Contents lists available at ScienceDirect





## Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth

# Disproportionality in education and employment outcomes of adult foster care alumni

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#### ARTICLE INFO

Available online 19 August 2009

Keywords: African Americans in foster care Disproportionality Foster care alumni outcomes Foster care alumni Education and employment outcomes

#### ABSTRACT

Racial similarities and disparities in the education and employment of 134 African American and 574 White adults placed in foster care as children were examined. Logistic regression was used to compare differences among these young adult alumni who were served by a voluntary foster care agency in 23 U.S. communities. When controlling for demographic background, risk factors, and foster care experiences, race/ethnicity was a significant factor only in the increased odds of White alumni having income at or above poverty level, three times poverty level, and home/apartment ownership compared to African Americans.

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#### 1. Introduction

The child and family services delivery system in many areas of the country remains stressed due to the large number of children passing through the system. In 2005, 3.3 million U.S. children were reported as abused and neglected, with 899,000 confirmed victims (U. S. Department of Health and Human Services, Administration on Children, Youth and Families (DHHS), 2007, p. xiv). The numbers of children placed have risen substantially since 1980, but have slowly been decreasing since 2000.<sup>1</sup> When a child's safety cannot be assured in the home, they are most often removed. The United States federal government estimated that 513,000 children were placed in foster care in family and non-family settings as of September 30, 2005 (DHHS, 2006).<sup>2</sup>

Despite the recent reduction, systemic disproportionality exists within the child welfare system. Specifically, while the overall numbers of children placed in out of home care have decreased, particular populations of children of color continue to be disproportionately represented in foster care. African American children represent the largest proportion of children of color placed apart from their birth families (DHHS, 2006; Harris & Hackett, 2008). Although they comprise 15% of the U. S. child population, African American's represent 32% of the foster care population (Casey Family Programs, 2007).<sup>3</sup>

Many policy-makers and researchers are calling for a critical examination of child welfare practices and evidence of their effectiveness, including core areas or practice such as adoption (Wulczyn, Hislop, & Chen, 2006), kinship care (Hegar & Scannapieco, 1998), and neighborhood-based foster care (Berrick, 2006). Further, foster care placement experiences, such as placement changes and type of placement, have important influences on child development and are the focus of a resurgence of research (e.g., Benedict, Zuravin, & Stallings, 1996; Connell et al., 2006; James, 2004; Pecora et al., 2005; Wulczyn, Kogan, & Harden, 2003). Still, growth in research with young people who have exited foster care remains slow. Few studies look at a range of outcomes that might be indicators of a quality adult life.

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<sup>&</sup>lt;sup>1</sup> For foster care trend data using the AFCARS statistics see http://www.acf.hhs.gov/ programs/cb/stats\_research/afcars/trends.htm.2005. African American children represented 32% of the foster care population; White children constituted 41%.

<sup>&</sup>lt;sup>2</sup> These data are from the federal Adoption and Foster Care Analysis and Reporting System (AFCARS) which used data from 45 state and other jurisdictions, including Washington, DC, and Puerto Rico, to derive these estimates. For the total children served in 2005, see http://www.acf.hhs.gov/progrrams/cb/stats\_research/afcars/ trends.htm. Note that AFCARS data are periodically updated; therefore, the data cited may not match the data on the current website.

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<sup>&</sup>lt;sup>3</sup> Thirty-two percent (166,482) of the children in foster care were African American, although African American children make up only 15% of the U.S. child population. African Americans were disproportionately represented in the child welfare system at a rate of 2.21:1 (33.21/15). Race/Ethnicity information is available for 501,229 (98%) of the 513,000 children in foster care on September 30, 2005 U.S. Department of Health and Human Services (DHHS) (September 2006). The AFCARS (Adoption and Foster Care Reporting System) Report. Retrieved January 19, 2007, from http://www.acf.hhs.gov/programs/cb/stats\_research/afcars/tar/report13.htm. This number (501,229) is used as the denominator for all percent calculations. For children in the general population see The Annie E. Casey Foundation (2002). KIDS COUNT State level Data On-line. Retrieved January 19, 2007, from http://www.aecf.org/kidscount/sld/profile\_results.jsp?r=1&d=1&c=9&p=5&x=146&y=5.

#### 1.1. Purpose

The purpose of the current study was to examine differences between two racial/ethnic groups (African American and White) on adult foster care outcomes, including education, and employment. The sample included young adults who were placed in foster family care between 1966 and 1998 in 23 field offices of a private service agency in the United States (Casey Family Programs).<sup>4</sup> Because the focus of this study was an examination of disproportionate outcomes, comparisons focused on similarities or differences between African Americans, the most overrepresented foster care population, and Whites, who percentage-wise, are underrepresented in foster care nationally, but comprise a sizable number of children in care.

#### 2. Background

#### 2.1. The scope of disproportionality

The concept of disproportionality in child welfare is based on the assumption that a group of children and youth is represented at higher rates in the system than in the general population. Racial disproportionality is present in child welfare in various forms – while African American and Native American families are disproportionately represented in many U. S. states and in Canada (Trocmé, Knoke, and Blackstock, 2004; Washington State Racial Disproportionality Advisory Committee, 2008), Latino children are overrepresented in some states and counties (Berger, McDaniel, & Paxson, 2005; Hill, 2006).

Even though child welfare policy-makers in the U. S. strongly emphasize preventing child placement and shortening the length of placements through permanency planning programs (Wulzyn and Brunner, 2002), many children will spend a substantial amount of their childhood in the foster care system. For example, of those returning or emancipating from foster care settings during fiscal year 2005, 50% had been in care one year or more, and 17% had been there for three years or more. A sizable number of youth (24,000) in longerterm placements emancipate to adulthood from a foster care setting (DHHS, 2006).

