



 THE  
FOSTER CARE  
ALUMNI STUDIES  
STORIES FROM THE PAST TO SHAPE THE FUTURE

## **IMPROVING FAMILY FOSTER CARE**

Findings from the Northwest  
Foster Care Alumni Study

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### *Findings from the Northwest Foster Care Alumni Study*

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### Study Overview

The Northwest Foster Care Alumni Study (Northwest Alumni Study) examined outcomes for 659 alumni who were placed in family foster care as children. The investigation included adults between the ages of 20 and 33 who had been placed in family foster care between 1988 and 1998, and who were served by one of three agencies: (1) Casey Family Programs; (2) the Oregon Department of Human Services, Division of Children, Adults, and Families; or (3) the Washington Department of Social and Health Services, Children's Administration, Division of Children and Family Services. The study focused on identifying how alumni were faring and what foster care experiences resulted in positive outcomes.

The study reviewed case records for 659 alumni and interviewed 479 of them between September 2000 and January 2002. The adjusted response rate was 75.7%. The sample consisted of 60.5% women and 54.4% people of color.

### Findings

Despite challenges that included child maltreatment and placement instability, over one-fifth of alumni were doing well in terms of educational achievement, personal income, or other major outcomes. The majority, however, faced significant challenges in the areas of mental health, education, and employment and finances.<sup>1</sup> Findings are summarized below:

#### Mental Health

- **A disproportionate number of alumni had mental health problems.** Within the previous 12 months, more than half of the alumni (54.4%) had clinical levels of at least one mental health problem, such as depression, social phobia, panic syndrome, post-traumatic stress disorder, or drug dependence, and one in five (19.9%) had three or more mental health problems. These rates are substantially higher than those of the general population in the age range of the sample.
- **Post-traumatic stress disorder (PTSD) rates for alumni were up to twice as high as for U.S. war veterans.** One in four alumni (25.2%) experienced PTSD within the previous 12 months.
- **Many alumni recovered from mental health problems.** Although alumni encountered significant mental health problems, recovery rates for major depression, panic syndrome, and alcohol dependence were similar to those of the general population (recovery was defined as occurring when a previously diagnosed mental health illness had not been present in the past 12 months). While some recovery rates seem high, a substantial proportion of alumni is living with mental health problems.

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<sup>1</sup> This report contains a limited set of study findings, including outcomes related to mental health, education, and employment and finances. Gender and racial differences in outcomes will be reported in subsequent papers. Data related to additional outcomes in the domains of physical health, marriage and relationships, and parenting are reported in a book by Pecora, Kessler, Williams, Downs, English, and White (forthcoming) and in papers that will be posted on the alumni study extranet at <http://research.casey.org> (User name: researchguest. Password: caseyguest).

## Education

- **Alumni completed high school at a high rate.** Over four in five alumni (84.8%) had completed high school via a diploma or a general educational development (GED) credential (89.1% among those 25 years and older). This compares favorably to the general population (87.3%) and is much higher than graduation rates found by other foster care studies.
- **Completing high school via GED testing was a common practice among alumni.** Over one in four (28.5%) of the alumni who completed high school did so by passing GED tests; this is a concern because national research has found that adults with a diploma are 1.7 times more likely to earn an associate's degree and 3.9 times more likely to complete college. Adults with a high school diploma also earn more than those who have a GED credential.
- **Alumni completion rates for postsecondary education were low.** Fewer than one in five alumni (16.1%) had completed a vocational degree; the rate was greater for alumni who were 25 years or older (21.9%). The rate for completing a bachelor's or higher degree (1.8%) was significantly lower than that of the general population of the same age (24%). The rate increased somewhat (to 2.7%) among alumni who were 25 years or older, but remained dramatically lower than that of the general population.

## Employment and Finances

- **Many alumni are in fragile economic situations.** After accounting for alumni who were not in the workforce (e.g., full-time students and homemakers), the employment rate was 80.1%. This rate is lower than for 20- to 34-year-olds in the general population (95%). One-third of the alumni (33.2%) had household incomes at or below the poverty level, which is three times the national poverty rate. One-third (33.0%) had no health insurance, which is double the national rate of 18% for ages 18 to 44 years old. More than one in five alumni (22.2%) experienced homelessness after leaving foster care.



## Policy and Program Recommendations

### What can agencies and communities do to improve outcomes for youth currently in care?

To answer this question, the following recommendations are clustered by the major outcome domains covered by this report—Mental Health, Education, and Employment and Finances. The recommendations stem from the basic descriptive outcomes of the study, the foster care experience statistical simulations, and conversations with stakeholders.

Statistical simulations were conducted to evaluate the expected effects on mental health, education, and employment and finance outcomes after optimizing services and other foster care experiences of youth in foster care. These analyses simulated an optimal foster care experience.

The stakeholders included alumni of foster care, foster parents, caseworkers, and agency executives, as well as clinical and policy specialists from each of the three collaborating organizations and other public child welfare agencies.<sup>2</sup>

### Mental Health

Comparing alumni mental health diagnoses to the general population provided clear evidence of severe mental health problems among alumni. It is critical to examine why mental illness is so prevalent for this group.

1. **Increase youth and alumni access to evidence-based medical and mental health treatment.**

This study contributes new findings: PTSD and major depression may be the most far-reaching mental health conditions for alumni in young adulthood. PTSD and depression may contribute to difficulty in gaining or retaining employment, and their prevalence underscores the need to improve mental health services in many ways, including the following:

- a. Reform systems to increase mental health insurance coverage and Medicaid. Federal and state governments should examine barriers to mental health care—including eligibility requirements that limit access to funding and worker capacity that may be insufficient to treat mental health problems—so that youth and alumni have greater access to effective treatment.
- b. Provide specialized training to Medicaid-funded and other therapists to enable them to properly screen, assess, and treat PTSD, depression, social phobia, and other disorders.
- c. Expand early and ongoing evidence-based treatment to help alleviate mental health disorders.<sup>3</sup> Treat youth with validated approaches, and validate promising new interventions.

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<sup>2</sup> These people were chosen as “key informants” because of their past work in designing the study or their familiarity with the study design or early findings.

<sup>3</sup> The field needs more interventions that have been documented as effective by rigorous practice research (Kazdin & Weisz, 2003).

2. **Help maintain placement stability, which appears to have a large positive effect on adult mental health.** Optimizing *Placement History and Experience* (e.g., few placement changes, no reunification failures, and no runaway incidents) resulted in a 22.0% decrease in negative mental health outcomes. While many factors influence placement stability,<sup>4</sup> minimizing placement changes while a youth is on his or her way to a permanent living situation warrants greater attention because of the apparent association of fewer changes with fewer mental health problems. Strategies include:
  - a. Strengthen initial placement decisions so that youth are less likely to move.
  - b. Train foster parents in how to implement social learning approaches to child behavior management and other interventions that will minimize placement disruptions.<sup>5</sup>
  - c. Provide opportunities for youth to form positive attachments, and teach them skills for maintaining healthy relationships.
  - d. Continuous relationships with adults can facilitate youth development. If caseworkers help youth form and maintain healthy relationships with birth parents and siblings through regular visits, provide transportation for visits (e.g., bus passes), and provide phone cards while they are in care, youth may be less likely to run away or otherwise need to be moved.
3. **Increase education services and experiences.** Optimizing *Education Services and Experiences* (i.e., by providing access to supplemental education services and tutoring and by having a low number of school changes) resulted in a 13.0% decrease in negative mental health outcomes. According to the results of our analysis, stability and support in the school environment will have a positive effect on adult mental health.

## Education

Although graduation rates were quite high, the rates at which alumni completed high school with a GED credential were disproportionately higher than in the general population. While a considerable number of alumni had begun vocational and college programs, too few were graduating.

1. **Encourage youth not to settle for a GED credential.** Improve identification and treatment of mental health problems that may act as barriers to classroom success (e.g., social phobia, depression, and the sleep and attention problems that accompany PTSD). Educate school personnel about the challenges that youth in foster care face and ways that they can advocate for these youth.<sup>6</sup>
2. **Minimize placement change.** By minimizing placement changes, reunification failures, and runaway incidents, the statistical simulations predicted a 17.8% decrease in negative education outcomes. If youth don't change homes and schools, there is no need to transfer school records and the youth are less likely to fall behind. Placement instability can result from moves toward a more permanent living situation, poor administrative processes, lack of agency support of foster parents, and behavioral problems of youth. All of these factors need to be studied and addressed.<sup>7</sup>

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<sup>4</sup> James (2004).

<sup>5</sup> Briere (2004); Chamberlain, Moreland, & Reid (1992); Cohen, Mannarino, Zhitova, & Capone (2003); Kazdin & Weisz (2003); and Price & Chamberlain (forthcoming).

<sup>6</sup> For resources and more information, see *A Road Map for Learning: Improving Educational Outcomes in Foster Care* at [www.casey.org](http://www.casey.org).

<sup>7</sup> James (2004).

3. **Provide concrete resources to youth as they leave care.** Opportunities for youth to develop independent living skills in a variety of areas predicted a 14.6% decrease in negative education outcomes. It may be that having concrete resources such as a driver's license, \$250 in cash, and dishes and utensils results in more financial stability, allowing alumni to pursue their education goals. A more plausible explanation is that these variables represented youth who had received many different opportunities to develop skills for independent living, as well as some concrete resources.
4. **Support better preparation for, access to, and success in postsecondary education programs.** Caseworkers, foster families, and other stakeholders should encourage young people in foster care to plan for college or vocational school, and support them in being adequately prepared for higher education and training. Inform young adults about local college-preparatory programs, such as GEAR UP, TRIO, and Upward Bound, and help them enroll in these programs.

### Employment and Finances

Many alumni were living in vulnerable financial and housing situations.

1. **Overhaul independent living preparation.** As evidenced by the uneven findings for employment preparation, life skills preparation, education, and income, alumni varied widely in their level of readiness for emancipating from foster care.
  - a. Federal and state funds are being spent on a variety of untested life skills training, employment services, and education supports. Redirect these funds to the most promising programs, and rigorously evaluate them.<sup>8</sup>
  - b. For every youth, develop a comprehensive transition development plan that includes planning for supportive relationships, community connections, education, life skills assessment and development, identity formation, housing, employment experience, physical health, and mental health.<sup>9</sup>
  - c. Increase youth access to Individual Development Accounts (IDAs), special “youth opportunity passports,” and asset-accumulation strategies like debit accounts.<sup>10</sup>
  - d. Implement “booster session” programs that provide a toll-free phone number and various fallback services to alumni after they turn 21. This service could also include ongoing access to special job or housing search help well beyond the current age limitations.

