages at which postsecondary education achievement is assessed, college graduation rates vary greatly (1%–11%; Casey Family Services, 1999; Courtney, Terao, & Bost, 2004; Pecora et al., 2003; Reilly, 2003).

AI/AN people in the general population tend to be less successful in educational outcomes than people of other backgrounds. In a cohort study of high school sophomores in the general population followed from 1990 through 2000, it was found that over 60% of AI/AN adults' highest level of education was high school completion or less, while less than 25% of White adults' highest level of education was high school completion or less. Meanwhile, by 2000, one third of the White adults had completed college or more, compared to only 6% of AI/AN adults (National Center for Educational Statistics, 2005).

Employment and health insurance outcomes. The unemployment rate for the general population ages 20–44 was 4% in 2000.[3] When comparing to the general population, alumni data must be viewed with caution due to the young age at which most assessments occurred. The Westat National Study of alumni found that 49% of the 18- to 24-year-olds were working (Cook, 1994), while a study using administrative data found that 30% of alumni of foster care in Illinois, 23% in California, and 14% in South Carolina were unemployed when they left foster care (Goerge et al., 2002).

One consequence of unemployment is lack of health insurance. One study of the general population ages 18 to 24 found that 31% lacked health insurance (DeNavas-Walt, Proctor, & Lee, 2005). As a comparison, 47.1% of alumni had no health insurance (Alexander & Huberty, 1993).

Homelessness. According to estimates developed from the 1996 National Survey of Homeless Assistance Providers and Clients, at least 2.3 million adults and children (nearly 1% of the U.S. population) are likely to experience a spell of homelessness at least once during a year. Over a quarter of these homeless adults (27%) reported having lived in foster care, a group home, or other institutional setting for part of their childhood (12% reported being in foster care, 10% in a group home, and 16% in residential institutions; Burt et al., 1999).[4] A study of homelessness in Minneapolis (Piliavin, Sosin, Westerfelt, & Matsueda, 1993) found 39% of the 331 homeless people interviewed, aged 18 and above, reported being in a childhood foster care placement (foster home, group home, or institution). Data from alumni studies are difficult to compare to data in the general population. Although not an exact comparison, the rate of homelessness experienced by 21-year-old alumni of foster care ($N = 577$) was 18%, and over half of those who had been homeless had experienced more than one spell of homelessness (Courtney et al., 2007).

Home ownership. In the western United States (where many alumni in this study were served), where rates of overall home ownership are lower than the national average for all adults, the rate of the home ownership for people under age 50 ranged from 17.4% (less than 25 years old) to 70.1% (45- to 49-years-old; U.S. Census Bureau, 2000b).

Meanwhile, only 56% of AI/AN households own a home (U.S. Census Bureau, 2006). The American Indian homeownership rate on reservations is 33%, lowest among all ethnic groups and less than half that of the U.S. population (National American Indian Housing Council, 2006).

Household income and public assistance. The 2000 poverty rate (around the time data were collected for the current study) for the United States was 11%.[5] When income is not sufficient, many individuals turn to public assistance. Just over 3% (3.4%) of the general population received public assistance in 2000 (U.S. Census Bureau, 2000a).[6] In comparison, one quarter (26%) of alumni served by an East Coast agency received public assistance at the time they were interviewed (Casey Family Services, 1999, p. 13), while 32% of Wisconsin alumni were on public assistance 12 to 18 months after leaving care (Courtney, Piliavin, Grogan-Kaylor, & Nesmith, 1998). Alexander and Huberty (1993) found that 14.2% of alumni of foster care in Indiana received some form of public assistance (Aid to Families with Dependent Children [AFDC], food stamps, general assistance [GA]),

while only 5% of the general population in Indiana received some form of public assistance (U.S. Bureau of the Census, 1994, Table 599).

In sum, there is a dearth of knowledge concerning the in-care and postcare experiences of AI/AN youth and adults. In particular, little is known about their educational, employment, and financial achievements after leaving care. To address this lack of information, this article will describe the demographics, risk factors, foster care experiences, and outcomes of AI/AN adults using data from a national alumni study. Additionally, outcomes of AI/AN alumni will be compared to those of White alumni in the same study.