Children of color, especially African Americans, remain in the child welfare system longer than White children (Avery, 2001; Courtney et al., 1996; Harris & Courtney, 2003; Harris & Skyles, 2008; Wells & Guo, 1999). In fiscal year (FY) 2005, approximately 287,000 children exited the foster care system; 45% (130,235) of youth who exited care were White, compared to 28% (81,542) African American (DHHS, 2006). African American children continue to enter and exit the foster care system in disproportionately large numbers when compared to White children.

Adoption rates among youth in out of home care also have exhibited differences. African Americans represented 30% of children adopted from foster care (compared to 43% of White children), but were also 36% of children waiting to be adopted (compared to 40% of Whites). Studies by Barth (1997) andWulczyn (2003) also showed that children of color move much more slowly to adoption than their white counterparts. However, this finding contradicts descriptive statistics in one recent study which found that 24% of all black children in the sample were adopted, which was a greater percentage than that for any other ethnic group (Wulcztn et al., 2006). The data suggest an explanation for this contradiction: Although a higher percentage of black children than white children are eventually adopted, the adoptions of black children tend to occur after a longer time in care than that for white children.  $^{\rm 5}$ 

#### 2.2. Educational challenges faced by children/youth in foster care

In addition to struggling with mental health, children who are neglected or abused and enter foster care are at high risk for school failure (Altshuler, 1997; Cohen, 1991; Jackson, 1994; Stein, 1994). One of the few existing national foster care studies found that only 54% of young alumni had completed high school (Cook, Fleishman & Grimes, 1991, pp. 3-2). This rate was higher (77%) in another national study that used an educational data base (Blome, 1997). In a Wisconsin study, only 63% of the alumni had completed high school 12 to 18 months after discharge (Courtney et al., 2001), while a study of youth in care in New York City found a 65.2% high school graduation rate, compared with 70.8% for 18 to 24 year olds in the city's general population in 1980 (Festinger, 1983; U. S. Census Bureau, 1980). According to the U. S. Census (1980), the rate among emancipated youth in West Virginia was 63% compared with 73% of youth aged 18–24 in the state's general populations (Jones & Moses, 1984).

A more recent study in Washington state found that of the youth leaving foster care at age 18 or older from January to June 2000, 34% had a high school diploma or GED; 38% were currently enrolled in educational or vocational programs; and 28% had no educational involvement (i.e., had dropped out of school). Further, youth in foster care scored, on average, 15 to 20 percentile points below non-foster youth in statewide achievement tests. At both the elementary and secondary levels, twice as many youth had repeated a grade, changed schools during the year, or enrolled in special education programs, when compared with non-foster youth (Avery, 2001; Burley & Halpern, 2001).

In addition to secondary school challenges, youth formerly placed in foster care struggle with post-secondary school completion. Data in this area are sparse and inconsistent. For example, due to the variety of samples and follow-up time periods, estimates range widely for college enrollment rates (7–48%) and graduation rates (1–8%) (Casey Family Services, 1999; Courtney, Terao & Bost, 2004; Reilly, 2003). One of the limitations of many of these studies is that they examine outcomes of alumni at a relatively young age, such as 19 or 20.

Although post-secondary completion rates may be low, a recent report of youth in foster care in Illinois, Iowa, and Wisconsin estimated that about 80% of youth aspire to go to college or enroll in a post-secondary training program (Courtney et al., 2004). Factors impacting access to, and completion of post-secondary education included high rates of special education status, school interruptions, mobility, and low reading ability and poor grades. Placement instability in homes further complicates attainment which may increase the likelihood of additional school moves and educational failure (Cadoret & Riggins-Caspers, 2002; De Bellis, 2001; Landsford et al., 2002).

For this group of young adults, gaining access to college opportunities and overcoming the many academic, financial, health and personal barriers has been difficult. Students coming from state or privately-sponsored foster care are underrepresented significantly in the post-secondary education and training settings that could provide them with better opportunities for employment or higher paying jobs. Youth in foster care are less likely to be enrolled in college preparatory classes (15% vs. 32%) (Sheehy et al., 2001), even when they have similar test scores and grades as non-foster youth; and they are significantly underrepresented in post-secondary programs.

<sup>&</sup>lt;sup>4</sup> The Casey National Alumni Study is one of two linked foster care alumni studies. The other study is the Northwest Alumni Study, which includes foster care alumni served by the state public child welfare agencies in Oregon and Washington, who were matched with Casey alumni served in the same geographic areas between 1988 and 1988. For more information, see Pecora et al. (2003) at http://www.casey.org and Pecora et al. (2006).

<sup>&</sup>lt;sup>5</sup> Since an earlier article by Wulczyn (2003) suggests that the baseline hazard of adoption for whites and that for black children is not proportional, a separate analysis in the Wulztn et al. (2006) study stratified the data by race and ethnicity. The results, as expected, show that white children are more likely to be adopted in the early years in care than are black children (Wulztn et al. (2006), p. 608).

#### 2.3. Employment challenges faced by youth in foster care

The benefit of additional education is greater employment opportunities and the associated self-sufficiency. Several studies have documented poor job preparation, minimal work experience, and lack of self-support capabilities of youth who have exited the foster care system (Beyer, 1986; Cook, 1988; Kluger, Maluccio, & Fein, 1989; CWLA, 1993). Findings from a 1992 study by Westat documented no improvement in self-support or employment abilities for youth for two to four years following their exit from foster care (Cook, 1994).

Courtney (1998) used state administrative data to study youth 18 months after their exit from foster care. Findings demonstrated that 57% of the youth were currently employed and over 80% of the youth reported employment at some point following their exit from foster care. Additionally, Dworsky and Courtney (2000) measured employment and the use of public assistance of youth in Wisconsin who had exited the foster care system. African American youth and youth from the city of Milwaukee tended to use Aid to Families with Dependent Children (AFDC)/Temporary Assistance to Needy Families (TANF) or Food Stamps more than others. In addition, the earnings of African American youth were lower than all other youth in Wisconsin.