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**There are many program reforms that can be made now.**

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<sup>8</sup> Clark & Davis (2000); Massinga & Pecora (2004); and Shirk & Stangler (2004).

<sup>9</sup> Casey Family Programs (2001); and Mech (2003).

<sup>10</sup> See Jim Casey Youth Opportunities Initiative at [www.jimcaseyouth.org](http://www.jimcaseyouth.org).

2. **Strengthen housing programs and other supports to prevent homelessness after leaving care.**
  - a. Encourage youth to develop and maintain lifelong relationships with foster parents and other supportive adults so that alumni have a place to go during difficult times. This may require after-care supports for the foster parents.
  - b. Reform systems to strengthen transitional housing and public/community housing systems. Government agencies can work with local Section 8 landlords to help allocate apartments for low-income foster care alumni.<sup>11</sup> As with other groups whose special needs have been recognized (such as battered women), alumni would benefit from these new housing models that provide not only housing subsidies but also home-based case management or other adult guidance (e.g., Scattered-Site, sober living,<sup>12</sup> Master-Lease Models, and HUD, HOME, and Section 8 housing assistance).
3. **Minimize placement change.** By minimizing placement changes, reunification failures, and runaway incidents, the statistical simulations predicted a 6.8% decrease in negative employment and finances outcomes. Having fewer placement changes may allow youth in care to develop better social support networks, which will assist them to find employment and can serve as a safety net when a youth encounters financial difficulties.
4. **Optimize education services and experiences.** Optimizing *Education Services and Experiences* (i.e., by providing access to supplemental educational services and tutoring and by having a low number of school changes) decreased negative employment and financial outcomes such as low income and high public assistance receipt rates by 7.2%.
5. **Provide youth who are exiting care with concrete resources.** The study's optimization of the *Resources upon Leaving Care* program area indicated that having more extensive preparation for independent living and a critical mass of resources during exit from care decreased negative outcomes by 12.2%. These variables are reflective of the advantages of being able to drive, having cash for a rent deposit or other expenses, and having basic household supplies (i.e., a driver's license, \$250 in cash, and dishes and utensils).

## Conclusion

This study found that although some youth who were placed in foster care benefited from the protection, emotional care, and services that they received while they were in care, many did not. Service delivery systems were unable to prepare some alumni to secure and sustain jobs that pay a living wage with health insurance, and to help them complete vocational training or college.

Using statistical simulations, certain program areas were identified that, when optimized, can improve alumni outcomes. Rigorous field trials are important next steps in confirming these simulated findings. In other words, the prediction simulations would be bolstered by additional research identifying the types of services and foster care program performance levels that are linked with positive adult outcomes.

Apart from the research efforts, there are many program reforms that can be made now, as described above. The statistical simulations revealed the potential power of targeted program improvements. Combining all improvements has an even more powerful effect on youth outcomes. Finally, many of the needed improvements will be more successful if they are anchored in larger structural *and* community-based reforms that involve the public and private sectors, including neighborhood associations, faith-based organizations, Parent Teacher Associations, and local businesses.

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<sup>11</sup> Choca et al. (2004) and Van Leeuwen (2004).

<sup>12</sup> See Polcin (2001).

# I. INTRODUCTION TO THE NORTHWEST FOSTER CARE ALUMNI STUDY



## Focus of This Report

This report on the Northwest Foster Care Alumni Study (Northwest Alumni Study)<sup>13</sup> includes:

- Selected findings about the current functioning of alumni who were placed in family foster care with Casey Family Programs or a state agency in Oregon or Washington between 1988 and 1998.
- Comparisons of findings with other foster care alumni studies and general population benchmarks.
- Analyses of foster care experience areas that lead to positive outcomes in mental health, education, and employment and finances.
- Recommendations to help improve the outcomes for youth who are currently in foster care.

This report contains selected study findings, including outcomes that are related to mental health, education, and employment and finances. The full study findings will be reported in a book, *What Works in Foster Care?* (Pecora et al., forthcoming).

## Foster Care in the United States

Each week, nearly 50,000 children come to the attention of child welfare service agencies throughout the United States. In 2002, nearly three million children in the U.S. were reported as abused and/or neglected, with 896,000 substantiated cases.<sup>14</sup> When child safety cannot be ensured in the birth home, children are placed in out-of-home care.

The federal government estimated that throughout the 2003 federal fiscal year 800,000 children were served in foster care in family and non-family settings, mostly due to maltreatment.<sup>15</sup> Although there has been a small decrease since 2001, the number of children who are placed in out-of-home care has risen substantially since 1980; this increase is likely due to growing vigilance over child maltreatment, a heightened tendency to place higher-risk cases to minimize serious child injuries and resulting lawsuits, higher birth parent unemployment and substance abuse, and a lack of extended family supports.<sup>16</sup>

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<sup>13</sup> The Northwest Alumni Study is one of two linked foster care alumni studies. The other is the Casey National Alumni Study, which included alumni who were served only by Casey from 1966 to 1998. More findings and additional details about the study methods can be found in Pecora et al. (forthcoming) or on the study extranet at <http://research.casey.org> (User name: researchquest. Password: caseyquest).

<sup>14</sup> U.S. Department of Health and Human Services (2004a), p. xiii.

<sup>15</sup> 523,000 children were in foster care as of September 30, 2003.

U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau (2005), p. 1.

<sup>16</sup> Besharov & Hanson (1994). Some of the greatest (disproportional) increases have taken place in the African American and American Indian communities. See, for example, Berrick, Needell, Barth, & Johnson-Reid (1998); Hislop, Wulczyn, & Goerge (2000); Wulczyn & Brunner-Hislop (2001); and Wulczyn, Hislop, & Harden (2002).

Although child welfare leaders emphasize preventing out-of-home placement, many youth spend a substantial amount of their childhood living in foster care homes.<sup>17</sup> For example, of those leaving family foster care settings during fiscal year 2002, 48% had been in care one year or more, and 19% had been in care for three years or more.<sup>18</sup>

### Goals, Objectives, and Key Outcomes of Foster Care

Current foster care practices and programs are governed by an intricate set of policies and laws at the federal, state, and local levels.<sup>19</sup> According to federal standards, public child welfare agencies need to achieve a small but critical set of outcomes in three broad outcome domains: *child safety*, *child permanence*, and *child and family well-being*.<sup>20</sup>

A broader range of outcomes is pursued related to the emotional, physical, and cognitive development for children who are placed for long periods of time. These outcomes include reduction in the emotional trauma of child maltreatment; healthy physical development through regular check-ups and adequate medical, dental, and vision care; avoidance of teen pregnancy; life skills development; high school and postsecondary graduation; healthy socialization; and healthy adult relationships.

### Investment in Foster Care and Other Related Services

From the moment an agency screens a call that reports child maltreatment to the day of discharge from out-of-home care, a multi-billion-dollar patchwork of federal, state, local, and private funding covers the full range of services for children and families. Federal and state governments spent approximately \$22.2 billion on child welfare services in fiscal year 2002.<sup>21</sup>

Additional direct costs to society add to the investment. These direct costs include fees for hospitalization, treatment of chronic health problems, mental health care, law enforcement, and judicial involvement. When other direct costs are added to the indirect costs of special education, mental health and health care, juvenile delinquency, lost productivity, and criminality, the total cost estimate increases to *\$94.1 billion per year*.<sup>22</sup>

### Foster Care Program Results Are Mixed

Clearly, foster care services represent a major societal investment in the attempt to reclaim the futures of children whose safety has been compromised through maltreatment. Almost all studies find that youth who enter foster care have significant developmental disadvantages.<sup>23</sup> *But how do youth who have been placed in care function later in life?* The evidence from the limited number of recent foster care studies provides conflicting information. When children are placed in foster care, they very often need services that will alleviate their developmental disadvantages and promote positive developmental outcomes.<sup>24</sup>

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<sup>17</sup> In 1997, about 16% of maltreatment victims were removed from their homes in the 36 states that were reporting these data [U.S. Department of Health and Human Services (1999), p. E-11].

<sup>18</sup> U.S. Department of Health and Human Services (2004b).

<sup>19</sup> For further details, see Curtis, Dale, & Kendall (1999); Lindsey (2004); and Pew Commission on Children in Foster Care (2004).

<sup>20</sup> For example, American Humane Association et al. (1998), pp. 3–8; Pecora, Whittaker, Maluccio, Barth, & Plotnick (2000); and U.S. Department of Health and Human Services (2003).

<sup>21</sup> Bess & Scarcella (2005), p. 1.

<sup>22</sup> Using 2001 cost data; Fromm (2001).

<sup>23</sup> Clausen, Landsverk, Ganger, Chadwick, & Litrownik (1998); and Silver et al. (1999).

<sup>24</sup> Berrick, Needell, Barth, & Johnson-Reid (1998) and Casey Family Programs (2003a).

Some studies indicate that youth who received foster care services showed positive improvements in such domains as physical health, emotional adjustment, school performance, and behavioral functioning.<sup>25</sup> In contrast, other studies have found that youth in foster care continue to experience substantial difficulties into young adulthood, including higher rates of criminality, unemployment, and mental health disorders compared to the general population.<sup>26</sup>

Disagreement about how to measure success and methodological problems in evaluating foster care have hindered the field. Is success defined by the improvement in the individual over time, or by how youth in foster care compare to another population, or by some specified set of indicators of success or levels to be achieved (e.g., level of education)? The dearth of published studies about foster care outcomes has made it difficult to establish consistent performance standards.

The number of youth who remain in long-term foster care is troubling, especially given evidence that longer stays are associated with a greater number of placements.<sup>27</sup> Each new placement disrupts the youth's opportunity to achieve enduring positive relationships with caring adults. Although complex family situations—e.g., relatives who are reluctant to adopt or children who have challenging behavioral or health needs—may make family preservation more difficult, reunification, adoption, and other permanent living situations are still the most desirable options.

### **The Northwest Alumni Study Rationale**

Although society has invested a great deal in out-of-home care, rigorous research about long-term foster care service outcomes has been scarce. Many questions about the long-term effects of foster care in general, and specifically service components, remain unexamined.

The field has provided insufficient data on how youth who have been in foster care develop and function as young adults—especially data about which experiences and services predict their success as adults. Some research indicates that many youth who enter foster care as a consequence of maltreatment have significant health, mental health, education, and behavioral problems.<sup>28</sup> Services provided to address these needs may mediate the relation between child maltreatment and long-term outcomes.