Method

Participants

Casey Family Programs. Casey Family Programs (Casey) is a private operating foundation whose mission is to provide and improve—and ultimately prevent the need for—foster care. Established by Jim Casey, the organization has been providing services to youth and families and has been promoting advances in child welfare practice and policy since 1966. In 1998 (at the time of the current study), Casey served youth in 23 field offices: Arizona (Phoenix, Tucson), California (Walnut Creek/Bay Area, San Diego), Hawaii (Hilo, Honolulu), Idaho (Boise), Louisiana (Baton Rouge), Montana (Helena, Missoula), North Dakota (Bismarck, Fort Berthold American Indian Reservation), Oklahoma (Oklahoma City), Oregon (Portland), South Dakota (Pine Ridge American Indian Reservation, Rapid City, Rosebud American Indian Reservation), Texas (Austin, San Antonio), Washington (Seattle, Tacoma, Yakima), and Wyoming (Cheyenne).

To be included in the Casey National Alumni Study, alumni had to have been (a) placed with a Casey foster family for 12 consecutive months or more and (b) discharged from foster care for at least 12 months prior to the interview period.

Using the standards of the American Association for Public Opinion Research (2000), the minimum response rate was calculated by first removing ineligible alumni, which included those who were deceased ($n = 61$), incarcerated ($n = 55$), and institutionalized ($n = 11$), from the 1,582 alumni meeting the study's criteria. Therefore, the response rate was the ratio of alumni interviewed ($N = 1,068$) to alumni eligible ($N = 1,455$), or 73.4%.[7]

This article focuses on a subpopulation of interviewed alumni who reported their race as AI/AN, a total of 243 adults (23% of all alumni interviewed). Over half (56.8%) of these alumni were male. Their average age at the time of interview was 30.5 years ($SE = 0.4$), ranging from 20 to 49. Over half of the alumni (56.8%) entered care in the 1980s. Over 4 in 5 alumni (84.0%) were served in the Northwest or Great Plains.[8]

Measures

Case records. Case records provided demographics, risk factors (information that placed alumni at risk for long-term problems; e.g., child maltreatment by the birth family, reason for initial placement), and foster care experiences (e.g., number of placements, length of time in care). Child maltreatment data were recorded using operational definitions of abuse and neglect variables, as defined by the Barnett Coding System for type and severity of child maltreatment, and modified for use by the LONGSCAN project (Modified Maltreatment Classification System; Barnett, Manly, & Cicchetti, 1993; English & The LONGSCAN Investigators, 1997). Trained reviewers used a structured form and were required to achieve a high level of agreement with their trainers. To maintain reliability of reviews, approximately 10% of all records

were randomly selected for a second reading by a gold-standard rater (a highly trained staff member involved with data management, coding, and training for the reviews). Only case record variables with acceptable interrater reliability (as determined by Cohen's kappa or by interrater correlations) were retained.

Definitions of living situations and placements vary based on federal rules, perspectives (e.g., youth, agency, or researcher), and frameworks. For this study, a child's living situation was defined as the place where the child lived, and what was viewed by the caseworker as the child's "home"—temporary or not. Following the Federal and the Child Welfare League of America National Data Analysis System work group definitions (Woodruff, 2004), the study considered the following living situations to be distinct placements: initial shelter care, foster care, kinship care, treatment foster care, group homes, residential treatment, independent living placements, adoptions, and juvenile justice placements once the youth is under child welfare agency supervision (not juvenile justice as an initial placement).

Interviews. In addition to providing additional demographics (i.e., ethnicity, gender, and age) and data on risk factors, interviews provided information on foster care experiences such as number of school changes, access to therapeutic services and supports, having a close and confiding relationship with an adult while growing up, feeling loved while in foster care, and child maltreatment by the foster family or other caregiver. Much of the interview assessed mental health outcomes, which were measured by the Composite International Diagnostic Interview, a structured psychiatric interview with high reliability and validity (World Health Organization, 1996); these outcomes are not reported in the current article (for a summary of mental health findings, see Pecora et al., 2003).

Outcomes that were assessed during the interview and are reported in the current article include, among other topics, completion of high school, completion of college, employment, and receipt of public assistance. On average, interviews took 2.5 hours to administer. The full interview schedule can be requested from the corresponding author.

A random set of interviews was audiotaped and reviewed by study coordinators for adherence to the interview protocol. As an additional quality assurance check, study coordinators called some respondents after they had completed the interview to verify their responses.

Procedure

Prior to initiation of the study, protocols, measures, and procedures were reviewed by a diverse review committee, which included alumni and AI/AN experts. Prior to data collection, the University of Michigan Internal Review Board approved the study protocol. Case records were reviewed for 1,582 alumni. For case records, trained raters with no knowledge of the hypotheses of the study individually read and recorded the information from case records.