The focus of another study was employment outcomes of youth close to their 18th birthday in California, Illinois, and South Carolina (Goerge, Bilaver, & Lee, 2002). This study compared findings of youth aging out of foster care to youth who were reunified with their birth parents, and to low-income youth. Findings include:

- Youth aging out of foster care are underemployed. No more than 45% of the aging out youth have earnings in any of the three states during any one of the 13 quarters of the study. This is also the case for reunified youth. A slightly larger proportion of low-income youth has earnings, but never more than 50%.
- Patterns of unemployment vary by state. About 30% of youth aging out of foster care in Illinois, 23% in California, and 14% in South Carolina had no earnings during the entire 13-quarter period.
- Youth who do work begin to do so early. In all three states, youth were more likely to earn income for the first time during the four quarters prior to and the quarter of their eighteenth birthday than in the 2 years following. For youth who exited foster care by aging out, half in California and Illinois and two-thirds in South Carolina had earnings prior to their eighteenth birthday. In California and South Carolina, if youth did not work prior to exit, there was slightly more than a 50–50 chance that they would begin employment after exit. In Illinois, youth who did not have earnings prior to their eighteenth birthday had less than a 50% chance of beginning to work by the age of 20.
- Youth aging out of foster care have mean earnings below the poverty level. Youth aging out of foster care earn significantly less than youth of the comparison groups both prior to and after their eighteenth birthday. In each state, the average earnings increase roughly \$500 per quarter. However, even with these increases, these youth average less than \$6000 per year in wages, which is substantially below the 1997 poverty level of \$7890 for a single individual.
- Youth aging out of foster care progress more slowly in the labor market than other youth. In Illinois, low-income youth make a bigger increase in earnings from the first year to the second year after their eighteenth birthday than do either group of foster care youth. Low-income and aging out youth in California see a larger increase in their earnings than reunified youth. There is no difference among the groups in South Carolina (pp. 2–3).

Alumni of foster care continue to deal with mental health problems after they leave the system and often do not achieve educational benchmarks such as a high school diploma prior to exiting, or aging out of the system at age 18. It is also clear that youth exiting foster care continue to be underemployed and tend to have difficulty in the labor market.

Some limitations in previous foster care alumni studies and the dearth of existing research in this area make the current study useful for work with this population. Previous studies have tended to report alumni outcomes at young ages — in their late teens rather than early twenties and beyond. Additionally, few studies used standardized mental health measures relating to diagnostic criteria specified in the Diagnostic and Statistical Manual of Mental Disorders (DSM) and few provided multiple measures of educational attainment or income and employment at later stages in life. Furthermore, race/ethnic differences were rarely reported. Therefore, the current study will help increase understanding of how race/ethnicity influence the education, and income and employment outcomes of African American and White foster care alumni while controlling for several factors related to the foster care experiences of these alumni.

#### 3. Theoretical foundation

An ecological risk and protective factors model was used as a framework for this examination. Ecological theory created by Bronfenbrenner (1977) explains and links developmental outcomes across the lifecourse to the multiple and diverse environmental contexts to which a person is exposed. The five environmental systems in this theory range from intricate personal interactions to extensive cultural inputs. As diagrammed in Fig. 1, critical to one's ability to achieve optimal success are their personal characteristics (e.g., biological and genetic makeup, personality, and cognitive ability), and how they interact with others in the context of family systems, culture, and broader social systems (Bronfenbrenner & Morris, 1998; Cicchetti, & Aber, 1998; DeBellis, 2001). To increase understanding of the determinants of health and positive adult functioning among alumni of foster care, this research empirically examines risk and protective factors at each of these levels. Based on this conceptualization, it is expected outcomes would be affected by transactions within the alumnus' ecological systems. For instance, individual-level factors such as mental/physical health problems diagnosed before or during foster care (e.g., Attention Deficit Hyperactivity Disorder or ADHD) would interact with other domains of risk or protection within the biological family environment (e.g., parental mental health) and foster family (e.g., helpfulness of foster parents), and other factors associated with the broader context of foster care (e.g., placement history, or supports and services) to influence the likelihood of psychological disorders, educational achievements, and financial status. As it relates to the current examination, the model uses contextual factors as controls while analyzing the role of race/ethnicity in predicting the probability of educational achievement for high school and beyond, and financial status.

#### 4. Methods

#### 4.1. Participants

A sub-sample (N = 708) of the Casey National Foster Care Alumni Study was examined. The sample included 134 (21.9%) African American and 574 White (78.1%) adult foster care alumni served by foster families and caseworkers of Casey Family Programs (Casey) between 1966 and 1998. Demographic characteristics by race/ ethnicity for each group are shown in Table 1 . Alumni were closely matched by gender, with females being 52.6% of the African American subgroup and 48.3% of the White subgroup. On average, African Americans were younger than Whites at the time of the interview and were served mostly in the Southwest (Austin and San Antonio, Texas), and Northwest (Portland, Oregon, and Tacoma, Seattle, and Yakima,

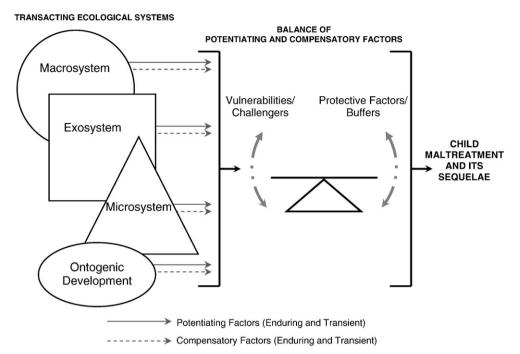


Fig. 1. Ecological-transactional model of child maltreatment.

Washington) regions. Most White alumni were served in the Great Plains and the Northwest.