Yet few studies have rigorously examined the long-term mental health, education, and employment and financial outcomes among alumni of foster care. Nor have studies tied these outcomes to the types of placements or services that the youth received. Further complicating the ability to extrapolate or generalize from previous studies to the broader foster care population are brief follow-up periods (such as within one year after leaving care), low response rates, and relatively small sample sizes (often fewer than 100 participants).<sup>29</sup> Moreover, with few exceptions, standardized diagnostic measures, longitudinal approaches, and experimental design studies have not been implemented.<sup>30</sup>

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<sup>25</sup> See Biehal & Wade (1996); Coulling (2000); Goerge, Wulczyn, & Fanshel (1994); Horowitz, Simms, & Farrington (1994); and Reilly (2003).

<sup>26</sup> See, for example, Courtney, Terao, & Bost (2004a,b) and Minty (1999). Note, however, that a few studies have demonstrated that foster care alumni functioning is similar in many ways to that of children from low-income families in some areas—see Buehler, Orme, Post, & Patterson (2000) and Cook (1992).

<sup>27</sup> Berrick, Needell, Barth, & Johnson-Reid (1998).

<sup>28</sup> Chernoff, Combs-Orme, Riskey-Curtiss, & Heisler (1994); Kendall-Tackett (2003); and McMillen et al. (2005).

<sup>29</sup> Buehler, Orme, Post, & Patterson (2000). Additionally, comparisons with general population studies are rare, as are more rigorous comparisons with children who are from similar family backgrounds but who were not placed in foster care (e.g., children of persistent poverty, children whose parents have mental health or substance abuse problems, or children with their own mental health problems). The latter comparison is crucial in that children in out-of-home care are likely to face much more childhood adversity than the adversity that is associated with poverty.

<sup>30</sup> Goerge, Wulczyn, & Fanshel (1994); McDonald, Allen, Westerfelt, & Piliavin (1996); Williams, McWilliams, Mainieri, Pecora, & La Belle (in press); Widom (1989); and Wulczyn & Goerge (1992).

## II. COLLABORATORS, QUESTIONS, AND HYPOTHESES

One research gap that this study specifically addressed was the need to interview foster care recipients in young and middle adulthood to understand the effects of their childhood maltreatment, the remediation of these after-effects in foster care, and the ongoing after-effects of their maltreatment. Because our child welfare system and society are concerned with producing well-functioning adults, we must follow foster care recipients beyond age 19 and into young and middle adulthood to discover the longer-term effects of childhood adversity and the services provided by family foster care.<sup>31</sup>

### Collaborators of the Northwest Alumni Study

To ensure objectivity and examine a representative Northwest sample of alumni, the University of Washington, Harvard Medical School, and the University of Michigan Survey Research Center collaborated with three social service organizations to conduct the Northwest Alumni Study:<sup>32</sup>

1. Casey Family Programs (Casey), with participating offices in Seattle, Tacoma, and Yakima, Washington, and Portland, Oregon; 111 children from Casey Washington and 44 children from Casey Oregon were included in the study.
2. The Oregon Department of Human Services, Division of Children, Adults and Families, Community Human Services (Oregon DHS), with participating offices in Portland, Oregon; 171 children from DHS were included in the study.
3. The State of Washington Department of Social and Health Services, Children's Administration, Division of Children and Family Services (Washington CA/DCFS), with participating offices in the areas of Seattle, Tacoma, and Yakima, Washington; 333 children from CA/DCFS were included in the study.



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## How are youth who were placed in foster care faring as young adults?

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<sup>31</sup> Williams et al. (in press) and McDonald et al. (1996).

<sup>32</sup> See Appendix A for a list of project staff and agency advisors.

## Research Questions and Hypotheses

The Northwest Alumni Study was informed by a theory-based developmental framework that considers a range of child, family, community, foster home, and other factors in explaining how well alumni function after they leave foster care. (See Appendix B.)

There were four main research questions:

1. How are youth who were placed in foster care faring as young adults?
2. Are certain key factors or program components linked with better functioning in alumni of foster care?
3. Does one particular approach to family foster care lead to more positive outcomes? Is one approach more suitable for certain youth?
4. Which youth are most at risk of poor long-term outcomes?

Building upon previous research, the study's hypotheses for this report focused on the first two research questions listed above. First, the study hypothesized that a high proportion of foster care alumni would be functioning less positively than the general population in the areas of mental health, education, and employment and finances. Second, the study hypothesized that positive alumni functioning would be associated with the availability of the following critical program elements: <sup>33</sup>

- Tutoring and other educational support services
- Access to mental health and other therapeutic group work services
- Employment training
- Employment experience
- A healthy and positive relationship with at least one foster family member
- A positive relationship with at least one agency staff member (established through regular contact)

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<sup>33</sup> Research that informed the study's hypotheses included Cook (1992); Festinger (1983); Fanshel & Shinn (1978); Fanshel, Finch, & Grundy (1990); and Wedeven, Pecora, Hurwitz, Howell, & Newell (1997). The third hypothesis was that the Casey alumni would have more positive outcomes compared to the state alumni in mental health, high school graduation, and college completion rates because of the program practice model and resource differences.

### III. DATA COLLECTION, MEASURES, AND STUDY VARIABLES

The study collected data through case record reviews and extensive interviews with alumni.

#### Case Record Reviews

The study reviewed case records for 659 alumni. Raters individually read and recorded case record information, which included demographics; reason(s) for original placement; dates of entry and exit from foster care; type and length of placement; foster family background; type of exit from foster care; history of child maltreatment; and information about birth parents, including family composition and functioning (including drug and alcohol usage and termination of parental rights).

For the purposes of this study, a version of the Maltreatment Classification Scheme, initially developed by Barnett, Manly, and Cicchetti and modified by the LONGSCAN Group, was used to record and classify the alumni's maltreatment experiences.<sup>34</sup> Results from inter-rater reliability analyses found that ratings were acceptable for the vast majority of measures that were assessed.

#### Interviews

Professionally trained interviewers from the University of Michigan Survey Research Center (SRC) conducted interviews with 479 alumni in person or on the phone between September 2000 and January 2002. (See Table 3.1 for a distribution of the alumni by agency.) Interviewers were not aware of the study hypotheses.

The interview protocol contained several standardized scales and covered a wide range of areas, including mental health, education, employment and finances, marriage and relationships, and parenting. The interviewers also asked open-ended questions that focused on the alumni's perceptions of agency services, how their foster parents could have done better, how the transition to independent living could have been improved, and which people or services had the most influence on their success.



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<sup>34</sup> Barnett, Manly, & Cicchetti (1993) and Lau et al. (in press).

**Table 3.1 Number of Alumni Interviewed, by Agency**

ALUMNI GROUP	n
Washington CA/DCFS	242
Oregon DHS	126
Casey Washington	82
Casey Oregon	29
<i>Sample size: 479</i>	

An important feature of this interview was the use of several sections from the Composite International Diagnostic Interview (CIDI). The CIDI is a World Health Organization–approved psychiatric diagnostic interview that was developed to facilitate psychiatric epidemiological research without the need for clinician interviewers. It generates mental health diagnoses for conditions such as depression, anxiety, and substance addiction. Sections of the CIDI 2.1, supplemental sections from the CIDI 2.0 and 3.0,<sup>35</sup> and other supplemental interview questions from University of Michigan Institute for Survey Research were used. This version of the CIDI has been shown to have high reliability and validity indices (e.g., World Health Organization, 1996).

This compilation of CIDI items was used to compare the outcomes for alumni in the Northwest Study to outcomes for adults in the National Comorbidity Study Replication (NCS-R) survey, which used a representative sample of the general population. Participants in the two studies were matched on age to help make the two studies more comparable.<sup>36</sup>

The interview also included the Short Form Health Survey 12 (SF-12®). The SF-12 was developed to be a much shorter, yet valid, alternative to the SF-36® for use in large surveys of general and specific populations as well as for large longitudinal studies of health outcomes.<sup>37</sup>

### Description of Study Variables

The study obtained some information on demographics, pre-placement risk factors, and foster care experiences through case records. It obtained information on service access, extent of use, and adult outcomes primarily through interviews.

This section of the report groups the items that were used in the analyses into *predictor variables* and *outcome variables*.<sup>38</sup> The variables presented were the primary predictors and primary outcomes (these variables are used in Section XI, “What Works in Achieving Positive Adult Outcomes”). The data for several other variables are presented in the following sections to provide additional information about alumni, but were not included in the analyses in Section XI. Numeric and lettered lists are domains; bulleted items are variables.

<sup>35</sup> Kessler (1991); Kessler & Magee (1994); Kessler & Ustun (2004); Kessler & Walters (2002); Robins et al. (1989); and World Health Organization (1996).

<sup>36</sup> Childhood poverty and other adversities were not used as matching criteria. The NCS-R was conducted with a nationally representative sample of 10,000 respondents in 2001–02. The extensive structured interview allows for lifetime and 12-month diagnoses of DSM-III-R disorders. For more information, see Kessler & Walters (2002); Kessler et al. (2003); and <http://www.hcp.med.harvard.edu/ncs/>.

<sup>37</sup> All SF-12 items come from the SF-36 [Ware, Kosinski, & Keller (1998), pp. 11 & 60].

<sup>38</sup> For more information about the study methods, see the working papers and other documents on the alumni study extranet at <http://research.casey.org> (User name: researchguest. Password: caseyguest).

## Predictor Variables

### 1. Demographics (3 predictor variables)

- Ethnicity
- Age
- Gender

### 2. Pre-placement Risk Factors (25 predictor variables)

#### a. Living Arrangements Before Foster Care

- Age at which the youth entered child welfare system
- Number of places the youth lived before foster care

#### b. Parent Functioning

- Mother's and father's mental health
- Mother's and father's physical health
- Mother's and father's substance abuse
- Mother's and father's criminal behavior
- Mother's and father's employment

#### c. Parenting Style of Birth Parents

- Mother's and father's warmth
- Mother's and father's overprotection
- Both parents' neglect
- Birth parents' relationship with youth

#### d. Child Maltreatment by Birth Family

- Type of abuse or neglect (e.g., verbal, physical, sexual)
- Number of abuse or neglect types

#### e. Reasons for Initial Placement

- Number of reasons
- Placement reasons (child behavior problems, maltreatment, parents' substance abuse problems)

#### f. Mental/Physical Health Problems Diagnosed While in Care

- Attention deficit and hyperactivity disorder (ADHD)
- Physical or learning disability
- Other impairments (i.e., exposure to drugs as an infant, fetal alcohol effect, fetal alcohol syndrome, vision or hearing impairments)

3. **Intervention Group (organization in which alumnus was placed) (2 predictor variables)**
  - Agency
  - State
4. **Foster Care Experience (22 predictor variables)**
  - a. Placement History and Experience
    - Number of placements
    - Length of time in care
    - Placement change rate
    - Number of reunification failures
    - Number of runaways
    - Number of unlicensed living situations with friends or relatives
  - b. Education Services and Experience
    - Access to supplemental educational services and tutoring
    - Total number of school changes from elementary through high school
  - c. Therapeutic Service and Supports
    - Access to therapeutic service and supports
  - d. Foster Family Activities
    - Participated in both fun and religious activities with foster family
  - e. Preparation for Leaving Care
    - Degree of preparation for leaving care<sup>39</sup>
    - Number of resources that youth had when leaving care (*Resources upon Leaving Care*)<sup>40</sup>
  - f. Foster Family and Other Nurturing Support While in Care
    - i. Parenting Style of Both Parents
      - Authoritative
      - Permissive
      - Authoritarian
      - Disengaged
      - Other
    - ii. Other Supports
      - Felt loved while in foster care
      - Overall helpfulness of foster parents
      - Help from foster family with ethnic issues
      - Had a mentor while growing up
    - iii. Child Maltreatment
      - Child maltreatment by foster parent or other caregiver

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<sup>39</sup> The measurements for preparation were (1) youth could participate in employment training or job location services; (2) youth could participate in independent training groups or workshops; (3) alumni reported that they had been somewhat or very prepared for independent living; and (4) alumni had health insurance at exit.