Interviews were completed for 1,068 alumni between September 2000 and January 2002. Professionally trained staff from the University of Michigan Survey Research Center administered the interview. Prior to being interviewed, alumni were asked to sign or provide informed consent verbally, stating they were aware of the benefits and risks of participation.

Data Analysis

Because some eligible alumni were not located and interviewed, weighting was used to adjust for interview nonresponse. All interview variables including demographics, risk factors, foster care experiences, and outcomes were weighted across all 1,068 interviewed Casey alumni in

TABLE 1. *Risk Factors: Child Maltreatment by the Birth Family, Reason for Initial Placement, and Mental and Physical Health Diagnoses*

RISK FACTORS	WHITE (n = 574)	AI/AN (n = 243)
	%	%
Expanded hierarchical categorization		
No child maltreatment	10.1	5.3
Sexual abuse only (with or without emotional)	5.4	5.3
Sexual abuse and other (besides emotional)	42.0	42.0
Emotional maltreatment only	4.4	4.1
Physical abuse only (with or without emotional)	9.6	8.2
Physical neglect only (with or without emotional)	13.2	16.9
Physical abuse and physical neglect only (with or without emotional)	15.3	18.1
Reason for placement (alumni could have more than one reason)		
Child behavior problems*	25.8	14.0
Maltreatment	54.2	53.1
Birth parents' substance abuse problems*	27.5	43.6
Other (includes family violence/partner abuse, family stress, primary caregiver(s) unable/unwilling to care, refugee, and other reasons)*	60.1	67.9
Mental and physical health problems diagnosed by a licensed professional before or during care		
Attention deficit/hyperactivity disorder (ADHD)	11.3	9.5
Physical or learning disability	18.5	22.2
Other impairments (drug exposed, fetal alcohol effect, fetal alcohol syndrome, or visually/hearing impaired)*	6.3	11.9

* $p < .05$ (significant difference between White and AI/AN alumni).

TABLE 2. *Foster Care Experience: Placement History and Experience*

FOSTER CARE EXPERIENCES	WHITE (n = 574)	AI/AN (n = 243)
	%	%
Number of placements		
Low (4 or less)	31.7	36.6
Medium (5 to 8)	40.1	32.9
High (9 or more)	28.2	30.5
Mean no. placements	6.6 (SD = 3.9)	7.1 (SD = 4.9)
Length of time in care (years)*		
Low (5.9 or less)	33.4	20.6
Medium (6.0 to 9.9)	32.4	34.2
High (10 or more)	34.1	45.3
Mean time in care (years)*	8.6 (SD = 4.6)	10.1 (SD = 4.6)
Placement change rate (placements per year)		
Low (0.49 or less)	27.7	34.6
Medium (0.50 to 0.99)	37.6	37.9
High (1 or more)	34.7	27.6
Mean placement change rate (placements/year)	0.9 (SD = 0.7)	0.9 (SD = 0.7)
Number of reunification failures		
Low (0)	73.2	75.7
Medium (1)	18.6	14.8
High (2 or more)	8.2	9.5
Number of runaways*		
Low (0)	80.7	73.7
Medium (1)	12.2	12.3
High (2 or more)	7.1	14.0
Number of unlicensed living situations with friends/relatives*		
Low (0)	91.8	87.7
Medium (1)	6.4	7.0
High (2 or more)	1.7	5.3

* $p < .05$ (significant difference between White and AI/AN alumni).

the Results section later in this article. Because case record information was based on the population of interest, no weight was created for case record data. Therefore, case records do not have standard errors associated with them; only interview variables do.

To determine if AI/AN alumni differed significantly from White alumni, bivariate chi-square tests of independence were conducted. If significant differences in outcomes were found between groups, logistic regressions (referred to as multivariate analyses) were conducted to determine if these differences persisted after controlling for demographics, risk factors, and foster care experiences (these variables were described earlier). The odds ratios (and confidence intervals) are presented comparing White alumni to AI/AN alumni.

Results

Risk Factors

Risk factors are presented in Table 1. Using the expanded hierarchical categorization of abuse, it was found that just over 2 in 5 AI/AN alumni had been sexually abused and physically abused and/or physically neglected by their birth family, and about 1 in 20 experienced no abuse from their birth family. Over half of AI/AN alumni were placed initially in family foster care due to maltreatment. When compared to White alumni, AI/AN alumni were more often placed due to birth parents' substance abuse problems (43.6%) and less often placed due to child behavior problems (14.0%). Lastly, more than 1 in 5 AI/AN alumni were professionally diagnosed with a physical or learning disability before or during care. Compared to White alumni, AI/AN alumni were more often diagnosed with other impairments (11.9%) such as drug exposure, fetal alcohol effect (FAE), fetal alcohol syndrome (FAS), or visual/hearing impairments.