#### 4.2. Agency description

All alumni in the study were served by Casey, a national operating foundation that supports youth in care and foster families through direct services and system improvement efforts in child welfare. All alumni were served by Casey's field offices in operation in 1998 in 13 states: Arizona (Phoenix and Tucson); California (Walnut Creek/Bay Area and San Diego); Hawaii (Hilo and Honolulu); Idaho (Boise); Louisiana (Baton Rouge); Montana (Helena and Missoula); North

#### Table 1

Demographic characteristics by race/ethnicity.

|   | African American | $\frac{\text{White}}{n = 574}$ |  |
|---|------------------|--------------------------------|--|
|   | n = 134          |                                |  |
|   | % (SE)           | % (SE)                         |  |
| % of study sample <sup>a</sup>                | 21.9 (1.7)       | 78.1 (1.7)                     |  |
| Gender  |                  |                                |  |
| Male  | 47.4 (4.5)       | 51.8 (2.1)                     |  |
| Female  | 52.6 (4.5)       | 48.2 (2.1)                     |  |
| Age at time of interview <sup>a,b</sup>       |                  |                                |  |
| 20-25   | 37.8 (4.3)       | 20.4 (1.7)                     |  |
| 26-29   | 30.7 (4.1)       | 20.9 (1.7)                     |  |
| 30-34   | 18.9 (3.4)       | 26.6 (1.9)                     |  |
| 35-49   | 12.7 (3.0)       | 32.2 (2.0)                     |  |
| Mean age at time of interview <sup>a,b</sup>  | 28.0 (0.5)       | 31.5 (0.3)                     |  |
| Decade entered Casey foster care <sup>b</sup> |                  |                                |  |
| 1966 to 1979                                  | 18.7             | 31.7                           |  |
| 1980 to 1989                                  | 56.7             | 55.9                           |  |
| 1990 to 1998                                  | 24.6             | 12.4                           |  |
| Region served in care <sup>b</sup>            |                  |                                |  |
| Southwest                                     | 24               | 8                              |  |
| Great Plains                                  | 9                | 42                             |  |
| Hawaii  | 6                | 1                              |  |
| California                                    | 17               | 6                              |  |
| Northwest                                     | 43               | 42                             |  |

<sup>a</sup> Weighted percentages; *n*'s are unweighted.

<sup>b</sup> Indicates a significant difference between African American and White alumni, p < 0.05.

Dakota (Bismarck and Fort Berthold); Oregon (Portland); South Dakota (Pine Ridge, Rapid City, and Rosebud); Texas (Austin and San Antonio); Washington (Seattle, Tacoma, and Yakima); and Wyoming (Cheyenne).

#### 4.3. Culturally-informed practice approaches

The analyses presented here allowed us to examine closely Casey's culturally-informed practice model. Casey Family Programs defined cultural proficiency as

" ... the recognition of our own cultural identity while strengthening the capacity for others to develop a sense of a cultural self. It means that all work is culture-based and contributes toward a body of knowledge that results in best culturally proficient practices. It means actively and publicly pursuing social justice" (Annesse et al., 1999, p. 33).

Since 1982 Casey staff has been striving to develop a practical approach to building cultural proficiency at every level of practice through an organization fully evolving through the stages of multicultural development (Cross et al., 1989, as cited in Sue & Sue, 1999). Although Casey has not yet reached this state of proficiency, the organization does have established structures (organizational values of diversity and anti-racism), processes (training and skill development in culturally competent practice), and functions (specialized practitioner roles) that indicate a continuous movement in that direction.

Casey practice with children, families, and communities is premised upon relationships of trust, respect, openness, and sincerity – attributes that staff expresses and literature confirms are central to working effectively across multiple cultures (Bhattacharrya, 1999; Jenkins, 1998; Sue & Sue, 1999). Casey practice also derives meaning from an understanding of the social, historical, and political events of domination, oppression, and exclusion experienced by people of color in this society. This understanding helps staff fully appreciate within-group attitudes toward accessing various resources, responses to the dominant society, and perceptions of self and other – an understanding that is central to practice in a healing environment (Jenkins, 1998). Casey staff believes that race, culture, and ethnicity are fundamental in the developing lives of children and families. These beliefs led to the adoption of diversity and anti-racism as a core organizational value and gave rise to the National Cross-Cultural Advisory Committee, and a cross-cultural practice specialist was designated for each field office. These committees and individuals act as advisors and facilitators for Casey staff and leadership in providing culturally competent services to children and families, and in developing a multicultural organization defined by cultural proficiency.

The agency is fervent in the belief that race, culture, and ethnicity are crucial to a child's development and healthy identity formation. Although the ecological framework described previously in the theoretical background section did not specifically address culture, ethnicity and race, it is important to discuss how practice in this organization relates to these key concepts. The premises upon which practitioners and Casey Family Programs base their beliefs in the importance of race, culture and ethnicity are verbalized in several different ways, but the one concept that dominates is that it is crucial to a child's development and especially to identity formation. This concept was the basis for pursuing development of the *Conceptual Framework of Identity Formation in a Society of Multiple Cultures* (seeAppendix).

#### 4.4. Measures

#### 4.4.1. Demographics, risk factors, and foster care experiences

Case records included demographics (e.g., decade entered foster care and region served in care); risk factors (e.g., reasons for foster care placement by the birth family, child maltreatment); and foster care experiences (e.g., placement history). Interview data included birth parent information (e.g., health and mental health status, substance use, employment, and parenting style), and some foster family and foster care experience information (e.g., foster parent warmth and overprotection; relationships with other caring adults; child maltreatment; and access to educational and mental health services).

#### 4.4.2. Education

The educational achievements of foster care alumni were assessed in personal interviews. Participants were asked whether they attended high school, general equivalency diploma (GED) program, vocational school, and college, and whether they obtained any certificates or degrees at these schools.