<sup>40</sup> *Resources upon Leaving Care* included (1) a driver's license, (2) \$250 in cash, and (3) dishes and utensils.

## Outcome Variables

The study assessed a wide range of outcome domains, including mental health, education, and employment and finances. The dichotomous outcome variables that are included in the analyses in Section XI of this report are listed below.<sup>41</sup> Numeric and lettered lists are domains; bulleted items are variables.

### 1. Mental Health (10 outcome variables)

During the last 12 months, participants had:

- At least one CIDI mental health diagnosis
- Three or more CIDI diagnoses
- Major depression
- Panic syndrome
- Modified social phobia
- Generalized anxiety
- Alcohol dependence
- Drug dependence
- Post-traumatic stress disorder (PTSD)

Short Form Mental Health Summary Scale (SF-12)

- Mental health score of 50 or above

### 2. Education (5 outcome variables)

- Completed high school (via high school diploma or GED credential)
- Completed high school (via high school diploma only)
- Experienced any education past high school (any type of postsecondary education)
- Completed any degree or certificate beyond high school (e.g., vocational, A.A., or bachelor's)
- Completed college

### 3. Employment and Finances (9 outcome variables)

- a. Homelessness
  - Alumnus was homeless after foster care.
- b. Public Assistance
  - Alumnus was on public assistance after age 18.
  - Alumnus currently receives cash public assistance (AFDC, TANF, GA).<sup>42</sup>
  - Someone in the alumnus' household received a form of public assistance in the past six months.
- c. Employment
  - Working now or studying
- d. Finances
  - Household income below the poverty level
  - Household income greater than three times the poverty level
  - Has no health insurance
  - Owns house or an apartment

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<sup>41</sup> Data that are related to additional outcomes in the domains of physical health, marriage and relationships, and parenting are reported in Pecora et al. (forthcoming) and in papers that will be posted on the alumni study extranet at <http://research.casey.org> (User name: researchguest. Password: caseyguest).

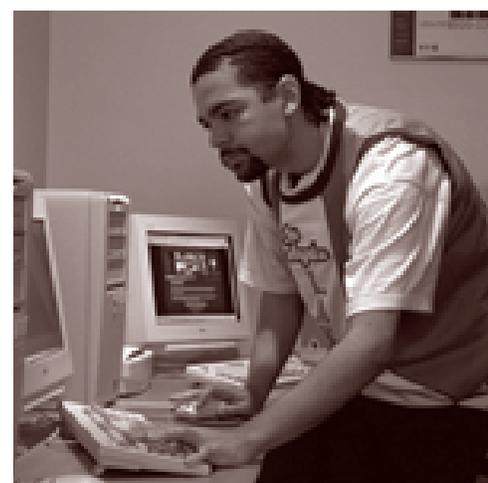
<sup>42</sup> AFDC: Aid to Families with Dependent Children; TANF: Temporary Assistance to Needy Families; GA: General Assistance.

### Summary of Methodology: Significance of This Study

This study has a number of distinguishing methodological aspects, which are summarized in Table 3.2.

**Table 3.2 Significant Features of the Northwest Alumni Study**

WHAT IS UNIQUE ABOUT THIS STUDY?	SIGNIFICANCE
United three public and voluntary child welfare agencies and three universities in a six-year research collaboration.	Enabled a joint research project to conduct an objective study with findings that are useful for guiding program design.
Used standardized measures of outcomes, including the mental health assessment that is used for the U.S. national prevalence studies (CID).	Facilitated comparisons to the general population.
Obtained an unusually high response rate (75.7%) for alumni interviews, which resulted in a larger, more representative sample than most previous research.	Provided a more complete picture of alumni functioning than past studies.
Interviewed alumni further into adulthood than in previous studies (alumni averaged 24 years old vs. 19 to 20 years old in other studies).	Offered a more comprehensive picture of development than short-term studies because alumni are further along in their lives (e.g., more time for college enrollment and completion).
Was reviewed by the National Institute of Mental Health and rated as meriting federal funding.	Affirmed the significance of the study on a national level.



## IV. THE SAMPLE

### Eligibility Characteristics

The study sample was 659 adults between the ages of 20 and 33 who had been placed in family foster care between 1988 and 1998 and who were served by one of the three agencies.<sup>43</sup> Eligibility criteria required participants to have spent 12 or more continuous months in family-based foster care between the ages of 14 and 18 during those years and to have turned 18 by September 30, 1998.

The sample was matched for geographic location and excluded youth who had a major physical or developmental disability (e.g., an IQ score of less than 70). Almost all Casey alumni had been served by a public child welfare agency prior to placement with Casey.

### Response Rates

The study reviewed case records for the total sample of 659 alumni and interviewed 479 of these alumni between September 2000 and January 2002. Not every alumnus could be located or interviewed because of Human Subjects protection restrictions. To calculate the response rate, this study used the *minimum response rate* (RR1) as defined by the standard definitions manual of the American Association for Public Opinion Research. Using this definition, 26 (4.0%) of the “ineligible” respondents included deceased alumni and those who were in prisons or psychiatric institutions at the time of the interviews. After removal of these alumni, the response rate was 75.7%. (See Table 4.1.)

With the exception of a landmark study in New York City<sup>44</sup> and the more recent longitudinal cohort alumni studies in the Midwest,<sup>45</sup> this response rate is much higher than the response rates that have been obtained in other alumni follow-up studies, which are typically about 55% or less.



<sup>43</sup> Alumni in the study were placed in foster care before two recent federal laws were passed or fully implemented: The Adoption and Safe Families Act and the Chafee Act to improve transition programs. See Child Welfare League of America (2003).

<sup>44</sup> Festinger (1983).

<sup>45</sup> Courtney, Terao, & Bost (2004a).

**Table 4.1 Disposition of the Northwest Alumni**

DISPOSITION	n (%)
Refusals	36 (5.5)
Not located	118 (17.9)
In a psychiatric or other institution	1 (0.2)
In prison	20 (3.0)
Deceased	5 (0.8)
Interviews	479 (72.7)
<i>Traditional/minimum response rate (%)<sup>a</sup>: 75.7</i>	
<i>Sample size: 659</i>	

<sup>a</sup> People in correctional or mental health institutions could not be interviewed. This “traditional” response rate (RR1) subtracts those in prison, those in psychiatric institutions, and the deceased from the sample size: interviews ÷ (sample – deceased – in prison – in institution) (American Association of Public Opinion Research, 2005).

### Foster Care Model Descriptions

The study examined two foster care models. The state agencies utilized a public agency program model in which staff members generally had between 18 and 35 cases; the annual staff turnover rates were from 20% to 25%; and ancillary services, such as mental health counseling, tutoring, and recreational camps, were only occasionally available to the youth. The state agencies were required to place all referred children.

Casey used a private agency program model in which worker caseloads averaged about 16 youth; annual staff turnover averaged 8.2% from 1995 to 1998 and was similarly low during other study years; foster parent retention was high; and ancillary services, such as mental health, education, and other services were widely available to the youth in care.<sup>46</sup> Casey used differential screening to determine who entered its program. Because the intent of the Casey model was to provide long-term care for children who would not be reunified or adopted, youth who entered Casey were older and expected to remain with Casey until emancipation.

### Sample Matching

Extensive efforts were made to match the Casey and the state samples for greater comparability. When one subgroup of people appears in only the Casey sample, or in only one of the state samples, comparing the groups is impossible. For example, a small number of unaccompanied refugee minors were removed from the state sample because Casey did not serve any refugee minors.

<sup>46</sup> Pecora et al. (forthcoming), Chapter 2.

### Weighting of Data

During analyses, additional steps were taken to match Casey and state samples and to account for the youth who were not interviewed. This matching improved the ability to generalize to the population of youth from which the sample was drawn. In both cases, propensity score matching was used to weight the data so that differences between the samples did not bias the results.<sup>47</sup> In sum, weights were used to estimate data as if there had been no pre-existing differences between Casey and the state samples, and as if the entire sample of 659 had been interviewed. Variables that contributed to the statistical weights included age, sex, and race.

### Missing Data

The study used two procedures to impute data that were missing from otherwise complete alumni records.<sup>48</sup> The first method was hot-deck imputation, which matched the participant for whom a data element was missing with respondents who had complete data for that element. The matching was based on other variables that were present in all sample alumni case records and were strongly related to the missing data element. Once matches were made, the data were drawn from a randomly selected matching case record to impute the missing data element.

The second method was mean imputation, which was used to impute values to variables that had small amounts of missing data that were not considered central to the analysis. In this situation, we assigned the mean value from respondents who had data for the variable to the missing case.

### Demographic Characteristics of the Alumni

Case record reviews supplied much of the demographic and background information, and interviews provided additional data. Case record data are reported for the *entire* sample (n=659), whereas interview data (n=479) were weighted to estimate the entire sample.

Over half (54.4%) of the interviewed alumni were people of color. (See Table 4.2.) American Indian or Alaska Native alumni (15.7%) and Asian or Native Hawaiian/Polynesian/Pacific Islander alumni (5.8%) made up the largest proportion of the “Non-Hispanic other” ethnic group. The average age of the alumni was 24.2 years old, and 60.5% were women.

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**The study sample was 659 adults between the ages of 20 and 33 who had been placed in family foster care between 1988 and 1998.**

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<sup>47</sup> Braitman & Rosenbaum (2002).

<sup>48</sup> Ford (1983).