Foster Care Experiences

Table 2 presents the placement history and experience of alumni. AI/AN alumni experienced an average of 7.1 placements, spent an average of 10.1 years in care, and experienced an average of 0.9 placements per year. AI/AN alumni spent significantly more time in care compared to White alumni. Compared to White alumni, AI/AN alumni more often experienced two or more runaway episodes (14.0%) and two or more unlicensed living situations with friends or relatives (5.3%).

Table 3 presents educational services and experience, therapeutic services and supports, and activities with foster family of alumni. More than 1 in 5 AI/AN alumni experienced 10 or more school changes. Almost all (95.1%) AI/AN alumni had access to tutoring or other supplemental educational services, while 84.7% had access to all three types of therapeutic services and supports, which was significantly less than White alumni. Lastly, more than 3 in 5 AI/AN alumni participated in both fun activities and religious activities, a rate higher than White alumni.

Table 4 presents information about alumni's preparation for leaving care and resources upon leaving care. Nearly 9 in 10 AI/AN alumni had access to employment training or job location services; almost 3 in 4 had access to independent living training groups or workshops; almost

TABLE 3. *Foster Care Experience: Educational Services and Experience, Therapeutic Services, and Supports and Activities With Foster Family*

FOSTER CARE EXPERIENCES	WHITE (n = 574)	AI/AN (n = 243)
	% (SE)	% (SE)
Total number of school changes (elementary through high school)		
Low (6 or less)	37.2 (2.1)	39.4 (3.2)
Medium (7 to 9)	31.7 (2.0)	37.1 (3.2)
High (10 or more)	31.2 (2.0)	23.4 (2.7)
Had access to tutoring or other supplemental educational svcs.[a]	94.1 (1.0)	95.1 (1.5)
Had access to all of the following therapeutic services and supports*		
Counseling and mental health services; alcohol and drug treatment programs; and group work or group counseling	90.3 (1.3)	84.7 (2.4)
Participated in both fun activities and religious activities with foster family[b]*	53.7 (2.1)	62.1 (3.2)

[a] These data refer to the last placement longer than 3 months.
[b] These data refer to the last placement longer than 3 months and combined two separate questions.
* p < .05 (significant difference between White and AI/AN alumni).

TABLE 4. *Foster Care Experience: Preparation for Leaving Care and Resources Upon Leaving Care*

FOSTER CARE EXPERIENCES	WHITE (n = 574)	AI/AN (n = 243)
	% (SE)	% (SE)
Had access to employment training or job location services[a]	88.5 (1.4)	86.6 (2.4)
Had access to independent living training groups or workshops[a]	76.9 (1.8)	72.3 (3.0)
Alumni reported feeling somewhat or very prepared for independent living	59.6 (2.1)	58.0 (3.2)
Had health insurance at exit*	36.5 (2.0)	45.0 (3.3)
Degree of preparation for leaving care (sum of four items above)		
Low (0 or 1)	14.6 (1.5)	13.7 (2.3)
Medium (2)	27.6 (1.9)	30.2 (3.0)
High (3 or 4)	57.8 (2.1)	56.1 (3.3)
Alumni resources when leaving care		
A driver's license*	58.6 (2.1)	47.3 (3.3)
$250	48.9 (2.1)	44.0 (3.3)
Dishes and utensils	37.8 (2.0)	41.4 (3.2)
Amount of leaving care resources (sum of three items above)		
Low (0)	26.7 (1.9)	31.6 (3.1)
Medium (1)	25.0 (1.9)	25.7 (2.9)
High (2 or 3)	48.3 (2.1)	42.6 (3.3)

[a] These data refer to the last placement longer than 3 months.
* p < .05 (significant difference between White and AI/AN alumni).

3 in 5 reported feeling somewhat or very prepared for independent living; and nearly half had health insurance at exit, a rate higher than White alumni. At exit, AI/AN alumni possessed a driver's license, $250 spending cash, and dishes and utensils at rates of 47.3%, 44.0%, and 41.4%, respectively. White alumni more often possessed a driver's license.