#### 4.4.3. Employment and finance

Employment and finance questions were also part of the Alumni Studies Supplemental Interview Schedule with some questions from the NCS (Kessler and Magee, 1993; Kessler and Walters, 2002) and some items from the SAMHSA Starting Early Starting Smart (SESS) project Intake Module (EMT Associates, 1999). Alumni were asked whether they had received public assistance or welfare since age 18; whether they lived with anyone who received public assistance in the past 6 months; whether they had health insurance; and whether they owned a home or apartment.

#### 4.5. Procedure

Data collection for the Casey National Foster Care Alumni study was completed between 2000 and 2002. Professionally trained interviewers from the University of Michigan Survey Research Center (SRC), blind to the study hypotheses, collected data from 1582 Casey alumni case records and conducted one-on-one interviews with 1068 alumni. The adjusted response rate was 73.4% [(adjusted for the approximately eight % of the sample was inaccessible due to incarceration (3.4%), psychiatric institutionalization (0.7%), or death (3.9%)].

The following are inclusion criteria for alumni in the study: (1) placement in Casey foster care between 1966 and 1998; (2) placement with a Casey foster family for at least 12 consecutive months; and (3) exit from Casey foster care for at least 12 months prior to being interviewed (see Pecora et al., 2003; Pecora et. al., 2006).

A random sample of 40 case records was selected for an inter-rater reliability check. Each record was reviewed twice: once by a regular and once by a "gold standard" reviewer (of which there were four). Only variables that had acceptable inter-rater reliability were retained.

#### 4.6. Analysis plan

#### 4.6.1. Weighting

Case records were available for the entire population from the Casey study. However, because some alumni were unavailable for interviews, weights were created to account for non-responses. Variables used to create the statistical weights included age, sex, and race/ethnicity. This statistical matching (weighting) improved the ability to generalize to the population of adults from which the sample was drawn by estimating data as if the entire sample of 1582 alumni had been interviewed. Propensity score matching was used to weight the data (Braitman & Rosenbaum, 2002).

#### 4.7. Test of race/ethnic differences

To test the null hypothesis of no difference between groups on alumni outcomes, bivariate analyses were conducted. Outcomes with statistically significant differences between African American and White alumni were retained and analyzed by race/ethnicity in logistic regression models while controlling for other demographic factors, risk factors, and foster care experience factors. If race/ethnicity was not significant in the regression when entered alone (Step 1), it was concluded that no differences existed between the two groups on this outcome and no further analyses were necessary. If there was a difference between the two groups, the next set of predictor variables (see Table 2) was entered into the logistic regression model in addition to race/ethnicity. All significant variables were retained in subsequent models. When race/ethnicity was no longer significant, no further steps were taken.

#### 5. Results

#### 5.1. Bivariate analyses

Bivariate analyses were conducted for education outcomes (Table 3), and income and employment outcomes (Table 4). Among the education outcomes, there was a significant difference for high school completion with a high school diploma. As Table 3 shows, although African Americans completed high school at a similar rate as White alumni (84.1% vs. 86.5%, respectively) a higher percentage of Whites (69.8%) completed high school with a high school diploma compared to African Americans (60.6%). Disparities were more prevalent in bivariate analyses of income and employment variables (Table 4). Specifically, significantly fewer African Americans than Whites had household incomes at or above the poverty line (African Americans 67.1% vs. Whites 80.5%), household incomes at 3 times the poverty line (African Americans 19.1% vs. Whites 33.6%), or owned their own homes or apartments (African Americans 15.9% vs. Whites 31.9%).

#### 5.2. Multivariate analyses

After determining where bivariate differences existed, a series of logistic regressions was run to determine whether being African American or White continued to contribute to disproportional outcomes. The remaining outcomes tested in the regression models e

#### Table 2

Variables in logistic regression models.

| Step | Domain       | Variable   | Source |
|------|--------------|--|--------|
| 1    | Demographics | Race/ethnicity   | Ι      |
| 2    | Demographics | Age at time of interview   | Ι      |
|      |              | Gender   | CR     |
|      |              | Decade entered child welfare   | CR     |
|      |              | Region served in Casey foster care   | CR     |
| 3    | Risk factors | Age entered child welfare  | CR     |
|      |              | Relationship with birth parents  | Ι      |
|      |              | Birth parent employment  | Ι      |
|      |              | Number of places lived before foster care  | Ι      |
|      |              | Birth parent mental health   | Ι      |
|      |              | Birth parent physical health   | I      |
|      |              | Birth parent substance abuse   | I      |
|      |              | Birth parent criminal problems   | I      |
|      |              | Birth parent warmth  | I      |
|      |              | Birth parent overprotection  | I      |
|      |              | Number of abuse types  | CR     |
|      |              | Type of abuse/neglect (emotional, physical, sexual, neglect)   | CR     |
|      |              | Number of reasons for placement  | CR     |
|      |              | Placed due to child behavior problems  | CR     |
|      |              | Placed due to child maltreatment   | CR     |
|      |              | Placed due to parental substance abuse   | CR     |
|      |              | Other reason(s) for placement  | CR     |
|      |              | Attention Deficit Hyperactivity Disorder (ADHD)  | CR     |
|      |              | Physical or learning disability  | CR     |
|      |              | Other impairments (i.e., drug exposed as an infant,<br>fetal alcohol effect, fetal alcohol syndrome, or<br>vision or hearing impaired) | CR     |
| 4    | Foster care  | Number of placements   | CR     |
| 4    | experiences  | Length of time in care   | CR     |
|      | experiences  | Placement change rate  | CR     |
|      |              | Number of reunification failures   | CR     |
|      |              | Number of runaways   | CR     |
|      |              | Number of unlicensed living situations with  | CR     |
|      |              | friends/relatives  | CR     |
|      |              | Number of school changes   | I      |
|      |              | Could participate in supplemental  | -      |
|      |              | Educational services/tutoring (access)   | Ι      |
|      |              | Could participate in therapeutic service and   | Ι      |
|      |              | supports (access)  |        |
|      |              | Participated a lot in activities with foster family  | Ι      |
|      |              | Degree of preparation for leaving care   | Ι      |
|      |              | Number of resources when left care   | Ι      |
|      |              | Foster parent warmth   | Ι      |
|      |              | Foster parent overprotection   | Ι      |
|      |              | Foster family helped with ethnic issues  | Ι      |
|      |              | Had a close and confiding relationship with an   | Ι      |
|      |              | adult while growing up   |        |
|      |              | Felt loved while in foster care  | Ι      |
|      |              | Overall, foster parents were helpful   | Ι      |
|      |              | Child maltreatment while in foster care  | Ι      |

were: High School Diploma; Income At or Above the Poverty Line; Income at 3 Times the Poverty Line; and Owns Home or Apartment.