**Table 4.2 Demographic Characteristics of the Northwest Alumni**

DEMOGRAPHICS	% (SE) <sup>a</sup>
<b>Ethnicity</b>	
Hispanic	10.5 (0.9)
Non-Hispanic black	21.3 (1.2)
Non-Hispanic other	22.6 (1.2)
Non-Hispanic white	45.6 (1.5)
<b>Age at time of interview</b>	
20 to 22 years	29.6 (1.4)
23 to 25 years	38.2 (1.4)
26 to 33 years	32.2 (1.4)
<i>Mean age at time of interview: 24.2 years (SE: 0.1)</i>	
<i>Sample size<sup>b</sup>: 479</i>	
<b>Gender</b>	
Male	39.5 (0.7)
Female	60.5 (0.7)
<i>Sample size: 659</i>	

<sup>a</sup> SE is the abbreviation for standard error (a measure of variance).

<sup>b</sup> Age at time of interview and ethnicity data were drawn from alumni interviews.

### **Racial and Gender Differences in the Outcome Data**

The child welfare field is beginning to analyze data to allow a better understanding of the extent and nature of racial/ethnic and gender disproportionality in child welfare.<sup>49</sup> The complexities involved in fully understanding whether racial and gender differences truly exist are formidable.

Comprehensive analyses for understanding racial disproportionality require at least two stages. The first stage is to conduct a simple comparison in outcomes between two racial groups (e.g., people of color compared to whites). The second stage of analysis is to make a similar comparison after statistically controlling for demographics, pre-placement risk factors, and other variables. This second analysis must be done because differences in outcomes found in the first stage may be due to a factor other than race and gender. For example, analysis at the first stage may find significant differences in occurrence of depression by racial group. While this is an important finding, more complex analyses at stage two may show that severity of abuse, not race, explains the depression.

These special analyses are being conducted during the next phase of the Northwest Alumni Study project, so this report does not include gender and racial differences in outcomes.

<sup>49</sup> See, for example, Chibnall et al. (2003); Hill (2001); and Hines, Lemon, Wyatt, & Merdinger (2004).

## V. FINDINGS: PRE-PLACEMENT RISK FACTORS

### Types of Child Maltreatment Experienced by the Alumni

Child maltreatment is the most frequent reason children are removed from the birth family and placed in foster care. Table 5.1 presents the reported types of maltreatment noted in the case records for the Casey and state samples.<sup>50</sup> Over one-half of the alumni (53.6%) reported experiencing sexual abuse with or without another form of maltreatment.<sup>51</sup> The second most frequent type of maltreatment reported for these youth was neglect (sometimes with physical abuse), with 27.5% of the alumni experiencing either physical neglect alone, or physical neglect and physical abuse combined.



**Table 5.1 Expanded Hierarchical Type of Child Maltreatment by Birth Family of the Northwest Alumni<sup>a</sup>**

CHILD MALTREATMENT BY BIRTH FAMILY	% (SE)
No child maltreatment	6.7 (0.4)
Sexual abuse only (with or without emotional maltreatment)	4.4 (0.3)
Sexual abuse and other maltreatment (besides emotional maltreatment)	49.2 (0.8)
Physical abuse only (with or without emotional maltreatment)	8.6 (0.5)
Physical neglect only (with or without emotional maltreatment)	10.8 (0.4)
Physical neglect and physical abuse (with or without emotional maltreatment)	16.7 (0.6)
Emotional maltreatment only	3.6 (0.3)
<i>Sample size: 659</i>	

<sup>a</sup> Excludes educational neglect.

<sup>50</sup> The timing of the child maltreatment was not recorded in case records. Therefore, it was not possible to distinguish pre-foster care maltreatment from maltreatment experienced after foster care when a child returned home. Data are available regarding child maltreatment by a foster parent or someone else in the foster family.

<sup>51</sup> The rate of sexual abuse in this sample is higher than what most states have reported. For example, in 1990, the percentage of sexual abuse victims in the United States was 14.9% and in 1996 it was 12.3% [U.S. Department of Health and Human Services (1998); pp. 2–8]. The timing and methods for data collection about sexual abuse, however, differ so much between this study and the U.S. DHHS findings that comparisons should be made with great caution.

### **Age at Which Youth Entered Foster Care**

Over half (56.9%) of the alumni entered care at age 12 years or older, but 14.9% were placed at age 5 or younger. (See Table 5.2.)

### **Reasons for Initial Placement**

Table 5.2 also provides data from case records regarding the reasons for placement into foster care. Because many alumni were placed for multiple reasons, the categories are not mutually exclusive. The most common reasons for placement were child maltreatment (64.3%) and birth parents' substance abuse problems (28.5%).

### **Parents' Substance Abuse and Criminal Problems**

Table 5.2 includes information about the alumni family situation before or during foster care. Substance abuse (64.6% of mothers and 45.1% of fathers) and criminal justice problems (35.0% of mothers and 36.7% of fathers) made up the highest proportion of parent problems.

### **Mental/Physical Health Problems Diagnosed Before or During Foster Care**

The study collected data about youth disabilities and diagnoses from case records. Data focused on professionally diagnosed medical, learning, and psychological issues that could have surfaced at any point in childhood, including before placement and up to case closure. The proportion of the sample that had mental or physical health diagnoses is presented in Table 5.2.



**Table 5.2 Pre-placement Risk Factors of the Northwest Alumni**

PRE-PLACEMENT RISK FACTORS		% (SE)
<b>Reason for initial placement</b>		
Child behavior problems		19.6 (0.6)
Maltreatment		64.3 (0.7)
Birth parents' substance abuse problems		28.5 (0.6)
Other <sup>a</sup>		49.2 (0.8)
<b>Birth mother</b>		
Had substance abuse problems		64.6 (1.4)
Had criminal problems		35.0 (1.4)
<b>Birth father</b>		
Had substance abuse problems		45.1 (1.5)
Had criminal problems		36.7 (1.4)
<i>Sample size: 479</i>		
<b>Age entered foster care</b>		
5 years or younger		14.9 (0.5)
6 to 11 years		28.2 (0.7)
12 years or older		56.9 (0.7)
<i>Mean age entered foster care: 11.1 years (SE: 0.1)</i>		
<b>Mental/physical health problems diagnosed before or during care</b>		
ADHD		13.7 (0.5)
Physical or learning disability		13.1 (0.4)
Other impairments <sup>b</sup>		6.4 (0.3)
<i>Sample size: 659</i>		

<sup>a</sup> Includes caregiver(s)' inability or unwillingness to provide care, family stress, and other reasons.

<sup>b</sup> Includes drug exposure, fetal alcohol effects, fetal alcohol syndrome, and visual/hearing impairments.

## VI. FINDINGS: FOSTER CARE EXPERIENCE AND SERVICES



### Measuring Placement Change

Living situations and placements are defined differently depending on the federal rules, viewpoints (e.g., youth, agency, or researcher), and other conceptual frameworks that are being considered. The Northwest Alumni Study defined a child's living situation as the place where the youth lives and what is viewed by the child as "home"—temporary or not. While research has shown that some changes in living situation can be beneficial for the youth, greater disruption in placement is generally associated with more negative outcomes.

The study considered the following living situations to be distinct placements:<sup>52</sup>

- Initial shelter care
- Foster care
- Kinship care
- Treatment foster care
- Group homes
- Residential treatment
- Independent living placements<sup>53</sup>
- Adoptions
- Juvenile justice placements once the youth is under child welfare agency supervision (not as an initial placement)

Although they were recorded in the case records, the following living situations were not counted as placements:

- Returning to or living with birth parents
- Running away from a current placement
- Visits to medical hospitals
- Respite care
- Living with birth family or unlicensed friends or relatives<sup>54</sup>
- Unless recorded as the first placement in the log, stays at psychiatric institutions that were *fewer* than 30 days
- A stay in a juvenile justice or correctional facility that was recorded in the log as the first placement

<sup>52</sup> The study followed the guidelines of the CWLA National Working Group to Improve Child Welfare Data as described in Woodruff (2004).

<sup>53</sup> The researchers are not aware of any guidance from the federal government regarding how to classify independent living (IL) placements. During the period covered by this study (1988 to 1998), few of the youth experienced formal supervised apartments or group home IL placements. Because the youth were on an active child welfare caseload and were seen on a periodic basis, however, the researchers decided to include IL situations as placements. Scholarship programs such as Casey's Continuing Education and Job Training Program (CEJT) were not included. When planning foster care programs, we recommend that agencies capture both kinds of IL programs: (a) the less intensive program where youth are essentially living on their own, and (b) the more formal scattered-site apartments or group homes that provide much more structure and staff contact.

<sup>54</sup> Living with birth family or unlicensed friends or relatives is not counted as an official placement because this study, and many others, cannot distinguish the nature of these living situations (e.g., the degree to which the child welfare agency is involved in supervising the child's living situation).

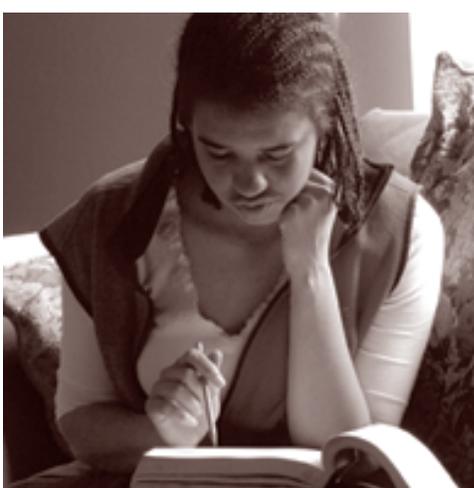
### Placement History and Experience

Alumni entered foster care on average at age 11.1 and exited, on average, at age 18.5. (See Table 5.2 and Table 6.1, respectively.) These average ages are older than for alumni in some studies because the Casey program served some older youth in their foster families as part of a transition program and did not discharge some youth until they had completed high school. Prior to entering Casey, nearly nine in ten (89.0%) Casey alumni spent time in a state or voluntary agency program, with a median time in care or under agency supervision of 2.9 years.

Many youth had unstable living situations while in care: Almost one-third (32.3%) had eight or more placements, with an average of 6.5 placements. (See Table 6.2.) While most youth did not have any reunification failures, over one in ten (11.7%) had two or more failures. Over one in five (21.2%) had run away at least twice.