Table 5 presents data on foster family and other nurturing supports for alumni while in care. The rates of foster parent parenting styles were mother warmth, 61.6%; mother overprotection, 67.5%; father warmth, 50.5%; and father overprotection, 52.6%.[9] The rate of overprotection among foster mothers for AI/AN alumni was significantly higher than for White alumni. Regarding their foster families, 63.7% of AI/AN alumni reported their foster family helped with ethnic issues; 37.0% reported having a close and confiding relationship with an adult while growing up; 80.2% reported feeling loved while in foster care; and 36.0% reported that, overall, foster parents were very helpful. About 1 in 4 AI/AN alumni

reported being physically abused by a foster parent or other caregiver; nearly 3 in 5 reported no maltreatment while in care.

Education, Employment, and Financial Outcomes

Table 6 presents the education outcomes of alumni. Although AI/AN alumni completed high school at a similar rate as White alumni (AI/AN, 84.3%; White, 86.6%), they did so more often with a general educational development (GED) credential (27.3%) and less often with a high school diploma (57.0%). While more than half of AI/AN alumni had obtained any education past high school, just over a third completed any degree or certificate past high school, and less than 1 in 30 had completed college or more, a rate lower than White alumni.

Table 6 also presents the employment and financial outcomes of alumni. For those AI/AN alumni in the workforce, more than 3 in 5 were employed, a rate significantly lower than that of White alumni (77.7%). More than 2 in 3 AI/AN alumni had health insurance. More than 7 in 10 AI/AN alumni had not been homeless for one or more nights at any time within a year after leaving foster care, and 1 in 5 owned a house or apartment, a rate lower than that of White alumni (31.9%).

Nearly 2 in 3 AI/AN alumni were in a household whose income was at or above the poverty line; nearly 1 in 5 were in a household whose income was greater than three times the poverty line; 2 in 5 had never received any public assistance or welfare (AFDC, Temporary Assistance for Needy Families [TANF], or GA) since turning 18; 4 in 5 were not receiving public assistance (AFDC, TANF, or GA) at time of the interview; and over half were in households where someone had not received public assistance in the past 6 months. For all five of these household income and public assistance outcomes, AI/AN alumni outcomes were significantly poorer than those of White alumni.

Multivariate Analyses

Table 6 also includes results from the multivariate analyses of education and employment. Odds ratios (and confidence intervals) are only presented for those variables where the bivariate results were significant (indicated with an asterisk in the table). Differences on outcomes between AI/AN and White alumni were not examined while controlling for demographics, risk factors, and foster care experiences if bivariate differences were not significant. All the education and employment outcomes that were significantly different between AI/AN alumni and White alumni at the bivariate level were also significant at the multivariate level (and favored White alumni). For outcomes phrased in a more desirable direction (i.e., all outcomes except completed high school with a GED credential), odds ratios ranged from 1.6 (owns house or apartment) to 3.1 (completed college or more). For example, White alumni had 1.6 times higher odds of

TABLE 5. *Foster Care Experience: Foster Family and Other Nurturing Supports While in Care*

Nurturing and support characteristics[a]	White (n = 574) % (SE)	AI/AN (n = 243) % (SE)
Foster mother		
Warmth	63.1 (2.1)	61.6 (3.2)
Overprotection*	58.5 (2.1)	67.5 (3.1)
Foster father		
Warmth	52.6 (2.1)	50.5 (3.3)
Overprotection	46.1 (2.1)	52.6 (3.3)
Foster family helped with ethnic issues	69.1 (2.0)	63.7 (3.2)
Close and confiding relationship with an adult while growing up	36.6 (2.1)	37.0 (3.2)
Felt loved while in foster care	80.7 (1.7)	80.2 (2.7)
Overall, foster parents were helpful		
A little	30.1 (2.0)	34.7 (3.1)
Somewhat	32.4 (2.0)	29.3 (3.0)
Very	37.5 (2.1)	36.0 (3.2)
Expanded hierarchical categorization (perpetrated by foster parents or other caregiver)		
No child maltreatment	68.6 (2.0)	58.6 (3.2)
Sexual abuse only	3.2 (0.7)	3.5 (1.1)
Sexual abuse and other	7.0 (1.0)	8.9 (1.8)
Physical abuse only	9.5 (1.3)	12.7 (2.2)
Physical neglect only	3.5 (0.8)	4.0 (1.3)
Physical neglect and physical abuse only	8.2 (1.2)	12.2 (2.2)

[a] These data refer to the last placement longer than 3 months.
* $p < .05$ (significant difference between White and AI/AN alumni).

owning a house or apartment and 3.1 times higher odds of completing college or more than AI/AN alumni.