In Step 1 of these analyses each outcome was regressed on race/ ethnicity only. The logistic regression model for completed a High School Diploma showed that race/ethnicity did not make a significant contribution to differences between groups when controlling for demographic factors (gender, age at time of interview, decade entered care, and region served in care).

Next, logistic regressions were conducted for income at or above the poverty line on race/ethnicity and the series of control variables. As presented in Table 4, race/ethnicity had significant effects on income at this level even when demographic factors were added to the model in Step 2 and all risk factors were added to the model in Step 3. But when foster care experiences were entered into the regression as controls (see Step 4 in Table 2), race/ethnicity no longer made a significant independent contribution to disparities in income level at or above poverty. Factors that remained significant were age at the time of interview, the number of places lived before foster care, the physical health status of birth father, birth father overprotection,

#### Table 3

Bivariate results: alumni educational achievements by race/ethnicity.<sup>a</sup>

| Education   | African<br>American | White      | Odds ratio<br>(confidence<br>interval) |  |
|---|---------------------|------------|--|--|
|   | n = 134             | n = 574    |  |  |
|   | % (SE)              | % (SE)     |  |  |
| Completed high school — with<br>high school diploma or GED  | 84.0 (3.2)          | 86.6 (1.5) | 1.2 (0.5, 1.4)                         |  |
| Completed high school – with<br>high school diploma <sup>b</sup>                                      | 60.6 (4.4)          | 69.8 (2.0) | 1.5 (0.4, 1.0)                         |  |
| Completed high school — with a GED  | 23.4 (3.9)          | 16.8 (1.6) | 0.6 (0.9, 2.5)                         |  |
| Any education past high school<br>(any type of post-secondary<br>education)                           | 63.7 (4.3)          | 56.1 (2.1) | 0.7 (0.9, 2.1)                         |  |
| Completed any degree/certificate<br>beyond high school  | 43.0 (4.4)          | 36.4 (2.0) | 0.8 (0.9, 2.0)                         |  |
| (vocational, bachelor's degree, etc.)<br>Completed college or more (has<br>bachelor's degree or more) | 6.1 (2.0)           | 10.7 (1.3) | 1.8 (0.3, 1.1)                         |  |

<sup>a</sup> Percentages are weighted; *n*'s are unweighted.

 $^{\rm b}$  Indicates a significant bivariate difference between African American and White alumni,  $p\,{<}\,05.$ 

physical or learning disability diagnosed at the point of entering agency foster care or during care, other impairments prior to care, access to supplemental education/tutoring services, number of resources when alumni left care, foster mother overprotection, and helpfulness of foster parents (results not shown).

#### Table 4

Bivariate results: alumni income and employment by race/ethnicity.<sup>a</sup>

| Employment and finance   | African<br>American<br>n = 134 | White $n = 541$ | Odds ratios (confidence intervals) at each step |                      |                      |                      |
|--|--------------------------------|-----------------|---|----------------------|----------------------|----------------------|
|  | % (SE)                         | % (SE)          | Step<br>1                                       | Step<br>2            | Step<br>3            | Step<br>4            |
| Ever received any public<br>assistance or welfare<br>(AFDC/TANF) since<br>turning 18 | 49.2 (4.4)                     | 44.5<br>(2.1)   | 1.2<br>(0.6,<br>1.2)                            |                      |                      |                      |
| Receiving public assistance<br>(AFDC/TANF) at time<br>of the<br>interview            | 13.3 (2.9)                     | 8.9<br>(1.2)    | 1.6<br>(0.4,<br>1.1)                            |                      |                      |                      |
| Anyone in household<br>received public assistance<br>in past 6 months                | 40.4 (4.4)                     | 34.4<br>(2.0)   | 1.3<br>(0.5,<br>1.2)                            |                      |                      |                      |
| Household income at/above<br>the poverty line <sup>b</sup>                           | 67.1 (4.2)                     | 80.5<br>(1.7)   | 2.0<br>(0.3,<br>0.8)                            | 1.7<br>(0.4,<br>1.0) | 2.1<br>(0.3,<br>0.8) | 1.7<br>(0.3,<br>1.0) |
| Household income greater<br>than 3 times the poverty<br>line <sup>b</sup>            | 19.1 (3.5)                     | 33.6<br>(2.0)   | 2.1<br>(0.3,<br>0.8)                            | 1.8<br>(0.3,<br>0.9) | 1.9<br>(0.3,<br>0.9) | ns                   |
| Has health insurance of<br>any kind  | 64.3 (4.3)                     | 72.4<br>(1.9)   | 1.5<br>(0.5,<br>1.0)                            |                      |                      |                      |
| Owns house or apartment <sup>b</sup>   | 15.9 (3.3)                     | 31.9<br>(2.0)   | 2.5<br>(0.2,<br>0.7)                            | 1.8<br>(0.3,<br>1.0) | 2.0<br>(0.3,<br>0.9) | ns                   |
| Homeless for one or<br>more nights within a<br>year of leaving care                  | 20.1 (3.5)                     | 21.5<br>(1.8)   | 1.1<br>(0.6,<br>1.5)                            |                      |                      |                      |
| Currently employed   | 75.4 (3.8)                     | 77.7<br>(1.8)   | 1.1<br>(0.6,<br>1.4)                            |                      |                      |                      |

<sup>a</sup> Percentages are weighted; *n*'s are unweighted. Note: Only models significant at Step 1 were analyzed in multivariate models (Steps 2–4).