**Table 6.1 Age at Exit from Foster Care of the Northwest Alumni**

AGE AT EXIT	% (SE)
15 to 16 years	12.0 (0.5)
17 years	22.3 (0.7)
18 years	42.9 (0.8)
19 or more years	22.8 (0.5)
<i>Mean age at exit: 18.5 (SE: &lt;0.1)</i>	
<i>Sample size: 659</i>	



**Table 6.2 Placement History and Experience of the Northwest Alumni**

PLACEMENT HISTORY AND EXPERIENCE		% (SE)
<b>Number of placements</b>	Low (3 or fewer)	31.9 (0.7)
	Medium (4 to 7)	35.8 (0.7)
	High (8 or more)	32.3 (0.7)
<i>Mean number of placements: 6.5 (SE: 0.1)</i>		
<b>Length of time in care</b>	Low (fewer than 3.6 years)	32.5 (0.7)
	Medium (3.6 to 5.9 years)	27.6 (0.7)
	High (5.9 or more years)	39.9 (0.7)
<i>Mean length of time in care: 6.1 years (SE: &lt;0.1)</i>		
<b>Placement change rate</b>	Low (fewer than 0.61 placements/year)	27.6 (0.6)
	Medium (0.62 to 1.23 placements/year)	29.3 (0.7)
	High (1.23 or more placements/year)	43.1 (0.8)
<i>Mean placement change rate: 1.4 placements/year (SE: &lt;0.1)</i>		
<b>Number of reunification failures</b>	Low (0)	69.5 (0.7)
	Medium (1)	18.8 (0.7)
	High (2 or more)	11.7 (0.6)
<b>Number of runaways</b>	Low (0)	60.7 (0.8)
	Medium (1)	18.1 (0.6)
	High (2 or more)	21.2 (0.7)
<b>Number of unlicensed living situations with friends/relatives</b>	Low (0)	76.8 (0.7)
	Medium (1)	16.8 (0.6)
	High (2 or more)	6.4 (0.4)
<b>Number of group care placements</b>	Low (0)	86.2 (0.6)
	Medium (1)	9.0 (0.5)
	High (2 or more)	4.9 (0.3)
<b>Number of kinship placements</b>	Low (0)	61.6 (0.8)
	Medium (1)	20.9 (0.6)
	High (2 or more)	17.5 (0.6)
<i>Sample size: 659</i>		

### Foster Care Experience

Nearly one-third (30.2%) of the alumni experienced ten or more school changes from elementary through high school. (See Table 6.3.) Some of these changes occurred prior to and/or after discharge from foster care. Most alumni reported access to therapeutic services during care (83.6% to 95.6% depending upon the service). The proportion of alumni who reported that they had participated in fun activities with their foster family was lower (76.1%).

**Table 6.3 Services and Activities While in Foster Care**

FOSTER CARE EXPERIENCE		% (SE)
<b><i>Education Services and Experience</i></b>		
Had access to tutoring or other supplemental education services		89.1 (1.0)
Actually participated in tutoring or other supplemental education services		48.1 (1.5)
Number of school changes, elementary through high school	Low (3 to 6)	35.0 (1.4)
	Medium (7 to 9)	34.8 (1.4)
	High (10 or more)	30.2 (1.4)
<b><i>Therapeutic Services and Supports</i></b>		
Had access to counseling and mental health services		95.6 (0.5)
Had access to alcohol and drug treatment programs		93.9 (0.7)
Had access to group work or group counseling		86.3 (1.0)
Had access to a lot of therapeutic services and supports		83.6 (1.0)
<b><i>Activities with Foster Family</i></b>		
Participated in fun activities with foster family		76.1 (1.3)
Participated in religious activities with foster family		54.5 (1.5)
Participated in both fun and religious activities with foster family		45.9 (1.5)
<i>Sample size: 479</i>		

### Involvement in Activities and Preparation for Leaving Foster Care

Over half (56.9%) of the alumni reported that they had been somewhat prepared or very prepared for independent living. Smaller percentages of the alumni said that they had the following resources when they left care: a driver's license (33.3%), at least \$250 in cash (38.4%), and dishes and utensils (23.7%). (See Table 6.4.)

**Table 6.4 Preparation and Resources for Leaving Foster Care**

FOSTER CARE EXPERIENCE		% (SE)
<b><i>Preparation for Leaving Care</i></b>		
Had access to employment training or job location services		84.2 (1.1)
Had access to independent living training groups or workshops		67.9 (1.3)
Alumni reporting they were somewhat or very prepared for independent living		56.9 (1.5)
Alumni who had health insurance at exit		47.4 (1.5)
Degree of preparation for leaving care (sum of the four <i>Preparation for Leaving Care</i> items above)		
Low (0 or 1)		17.7 (1.1)
Medium (2)		24.8 (1.3)
High (3 or 4)		57.5 (1.5)
<b><i>Resources upon Leaving Care</i></b>		
Alumni had the following when leaving care:		
A driver's license		33.3 (1.4)
\$250 in cash		38.4 (1.4)
Dishes and utensils		23.7 (1.3)
Sum of the three <i>Resources upon Leaving Care</i> items above		
Low (0)		43.5 (1.5)
Medium (1)		27.7 (1.3)
High (2 or 3)		28.8 (1.3)
<i>Sample size: 479</i>		

**Table 6.5 Parenting Styles of the Foster Parents**

		WARMTH		
		Low	Medium	High
OVERPROTECTION	Low	Disengaged	Other	Permissive
	Medium	Other	Other	Other
	High	Authoritarian	Other	Authoritative

### Parenting Style of Foster Parents and Child Maltreatment While in Care

Based on alumni self-reports of two parenting dimensions—overprotection and warmth—the study characterized each alumnus’s foster mother and foster father as *authoritative*, *authoritarian*, *permissive*, *disengaged*, or *other*.<sup>55</sup> Scores on overprotection and warmth were trichotomized separately and labeled as low, medium, and high. Crossing the two dimensions resulted in a 3 × 3 categorization table used to assign a parenting style to each type of foster parent. (See Table 6.5.)

The parenting style of most foster parents was designated as *other* (70.1%). The parenting styles *disengaged* (31.0%) and *authoritative* (27.4%) were the next most commonly reported. (See Table 6.6.) The foster parenting style might differ if caseworker ratings were used instead of alumni ratings.

As shown in Table 6.6, the majority of alumni reported positive experiences with their foster parents. More than four in five alumni (81.5%) felt loved while in care.

One-third (32.8%) of the sample, however, reported some form of maltreatment by a foster parent or other adult in the foster home during their foster care experience, as recorded in their case files. The maltreatment rate includes reported and substantiated reports of abuse and/or neglect. Although the study used a standardized case record review instrument, these reports were not necessarily screened or assessed by using a consistent standard of proof. Substantiated rates of foster parent maltreatment are generally low. In 2002, substantiated child maltreatment rates were 0.7% for foster care nationally.<sup>56</sup> Nevertheless, it appears that child safety was not ensured at a high level.

Fewer than half of the alumni (45.7%) had a mentor while growing up. Overall, ratings of foster parent helpfulness were evenly distributed across the three rating categories of *a little*, *some*, or *a lot*. A majority of foster parents helped the youth with ethnic identity issues (62.2%).

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**The majority of alumni reported positive experiences with their foster parents. More than four in five (81.5%) felt loved while in care.**

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<sup>55</sup> Baumrind (1995).

<sup>56</sup> [U.S. Department of Health and Human Services (2004a), p. xv]. In the current NSCAW national study of foster care, over 20% of the youth had allegations of maltreatment, but only 0.7% were substantiated or found to be by a foster parent [Kohl, Gibbons, & NSCAW Research Group (2005)].

**Table 6.6 Nurturing and Maltreatment Experiences While in Foster Care**

FOSTER CARE EXPERIENCE		% (SE)
<b>Parenting style of one or both foster parents</b>		
Authoritative		27.4 (1.3)
Authoritarian		15.7 (1.1)
Permissive		14.9 (1.1)
Disengaged		31.0 (1.4)
Other		70.1 (1.4)
<b>Maltreatment while in care</b>		
Some child maltreatment		32.8 (1.4)
Sexual abuse only		3.7 (0.6)
Sexual abuse and other maltreatment		4.0 (0.5)
Physical abuse only		5.6 (0.7)
Physical neglect only		10.1 (0.9)
Physical neglect and physical abuse only		9.4 (0.9)
<b>Nurturing and mentoring</b>		
Mentored while growing up		45.7 (1.5)
<b>Helpfulness of foster parents</b>		
Felt loved while in foster care		81.5 (1.2)
Overall helpfulness of foster parents	A little (1 to 4)	36.0 (1.5)
	Some (5 to 6)	28.1 (1.4)
	A lot (7)	35.9 (1.4)
Foster family helped with ethnic identity		62.2 (1.5)
<i>Sample size: 479</i>		

<sup>a</sup> Percentages add up to more than 100% because of the categorization of parenting styles: (A) If both foster parents had the same parenting style, they are represented once in the appropriate parenting style. (B) If two foster parents had different parenting styles, they are represented in both parenting styles. (C) If only one foster parent was present in the home, one parent is assigned the appropriate parenting style, and the non-present parent is assigned "Other."

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**Fewer than half of the alumni (45.7%) had a mentor while growing up.**

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## VII. OUTCOMES: ALUMNI MENTAL HEALTH

### Mental Health Disorders During the Previous 12 Months

This section reports the mental health functioning of the alumni at the time of the interview, based on CIDI ratings. Most youth enter foster care as a last resort because family support efforts were unsuccessful. These youth have a family history and life experiences that are detrimental to their well-being and safety. The very act of removal from their parents is often traumatic for the youth as well, potentially resulting in post-traumatic stress disorder (PTSD) and creating a sense of hypervigilance because their lives become unpredictable. Therefore, it was hypothesized that a high proportion of alumni would be struggling with mental health problems.<sup>57</sup>

The study compared alumni mental health to general population mental health as measured in the National Comorbidity Study Replication (NCS-R) survey. With only two exceptions (alcohol dependence and anorexia), mental health functioning was significantly poorer for the Northwest alumni than for the general population (see Table 7.1). The absolute and comparative rates of disorder among alumni are consistent with the study's hypothesis. Highlights of the findings include:

- **Overall:** Over half of the alumni (54.4%) had current mental health problems, while less than one-quarter of the general population (22.1%) had current mental health problems.
- **Post-traumatic stress disorder (PTSD):** The prevalence of PTSD within the previous 12 months was significantly higher among alumni (25.2%) than among the general U.S. population (4.0%). As a comparison, American war veterans have lower rates of PTSD (Vietnam: 15%; Afghanistan: 6%; and Iraq: 12% to 13%).<sup>58</sup> PTSD, depression, and social phobia may be the most significant mental health conditions of alumni.
- **Major depression:** The prevalence of major depression within the previous 12 months was significantly higher among alumni (20.1%) than among the general population (10.2%).



<sup>57</sup> See Garland et al. (2000) and Leslie et al. (2003).