One education outcome, completed high school with a GED credential, is less desirable (i.e., while completing high school with a GED credential is a better outcome than not completing high school at all, it is less desirable to complete high school with a GED credential than to complete high school with a diploma). Although there was no difference between AI/AN alumni and White alumni in overall high school completion rate, AI/AN alumni were more likely to complete high school with a GED credential. The odds ratio can be inverted to facilitate the comparison: AI/AN alumni had 2.6 times higher odds of completing high school with a GED credential than White alumni.

Discussion

Data from the Casey National Alumni Study indicated that alumni faced many factors that placed them at risk for long-term struggles. However, given the large number of items examined, relatively few differences between AI/AN and White alumni were observed for demographics, risk factors, and foster care experiences. This is in contrast to the placement and service disparities documented by AI/AN youth in foster care in other studies, as described in the introduction.

Compared to White alumni, AI/AN alumni in the current study were more likely to (a) be placed in care initially because of birth parents' substance abuse or because of other reasons (includes family violence or partner abuse, family stress, primary caregiver[s] unable or unwilling to care, refugee, and other reasons), (b) be diagnosed with mental and physical health problems before or during care, (c) be in care longer, (d) run away, (e) live with unlicensed friends or relatives, (f) participate in both fun activities and religious activities with their foster family, (g) be in possession of health insurance at exit from foster care, and (h) experience overprotection from their foster mother.

When compared to AI/AN alumni, White alumni were more likely to (a) be placed in care initially because of child behavior problems, (b) have access to therapeutic services and supports, and (c) have a driver's license at exit from foster care. Some of the differences in risk factors and foster care experiences between AI/AN and White alumni listed earlier favored one group of alumni over the other. For example, AI/AN alumni were favored in that they were more likely to participate in both fun activities and religious activities with their foster family and to have health insurance at exit from foster care, while White alumni were favored in that they were more likely to have access to therapeutic services and supports and to have a driver's license at exit from foster care. Conversely, the significantly higher runaway rate among AI/AN alumni (14.0% vs. 7.1% among AI/AN alumni and White alumni, respectively, with two or more runaway episodes) indicates that AI/AN alumni may have had significantly different placement experiences. The greater likelihood of having experienced overprotection from their foster mothers (among AI/AN alumni) is difficult to interpret; it could be perceived as a positive or negative experience depending on the individual situation.

Overall, however, the evidence described here does not suggest that either AI/AN or White alumni experienced significantly greater risk or had a significantly more positive experience in care compared to the other. Rather, the most significant differences occurred *after* youth left foster care. White alumni had more positive outcomes compared to AI/AN alumni on most education and employment outcomes. When compared to AI/AN alumni, White alumni were more likely to (a) complete high school with a diploma, (b) complete college or more, (c) be employed, (d) own a house or apartment, (e) have a household income at or above the poverty line, (f) have a household income greater than three times the poverty line, (g) never have received any public assistance or welfare since turning 18, (h) not be receiving public assistance currently, and (i) not have a household member receive public assistance in the past 6 months.

Even though no differences were observed between AI/AN and White alumni on educational stability and access to tutoring or other supplemental educational services, AI/AN alumni achieved fewer educational outcomes. Similarly, although few differences were noted between AI/AN and White alumni on preparation for leaving care and resources upon leaving care, White alumni achieved greater success in terms of employment and finances.

Study Limitations

It is important to note that these data, while they are from many states, are not a nationally representative sample and are limited to specific geographic areas. Further, almost all of the alumni had been first served by a public child welfare agency, and comparison of Casey services with some public agency services indicate that Casey services are more comprehensive, including greater youth access to mental health and independent living services. Compared to youth in public agencies,