 $^{\rm b}$  Indicates a significant bivariate difference between African American and White alumni,  $p\,{<}\,05.$ 

In analyses of household income greater than three times the poverty level, race/ethnicity remained significant through the first three regression models (see Table 4). With all demographic risk factors in the model, African American alumni had 0.5 times the odds of having a household income greater than three times the poverty line compared to White alumni. However, when foster care experiences were added in Step 4, any significant effects of race/ ethnicity disappeared. Factors that remained significant were age at the time of interview, biological father's employment, number of reasons for placement in foster care, physical or learning disability, number of resources alumni had when leaving care, and foster mother overprotection.

Similarly, race/ethnicity showed independent effects on disparities in home or apartment ownership through the addition of demographics and risk factors. When controls were added in Step 2, race/ethnicity, age at the time of interview, gender, and region were all significant, with African Americans 0.5 times less likely to own a home or apartment times as Whites. Race/ethnicity remained significant through Step 3; African American alumni were 0.5 times less likely to own a home or apartment than White alumni. When African American or White race/ ethnicity was no longer significant when foster care experiences were added in Step 4 (results not shown), factors that were significant were age at the time of interview, gender, region, other impairments, access to therapeutic services and supports, and number of resources when leaving care.

#### 6. Discussion

#### 6.1. Bivariate racial differences in outcomes

This article adds to the literature on education, and employment outcomes of adults who were placed in foster care as youth. Bivariate differences in educational attainment in terms of lower high school completion rates with a diploma have important implications. GED recipients are more than twice as likely as those completing regular high school diplomas to not enroll in post-secondary education (Bozick & DeLuca, 2005), and people holding high school diplomas have higher incomes than those with GEDs (Grubb, 1999).

In terms of alumni financial status, income at or above poverty level, income at three times the poverty level, and owning a home or apartment showed significant bivariate differences by race/ethnicity, with African Americans faring worse than Whites. This bears out the salience of attaining a high school diploma vs. finishing with a GED.

# 6.2. Few racial differences in outcomes persist when other variables are considered

One of the intriguing findings of this set of analyses was how alumni race/ethnicity was a significant factor for only three outcomes: household income at/above the poverty line, household income greater than three times the poverty line, and home/apartment ownership. These are adult outcomes where the sheltering effects of living in a foster home are no longer present and possibly the full effects of institutional or other forms of racism may be operative. Also, considering the fact that early physical or learning disabilities and other impairments related to drug and alcohol exposure were significant in terms of income at/above poverty level and home ownership, perhaps these outcomes speak to the severity of problems some children face and a need for more aggressive or longer-term interventions.

In essence, the findings underscore the value of quality foster care services for children of *all* racial/ethnic groups. It appears that certain pre-care risk factors and foster care experiences are more powerful predictors of adult achievement or functioning compared to race or ethnicity, which has implications for how services should be strengthened in foster care and related support programs such as mental health and education.

#### 6.3. Implications for foster care and transition support services

It is important to recognize that almost one fourth of postsecondary scholarship students receive Casey-funded therapy for significant mental health issues deriving from early histories of abuse and neglect (LeProhn & Pecora, 1994; Pecora et al., 2003). Findings from a study by Lenz-Rashid (2005) indicated that foster care alumni had more mental health issues than participants who had never been in foster care. Academically prepared and resourceful students may still find themselves overwhelmed by the pressures of post-secondary education or training while being on their own at such an early age, and experience a renewal of concerns specific to foster care alumni. The importance of providing mental health care for students with severe and moderate mental health issues cannot be understated. Kadison and DiGeronimo (2004) report that the stress of college can trigger anxiety disorder attacks, such as posttraumatic stress disorder (PTSD), a disorder recently found to effect a disproportionate number of young adults from foster care (Pecora et al., 2003, 2006). Too many campus-based health centers and counseling services are not adequately prepared to offer this type of needed therapy. Hoover (2003) reports that colleges are scrambling to shore up their mental health prevention programs in light of this need. Although postsecondary programs frequently provide group and sometimes limited individual counseling services, former foster youth often have mental health issues requiring more intense support than is commonly available at these institutions. More campus- and community-based options need to be available to sufficiently provide the most frequently utilized assistance for this unique population – emotional/social support - which includes mental health (Sim, Emerson, O'Brien, Pecora & Silva, 2008, pp. 17-18).

Given the deleterious pre- and post-natal environments that many foster children experience, their educational attainment is at a substantial risk. With so many placement moves, their likelihood of educational failure is greater still (Cadoret & Riggins-Caspers, 2002; DeBellis, 2001; Landsford et al., 2002). On a positive note, findings from this study indicate that a majority (84% of African Americans; 86.6% of Whites) of Casey alumni had received a high school diploma or GED by the time data were collected. Statistically significant differences between African Americans and Whites were found only for completion of high school with a diploma vs. a GED: a higher percentage (23.4%, SE 3.9) of African Americans completed high school with a GED rather than a high school diploma when compared to Whites (16.8%, SE 1.6). The educational outcomes for Casey alumni are noteworthy, especially when one looks at outcomes for other youth who have exited foster care. For example, findings from Courtney et al. (2005) indicated that 37% of foster care alumni aged 17-20 had not received a high school diploma or GED.

For many years, Casey staff and foster parents have worked to help youth placed with this organization to overcome educational skills gaps and other challenges. Targeted educational advocacy, integrated social work and education-focused case management, and continuing monitoring of education outcomes have been hallmarks of this organization's practices. Based on attachment and developmental theories, Casey staff has focused on helping youth build healthy relationships with adults, including foster parents and agency staff (Casey Family Programs, 2003; Downs & Pecora, 2005). Providing a nurturing foster family and a supportive agency environment may be significant in ameliorating the effects of earlier abuse and neglect (American Academy of Pediatrics, 2000; Simms & Horwitz, 1996).