<sup>58</sup> See Kulka et al. (1990) and Hoge, Castro, Messer, McGurk, Cotting, & Koffman (2004) for current PTSD rates of American war veterans. (Lifetime rates for veterans are available, but they are not included in this report.) Briere (2004) argues that the incidence of PTSD is difficult to obtain because the clinical data on PTSD often pre-dates the modern PTSD criteria. But some recent data do exist; Kulka, et al. (1990) estimate rates of PTSD for Vietnam theater veterans at 15.2% for males and 8.5% for females (current prevalence), and at 30.6% for males and 26.9% for females (lifetime prevalence). Additionally, new studies of victims of child maltreatment address the topic of PTSD, such as Boney-McCroy & Finkelhor (1996) and McCloskey & Walker (2002).

### Recovery Rates for Mental Health and Substance Abuse Disorders

Recovery was calculated as a 12-month-to-lifetime ratio. Specifically, *recovery* was operationally defined as having experienced symptoms of a mental health problem earlier in the lifetime but not in the past 12 months. (See Table 7.1.) A higher percentage indicates a higher rate of recovery.

Table 7.1 indicates reasonably high rates of recovery for alumni for certain mental health disorders, including alcohol dependence (67.9%) and major depression (51.0%). In contrast, some mental health problems have endured, with lower recovery rates for generalized anxiety disorder (39.6%), PTSD (15.7%), social phobia (26.6%), and bulimia (25.8%). In comparison, recovery rates were significantly higher for the general population on five of the eight mental health outcomes that were tested. There were no significant differences on the other three. In sum, the prevalence of mental health disorders was lower and recovery was higher for the general population.

High rates of mental health disorders such as depression and anxiety have also been found in studies of young adults, age 17 to 19, who were in foster care.<sup>59</sup> The Northwest Alumni Study demonstrates that these disorders persist in older foster care alumni and that the prevalence of PTSD was much higher than in the general population.

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<sup>59</sup> See Brandford & English (2004); Courtney, Terao, & Bost (2004a); and McMillen et al. (2005).

**Table 7.1 Mental Health Functioning: Rates for Lifetime Symptoms, Symptoms in the Past 12 Months, and Lifetime Recovery<sup>a</sup>**

OUTCOME	NORTHWEST ALUMNI			NCS (GENERAL POPULATION)		
	Percentage who had symptoms—lifetime	Percentage who had symptoms within past 12 months	Percentage making recovery	Ages 20 to 33: Percentage who had symptoms—lifetime	Ages 20 to 33: Percentage who had symptoms within past 12 months	Percentage making recovery
<b>CIDI DSM Diagnosis</b>	—	54.4 (2.7)	—	—	22.1 (1.0)*	—
<b>Three or more CIDI diagnoses</b>	—	19.9 (2.3)	—	—	2.9 (0.5)*	—
<b>Major depression episode</b>	41.1 (2.8)	20.1 (2.3)	51.0 (4.5)	19.8 (0.9)*	10.2 (0.6)*	48.3 (2.2)
<b>Panic syndrome</b>	21.1 (2.2)	14.8 (1.9)	30.1 (5.4)	5.0 (0.5)*	3.5 (0.4)*	30.4 (4.7)
<b>Modified social phobia</b>	23.3 (2.5)	17.1 (2.3)	26.6 (5.2)	13.8 (1.0)*	8.8 (0.7)*	36.7 (3.1)*
<b>Generalized anxiety disorder</b>	19.1 (2.4)	11.5 (2.0)	39.6 (7.3)	6.3 (0.5)*	3.2 (0.4)*	49.9 (4.3)*
<b>Alcohol dependence</b>	11.3 (1.2)	3.6 (0.6)	67.9 (4.5)	7.0 (0.6)*	2.5 (0.5)	63.4 (5.4)
<b>Drug dependence</b>	21.0 (2.3)	8.0 (1.8)	61.8 (6.6)	4.2 (0.5)*	0.8 (0.2)*	80.4 (4.8)*
<b>PTSD<sup>b</sup></b>	30.0 (2.5)	25.2 (2.5)	15.7 (2.4)	6.9 (0.6)*	4.0 (0.4)*	41.9 (4.1)*
<b>Anorexia<sup>c</sup></b>	1.2 (0.3)	0.0	100.0	0.4 (0.2)*	0.0	100.0
<b>Bulimia</b>	4.9 (1.4)	3.6 (1.3)	25.8 (1.1)	0.6 (0.1)*	0.3 (0.1)*	48.3 (13.6)*
<b>SF-12 mental health score of 50 or above</b>	—	50.6 (2.8)	—	—	—	—
	<i>Sample size: 479</i>			<i>Sample size: 1601</i>		

\* Indicates a significant difference between the Northwest Alumni and NCS,  $p < .05$ , two-tailed.

<sup>a</sup> Respondents were considered to have recovered if the lifetime occurrence of a mental health symptom was not present in the past 12 months.

<sup>b</sup> The NCS post-traumatic stress disorder (PTSD) section included some additional specific trauma items, but the alumni study version of the CIDI PTSD items included some general questions that were designed to identify potentially traumatic events. The focus was to help the respondent identify at least one event so the focus was on measuring whether the reactions to any of these events constituted PTSD, rather than measuring the number or type of items per se. The measures, therefore, should be comparable.

<sup>c</sup> Anorexia is extremely rare in the general population.



### High School Completion Rates

Children placed in foster care face many challenges in terms of high school completion. Youth experience frequent school changes, which, along with other factors such as learning disabilities and child maltreatment, are associated with academic difficulties.<sup>60</sup> Despite the fact that 65% of the alumni experienced seven or more school changes from elementary through high school, they completed high school at a rate (84.8%) similar to the general population (87.3% for ages 18 to 29)<sup>61</sup> and at a much higher rate than the more conservative national estimate compiled by the Manhattan Institute (70%).<sup>62</sup> (See Table 8.1.)

In spite of their comparable high school completion rates, foster care alumni obtained a GED credential instead of a high school diploma 28.5% of the time, nearly six times the rate of the general populations (5%).<sup>63</sup> While having a GED credential is more beneficial than not completing high school, research data indicate that people who earn a high school diploma are more successful as adults—they are 1.7 times more likely to complete an associate's degree and 3.9 times more likely to complete a bachelor's degree. They also have higher incomes than those with a GED credential.<sup>64</sup>

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**Research data indicate that people who earn a high school diploma are more successful as adults than those who obtain a GED credential.**

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<sup>60</sup> See Ryan & Testa (2004).

<sup>61</sup> National Center on Education Statistics (2003b) U.S. Census Bureau (2000a), p. 1. For some variables, comparative data from the general population are provided. A more appropriate comparison group would be youth who were from chaotic, poor, and socially disorganized families but who were not placed in foster care. As comparative data are located, that information will be incorporated into study comparisons.

<sup>62</sup> Greene & Winters (2005), p. 20.

<sup>63</sup> The national GED completion rate was 5.1% in 2000, and it was 7.8% in 1998 and 1999 when measured in a different manner (National Center on Education Statistics, 2003). Statistics are for those age 18 and older.

<sup>64</sup> Grubb (1999) and Smith (2003).

**Table 8.1 Education Outcomes of the Northwest Alumni**

OUTCOME	% (SE)
<b>High School</b>	
Completed high school—high school diploma or GED credential	84.8 (1.9)
Completed high school—high school diploma	56.3 (2.7)
<b>Postsecondary</b>	
Participated in any type of postsecondary education	42.7 (2.7)
Completed any degree/certificate beyond high school (vocational, B.A., etc.)	20.6 (1.8)
Completed vocational/technical degree	16.1 (1.7)
Currently attending vocational/technical school	3.8 (0.6)
Currently enrolled in college	11.9 (2.1)
Completed a bachelor's or higher degree	1.8 (0.4)
<i>Sample size: 479</i>	

### Postsecondary Enrollment and Completion Rates

Four in ten alumni (42.7%) received some education beyond high school, but only one in five (20.6%) completed a degree or certificate. More specifically, fewer than one in five alumni (16.1%) had completed a vocational degree; this rate increased among alumni who were 25 years or older (21.9%). (See Table 8.1.)

The alumni rate for completing a bachelor's or higher degree (1.8%) was significantly lower than that of the general population (27.5% for 25- to 34-year-olds).<sup>65</sup> For alumni ages 25 and older, the bachelor's completion rate was 2.7%.

The Casey National Alumni Study, which included many older alumni (age 30 to 51) who were placed between 1966 and 1998 in all Casey field offices, also found a high rate of college experience (49.3%), but a fairly low completion rate for a bachelor's degree (10.8%).<sup>66</sup> Both the Northwest Alumni Study and the Casey National Alumni Study did not directly ask alumni why they had not yet completed college. A new study of 19-, 22-, and 25-year-old Casey alumni, however, did include an open-ended question inquiring why young adults dropped out of school. The following themes were identified:

- Emotional, behavioral, or family problems
- Pregnancy
- Need to work for income
- Losing interest in being in school
- Getting kicked out of school<sup>67</sup>

<sup>65</sup> U.S. Census Bureau (2000c), p. 1.

<sup>66</sup> Pecora et al. (2003), p. 28.

<sup>67</sup> White, Holmes, O'Brien, & Pecora (2005).

## IX. OUTCOMES: ALUMNI EMPLOYMENT AND FINANCES



This section presents data related to three areas of economic well-being: homelessness, employment and public assistance, and personal and household finances.

### Homelessness

More than one in five alumni (22.2%) experienced homelessness for one day or more within a year of leaving foster care.<sup>68</sup> (See Table 9.1.) This rate is considerably higher than the rate of homelessness found in a Wisconsin study of alumni 12 to 18 months after they left foster care (12%)<sup>69</sup> and the rate found in a Washington state study of 19- to 20-year-old alumni who had been out of foster care for the past 12 or more months (11%).<sup>70</sup> These rates are all higher than national statistics for the general population, of which approximately 1% is homeless at least once during a year.<sup>71</sup>

### Employment and Public Assistance

The employment rate among the alumni who were eligible for work was 80.1%, which was substantially lower than the national average of 95% for those age 20 to 34. (See Table 9.1.) Many alumni are part of society's large group of marginalized youth who are neither employed nor in school.<sup>72</sup>

About one in six alumni (16.8%) received cash public assistance from TANF (Temporary Aid to Needy Families) or General Assistance at the time of their interview.<sup>73</sup> This rate is more than five times higher than the rate for the general population in 2000 (3%),<sup>74</sup> but lower than what Casey Family Services found in a long-term follow-up study (26%).<sup>75</sup> (See Table 9.1.)