TABLE 6. *Education, Employment, and Financial Outcomes*

OUTCOMES	WHITE (n = 574) % (SE)	AI/AN (n = 243) % (SE)	MULTIVARIATE ANALYSES (N = 817) OR[a] (CI)
Education			
Completed high school (diploma or GED)	86.6 (1.5)	84.3 (2.4)	n/a
Completed high school: diploma*†	69.8 (2.0)	57.0 (3.3)	2.1 (1.5–3.1)
Completed high school: GED*†	16.8 (1.6)	27.3 (3.0)	0.4 (0.3–0.6)
Any education past high school	56.1 (2.1)	53.8 (3.3)	n/a
Completed any degree/certificate past high school	36.4 (2.0)	35.2 (3.1)	n/a
Completed college or more*†	10.7 (1.3)	2.9 (1.0)	3.1 (1.3–7.2)
Employment and finance			
Employment and health insurance			
Employment for alumni in workforce*†	77.7 (1.8)	61.5 (3.2)	2.3 (1.6–3.2)
Has health insurance of any kind	72.4 (1.9)	67.3 (3.1)	n/a
Homelessness and home ownership			
Not homeless for one or more nights at any time within a year after leaving foster care	78.5 (1.8)	72.3 (3.0)	n/a
Owns house or apartment*†	31.9 (2.0)	20.3 (2.6)	1.6 (1.1–2.3)
Household income and public assistance			
Household income at or above the poverty line*†	80.5 (1.7)	64.7 (3.2)	2.1 (1.5–3.1)
Household income greater than three times the poverty line*†	33.6 (2.0)	18.3 (2.6)	2.0 (1.4–3.0)
Never received any public assistance or welfare (AFDC/TANF/GA)[b] since turning 18*†	55.5 (2.1)	39.5 (3.2)	2.3 (1.6–3.2)
Not receiving public assistance (AFDC/TANF/GA)[b] at time of the interview*†	91.1 (1.2)	80.7 (2.5)	2.4 (1.5–3.7)
No one in household received public assistance in past 6 months*†	65.6 (2.0)	53.7 (3.3)	1.7 (1.3–2.4)

[a] Odds ratios compared White to AI/AN alumni (e.g., White alumni had 3.1 times higher odds of completing college or more than AI/AN alumni). [b] AFDC: Aid to Families with Dependent Children; TANF: Temporary Assistance for Needy Families; GA: General Assistance.

* $p < .05$ (significant difference between White and AI/AN alumni); † $p < .05$ (significant difference between AI/NA and White alumni after controlling for demographics, risk factors, and foster care experiences).

youth served by Casey had greater placement stability and experienced lower worker and foster parent turnover (Pecora et al., 2003, 2005). Therefore, comparisons of AI/AN and White alumni served in other agencies may find even greater differences in outcomes because the more comprehensive Casey services may have leveled the playing field by ensuring that youth of all ethnic groups received similar access and quality in services that resulted in some outcome areas being similar. The study collected limited information, however, regarding the kinds of culturally competent, family-based strategies that were used to promote family reunification, and how the larger social systems may have contributed to racial differences in outcomes.

In addition to whether services and programs were culturally relevant, another limitation was that data were not collected regarding certain community factors: disadvantaged characteristics of communities in which AI/AN alumni may reside, poverty, school dropout rates, crime rates, single-parent households, and so forth. These community factors may account for a significant proportion of the difference in outcomes between AI/AN and White alumni. For example, disparate employment outcomes could be a result of where AI/AN alumni reside currently. These could be areas of higher poverty, which in turn could partially explain the higher rates of unemployment and receipt of public assistance.

Implications for Practice

Social workers, foster parents, teachers, and school administrators should be oriented to the issues that AI/AN youth in care face, such as child maltreatment trauma; separation from siblings, family, and other clan or tribal members; racism; and frequent moves. Cross-systems connections and education advocacy are essential for youth in care to support their school placement stability, opportunities for enrichment and extracurricular activities, tutoring and educational skills remediation, and coaching for college and vocational education preparation. (For more information on factors leading to alumni success, see Pecora et al., 2003, 2005.)

At the postsecondary level, few institutions or programs are aware of their independent students with foster care experience, let alone how to offer support services customized to meet their unique needs. For example, students have reported having no place to live over holidays or summer breaks. Alternate housing options and formulating 12-month financial aid packages with employment and/or housing assistance during summer months are important considerations for these students. Mental health supports, including both campus- and community-based services, are essential as young adults navigate the pressures of postsecondary education (Sim, Emerson, O'Brien, Pecora, & Silva, 2008).

Although it may need further examination, the finding that AI/AN youth in care were more likely to run away and were more likely to live with unlicensed friends or relatives has important implications for placement. It is critical for youth to live in a place they feel is home. The higher rates among AI/AN youth could reflect a poor placement match and a desire to live in a more culturally similar home.