Even with the multiple challenges that these alumni of foster care faced, the high school graduation rates were positive. This occurred despite many placement changes (the rate of which slowed significantly after the children entered Casey foster care (Pecora et al., 2003)). The use of the GED to complete high school, and the rates of college drop-outs, however, were still concerning in terms of adult educational achievements, and may have bearing on later household income.

Why did so many of these foster care alumni complete high school and begin post-secondary education across both racial groups? In contrast to many public foster care programs, youth placed with this agency were supported financially to participate in a variety of special activities such as the arts, sports, and other hobbies. Attention was paid to helping youth reach major developmental milestones, including development of social skills through participation in various community groups and events such as scouting, summer camps, church groups, and employment experience.

Employment and mental health services are commonly provided to Casey youth (Pecora et al., 2003). Youth who have exited the foster care system are more likely to be unemployed than youth in the general population. This study found disparities in employment and finances between African American and White youth. Household incomes at or above the poverty line were higher for Whites (80.5%) than for African Americans (67.1%). Household incomes at three times the poverty line were also higher for Whites (33.6%) than for African Americans (19.1%). It is readily apparent that employment and financial situations were difficult for African American and White alumni in this study. According to Sheehy et al. (2001), successful employment experiences for foster care alumni are heavily dependent on the quality of skills training and experience received in care. Since the late 1980s Casey has offered a case-management post-secondary education and training scholarship program which steadily grew over time to a point where about 150-170 young people in Casey each year were receiving these scholarships (Continuing Education and Job Training or CEIT scholarships). These scholarships support community and four-year college, vocational technical training, graduate school, professional certification, entrepreneurship, and apprenticeship training programs. This program has been instrumental in helping many Casey alumni obtain education and training to enter the employment world, and to develop and maintain successful careers.

In summary, no matter what racial or ethnic group, youth need continued support in order to have successful outcomes in education, and employment after they exit the foster care system. Youth need to be encouraged to get a high school diploma; they also need assistance in developing plans for higher education or vocational training, including financial aid and support services. It is imperative for youth to have ongoing post-foster care supports (i.e. financial, housing, employment) from caregivers, other significant adults in their lives, and from the broader community.

#### Appendix A. Cultural identity and foster care practice

Casey practitioners agreed that the process of cultural identity is intricately linked to developmental stages and continues into adulthood. Practitioners reported that late latency through adolescence is the stage at which they generally begin to observe young people accepting (or not) of their cultural identity. They further indicated that adolescents experience both an internal and external process in developing their sense of a cultural self. *Internal processes* include perceptions, feelings, and experiences that help to shape identity from within, usually not shared with others. *External processes* involve capturing the look of the culture through dress, speech, movement, and behavior around others.

Casey practitioners also observe that adolescence is the stage when some young people deny their cultural self, if they are more concerned with fitting in than acknowledging their difference within the dominant society. It is a period when children of color are hit particularly hard by racist remarks from white peers and other members of the dominant society (e.g., store personnel, teachers). Such events may lead them to question their cultural differences relative to the dominant society. This type of inquiry, usually characterized by questions about self, identity, and self-esteem, is identified as the *dissonance stage* of racial and cultural minority identity development (Sue & Sue 1999, pp. 121–142). Such inquiries often present practitioners with a teachable moment, when children are receptive to self-exploration, in which they can capitalize upon the opportunity to begin a discussion of race, culture, and ethnicity, to help the child resolve identity conflicts and become more prideful of his or her heritage.

Casey practitioners prefer using these teachable moments over pushing timing to effect change,<sup>6</sup> especially around issues of denial or rejection of a cultural self. This preference is based on the recognition that pushing too hard at a sensitive point may cause a child to become further entrenched in rejection or denial, and that it is just better to give the child time to work it through. This may be particularly true when practitioner and child are of the same cultural group because the practitioner, who is generally more knowledgeable about the cultural group, "may serve to heighten the conflicting beliefs and feelings" of the child (Sue & Sue 1999, p. 139). In the interim, the practitioner lets the child know that s/he is available at any time to reopen the conversation.

According to Casey practitioners, children placed in families that are culturally different (particularly in race, ethnicity, and class) than their birth family are at risk of losing their cultural selves over time, which is one reason the organization strongly promotes culturally matched placements whenever possible. It is also why practitioners commonly feel it is necessary to address cultural issues as early in the placement process as possible. However, legislative mandates (e.g., Multi-Ethnic Placement Act) that prohibit holding up placement of a child to locate a same-race or culturally matched family, and circumstances such as lack of availability of culturally appropriate families, sometimes make it impossible to ensure culturally matched placements. Additionally, children and/or families may not recognize the importance of their participation in cultural work as defined by practitioners.

Casey practitioners consequently place a high value on birth family work, which they widely recognize as helpful in ensuring a child's access to his or her racial, cultural, or ethnic heritage (Rodriguez, Cauce, & Wilson, 2000). This is one of the primary reasons that practitioners and Casey Family Programs seek creative ways to encourage birth family participation as partners in raising their children in long-term family foster care. It is also why some families (especially birth mothers) and some youths express a strong desire for, and practitioners strongly support, greater efforts to locate and involve birth fathers in their children's lives. Although Casey practitioners, children, and birth mothers have long recognized the importance of father involvement across a child's life span, it has only recently been acknowledged in family studies and research (National Center on Fathers and Families, 1997). Not only does a father's presence contribute to a child's sense of a cultural self, but fathers also contribute to the affective development of children (Gadsen 1995).

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<sup>&</sup>lt;sup>6</sup> "Pushing timing" refers to a technique used by practitioners to nudge children toward a response when it seems unlikely they will approach an issue on their own. See Annesse et al. 1999, pp. 5–6.

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