Culturally competent postfoster care supports in terms of employment, housing, and postsecondary education or job training should also be emphasized. Providing youth and their caregivers with information on postsecondary education and training opportunities, including financial aid and support services, is urgently needed. Providing these services in both tribal and urban communities is essential. NICWA, the National Indian Child Welfare Association, is a critical resource for learning more about these supports and services (http://nicwa.org). Additional resources for AI/AN youth in foster care who are preparing for emancipation are available through Tribal STAR (http://theacademy.sdsu.edu/TribalSTAR/Welcome.htm).

The Chafee Foster Care Independence Act requires all 50 states to implement independent living programs and provides states with flexible funding that can be used for programs that assist youth in completing their education. Most recently, the Chafee Act targets additional dollars for states to offer postsecondary education and training vouchers through the Federal Safe and Stable Families Act program (National Foster Care Coalition, 2005). Child welfare, K–12, and postsecondary

education systems need to work together to coordinate and deliver these supports. Finally, socioemotional supports provided by birth families, foster families (kin and nonrelative), tribal members, and friends can play an important role for students, so that youth placed in foster care and those who have emancipated can be helped to utilize these supports.

Implications for Research

As mentioned previously, there is a dearth of information on alumni outcomes, especially broken down by ethnic group. Further, many studies of youth formerly in foster care have short follow-up periods (often only 1 or 2 years since leaving care). Future alumni studies must include older alumni and be designed with the intent of answering questions concerning differences among ethnic groups.

Conclusion

Although AI/AN children enter foster care at a disproportionately high rate, very little is known about their outcomes as adults. This study found that AI/AN alumni of foster care experienced poorer education, employment, and financial outcomes than White alumni of foster care. These differences persisted despite a relatively small number of differences in demographics, risk factors, and foster care experiences between AI/AN and White alumni. Some of these differences could be because AI/AN alumni may have lived in poorer communities than White alumni; however, the current study did not assess community factors. More research should be conducted on AI/AN youth in care and alumni of care. Knowledge from this research is vital in developing more culturally appropriate services and supports to improve the lives of those youth in care and, ultimately, their outcomes as adults.

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Endnotes

[1] For more information about ICWA, visit http://narf.org/icwa/.

[2] Title IV-E of the Social Security Act (The Foster Care Maintenance Payments Program) assists states with foster care costs through matching funds.

[3] A weighted average for the general population unemployment rate for the eligible workforce combining the age brackets of ages 20–24 (7.1%), 25–34 (3.7%), and 35–44 (2.9%) was calculated. See http://www.bls.gov/lau/table12full00.pdf.

[4] Nearly two thirds of these (62%) are estimated to be adults, and more than one third (38%) are estimated to be children. Of the general population of homeless clients, 49% were in their first episode of homelessness, 17% in their second, and 34% had been homeless three or more times. For 28% of these homeless clients, their current episode had lasted 3 months or less; for 26%, between 4 and 12 months; for 16%, between 13 and 24 months; and for 30%, more than 2 years.

[5] The poverty level was $8,959 for a U.S. household of one in the year 2000. For two adults and one child, the poverty line was $13,861 (U.S. Census Bureau, 2001).

[6] Defined specifically as only General Assistance (GA), Aid to Families with Dependent Children (AFDC), and its successor Temporary Assistance for Needy Families (TANF).

[7] Because race or ethnicity was assessed at interview, response rates were calculated based on the whole sample ($N = 1582$) and were not able to be broken down by race or ethnicity reported at follow-up.

[8] Because no significant differences were observed in demographics between AI/AN and White alumni (such as age and decade entered care), data for the 574 White alumni were not presented.

[9] The warmth and overprotectiveness variables derived from the conceptual framework were constructed using alumni ratings of the foster parent they spent the most time with (Baumrind, 1995). Response options were "a lot," "some," "a little," and "not at all." Two factors emerged consistently from factor analysis of these items (conducted separately for foster mother and father), which were labeled warmth and protectiveness. The factors for foster parent warmth consisted of the following items: sense of humor, tolerance of different behaviors, confidant, and affection. The factors for foster parent protectiveness consisted of the following: overprotection (two items: overprotective and stopping child from doing things other children could do), expectation for the best, and consistent rules. These items were rescaled by coding "not at all" 0 and "a lot" 3. The summed items were then normalized from 0 to 100. Cronbach's alpha for each scale was 0.83 for foster mother warmth, 0.57 for foster mother protectiveness, 0.82 for foster father warmth, and 0.64 for foster father protectiveness. Each scale was then trichotomized so that the top third of each scale was considered high and the bottom third considered low on warmth or protectiveness.

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