### Finances

Many alumni are experiencing difficulty in finding jobs that pay living wages. Among alumni who were working at the time of their interview, mean income was low. One-third of the alumni (33.2%) lived in households that were at or below the poverty line, three times the national poverty rate.<sup>76</sup> (See Table 9.1.) More alumni also lacked health insurance coverage than the 18- to 44-year-old age group in the general population (33.0% vs. 18%).<sup>77</sup> (See Table 9.1.)

<sup>68</sup> The homelessness question was "Have you ever spent one or more nights homeless?" No further definition was provided to the alumni.

<sup>69</sup> Courtney, Piliavin, Grogan-Kaylor, & Nesmith (2001), p. 710.

<sup>70</sup> Brandford & English (2004), p. 4.

<sup>71</sup> See the 1996 National Survey of Homeless Assistance Providers and Clients [Burt et al. (1999)].

<sup>72</sup> Nelson (2004). The percentage of youth age 16 to 24 who were neither enrolled in school nor working decreased from 16% to 12% between 1986 and 1998, before increasing to 13% in 2002, where it remained in 2003 (see <http://childtrendsdatbank.org>).

<sup>73</sup> Income should be examined in relation to the age of the alumni and the cost of living in the communities where alumni are residing. Those breakdowns have not been completed. All U.S. income benchmark statistics are from the year 2000 U.S. census, which is when most of the interviews were completed.

<sup>74</sup> Public assistance included TANF, food stamps, Supplemental Social Security (SSI), and Medicaid. Percentage of households with reported public assistance income in 1999. [U.S. Census Bureau (2000b), Table DP-3.]

<sup>75</sup> Casey Family Services (1999), p. 13.

<sup>76</sup> The poverty rate for the general population in 2000 was 14.4% for 18- to 24-year-olds and 10.4% for 25- to 34-year-olds. The poverty line 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, 2001a), pp. 2 and 5.

<sup>77</sup> Institute of Medicine (2001), p. 2.

**Table 9.1 Employment and Finances Outcomes of the Northwest Alumni**

OUTCOME	% (SE)
<b>Homelessness</b>	
Homeless for one day or more within a year of leaving care	22.2 (2.1)
<b>Employment and public assistance</b>	
Currently employed or in school	74.0 (2.4)
Employment among those eligible to be in the workforce <sup>a</sup>	80.1 (1.8)
On public assistance after age 18	51.7 (2.8)
Currently receives cash public assistance (AFDC/TANF) <sup>b</sup>	16.8 (2.2)
Alumni household had received public assistance in the past six months	47.8 (2.8)
<b>Finances</b>	
Household income at or below the poverty level	33.2 (2.6)
Household income greater than three times the poverty level	21.3 (2.2)
Has no health insurance	33.0 (2.6)
Owens house or apartment	9.3 (1.6)
<i>Sample size: 479</i>	

<sup>a</sup> Alumni who were not in the workforce included full-time students, homemakers, and people with severe disabilities.

<sup>b</sup> AFDC: Aid to Families with Dependent Children; TANF: Temporary Assistance to Needy Families



## X. SUMMARY OF OUTCOMES



The first research question was “How are youth placed in foster care faring as young adults?” Despite the challenges of child maltreatment, childhood adversity, and placement instability, over 26% of the alumni demonstrated positive outcomes in terms of good mental health, education achievements, employment, or personal income. Many alumni did, however, face significant challenges in these areas, as described below.<sup>78</sup>

- A disproportionate percentage of alumni (54.4%) had mental health problems.
- Incidence of PTSD within the previous 12 months was significantly higher among alumni (25.2%) than among the general U.S. population (4.0%).
- Recovery rates for alumni with a diagnosis of major depression, drug dependence, or alcohol dependence ranged from 51% to 68%.
- Recovery rates in five other mental health areas were lower for alumni than for the general population.
- High school completion rates via a diploma or GED credential were high (89.1% among those 25 years and older).
- Foster care alumni obtained a GED credential instead of a high school diploma at a rate nearly six times (28.5%) the rate of the general population (5%).
- Completion rates for postsecondary education were low (vocational degree: 16.1%; bachelor’s degree: 1.8%).
- Alumni are in fragile economic situations. For example, 33.2% of the alumni had household incomes that were at or below the poverty level, and one-third had no health insurance (33.0%).

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**Many alumni face significant challenges in  
education and employment.**

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<sup>78</sup> Data related to additional outcomes in the domains of physical health, marriage and relationships, and parenting are reported in Pecora et al. (forthcoming) and in papers that will be posted on the alumni study extranet at <http://research.casey.org> (User name: researchguest. Password: caseyguest).

## XI. WHAT WORKS IN ACHIEVING POSITIVE ADULT OUTCOMES

### What Program Changes Could Improve Youth Outcomes?

Child welfare administrators and practitioners want to know the aspects of service delivery that they should improve to maximize success for youth in care. To address this need, this study conducted statistical simulations that estimated the degree to which optimizing certain foster care experiences might affect alumni outcomes.

The first step in the simulation was to create a score for each alumnus in the three major outcome domains that are described in this report—Mental Health, Education, and Employment and Finances. For example, the Education domain outcome score summed the five individual education outcome variables that are listed in Section III, “Data Collection, Measures, and Study Variables.” Scores could range from *zero* (no positive individual education outcomes) to *five* (attained all positive individual education outcomes). The simulation defined the outcome variables so that they were all in a positive direction (e.g., *no* depression in the previous 12 months, high school completion, *not* homeless after foster care, and so on). (Due to space limitations, details of three other outcome domains—Physical Health, Marriage and Relationships, and Parenting—are not included in this report.)

The second step in the simulation was to use the three major outcome domain scores to create a regression equation that would estimate the number of increased positive outcomes that each alumnus would achieve based on the foster care experiences that the alumnus *actually* had in foster care (e.g., time in care, number of schools attended). Next, these foster care experiences were “optimized” in the simulation so that each alumnus had the most *optimal* foster care experience possible (e.g., a *short* time in care, *fewer* number of schools attended). These optimal levels of foster care experience are listed in Table 11.1.

As the last step in the simulation, these optimized variables were then placed into a second regression equation to estimate the number of positive outcomes that could be achieved by using those variables. The change in the number of positive outcomes before and after optimizing the foster care experience variables represents the *anticipated effect* of optimizing these foster care experiences.<sup>79</sup>

The statistical simulation described above was also conducted using all foster care experience areas at once (to estimate the effects of optimizing all areas simultaneously), and on each area individually (to measure the effect of optimizing only a particular area). The latter was done because it is more likely that an agency could implement program changes for one area than for all areas at once.



<sup>79</sup> See Little (1982) for more information on this statistical approach.

**Table 11.1 Program Optimizations by Foster Care Experience Area**

<b>I. Placement History and Experience</b>
Low number of placements (3 or fewer placements)
Low length of time in care (3.5 or fewer years)
Low placement change rate (0.61 or fewer placement changes per year)
No reunification failures
No runaway episodes
No unlicensed living situations with friends or relatives
<b>II. Education Services and Experience</b>
Could participate in, or obtain, supplemental education services and tutoring
Low total number of school changes from elementary through high school (6 or fewer changes)
<b>III. Therapeutic Services and Supports</b>
Could participate <i>a lot</i> in therapeutic services and supports (i.e., high access to services)
<b>IV. Activities with Foster Family</b>
Participated <i>a lot</i> in activities with foster family
<b>V. Preparation for Leaving Care</b>
High degree of preparation for leaving care (3 or more types of preparation) <sup>a</sup>
<b>VI. Resources upon Leaving Care</b>
High amount of resources when leaving care (3 resources) <sup>b</sup>
<b>VII. Foster Family and Other Nurturing Support While in Care</b>
Positive parenting by foster parents
Felt loved while in foster care
Overall, foster parents were helpful (rated a 7 on a 1-to-7 scale)
Foster family helped with ethnic identity issues
Had a mentor while growing up
Low amount of child maltreatment while in foster care (1 or no incidents)

<sup>a</sup> Types of preparation included (1) employment training or job location services; (2) independent training groups or workshops; (3) alumni reporting they were somewhat or very prepared for independent living; and (4) alumni had health insurance at exit.

<sup>b</sup> Resources upon Leaving Care included (1) a driver's license; (2) \$250 in cash; and (3) dishes and utensils.

**Table 11.2 Outcome Domain Scores Before and After Optimization of Foster Care Experience Areas**

OUTCOME DOMAIN	Estimated Outcome Score Before Optimization	Estimated Outcome Score After Optimization of Foster Care Experience Areas (Percentage Decrease in Negative Outcomes)							
		Placement History and Experience	Education Services and Experience	Therapeutic Services and Supports	Foster Family Activities	Preparation for Leaving Care	Resources upon Leaving Care	Foster Family and Other Nurturing Supports	All Variables Optimized
<b>Mental Health</b> (highest possible score: 10)	7.8	8.3 (-22.0)	8.1 (-13.0)	7.9 (-3.1)	7.7 (6.4)	8.0 (-4.9)	— <sup>a</sup>	7.8 (2.2)	8.7 (-38.0)
<b>Education</b> (highest possible score: 5)	2.3	2.8 (-17.8)	—	—	2.4 (-4.2)	—	2.7 (-14.6)	2.1 (7.0)	3.0 (-25.5)
<b>Employment and Finances</b> (highest possible score: 9)	5.2	5.4 (-6.8)	5.4 (-7.2)	5.2 (-1.5)	—	5.3 (-3.0)	5.6 (-12.2)	5.0 (3.2)	6.2 (-27.9)
<b>All Outcomes</b> (highest possible score: 43) <sup>b</sup>	26.0	27.6 (-9.1)	27.2 (-6.6)	26.3 (-1.3)	—	26.1 (-0.5)	27.0 (-5.4)	26.0 (0.0)	29.8 (-22.2)

Note. A negative value in parentheses represents a decrease in the number of undesirable outcomes; a positive value represents an increase in the number of undesirable outcomes.

<sup>a</sup> Dashes [—] designate foster care experience areas that were not optimized because none of the individual variables within the areas significantly predicted the outcomes for the three major outcome domains. Furthermore, although some of the percentages in the parentheses appear negligible, some of the variables within the foster care experience area did significantly predict the outcomes for the domains. However, when examined in combination with other variables within that area, the effects cancelled each other out (i.e., some of the variables within the foster care experience area increase positive outcomes, while others decrease positive outcomes).

<sup>b</sup> This includes major outcome domains that are not included in this report: Physical Health, Marriage and Relationships, and Parenting.

Table 11.2 presents the estimated outcome domain scores before and after the simulated optimizations of the foster care experiences. For example, the Mental Health domain scores before and after optimization of the foster care experience area of *Placement History and Experience* were 7.8 and 8.3, respectively. This represents a 22% decrease in the number of undesirable outcomes (thus, -22% is presented in parentheses). This means that we would expect a 22% reduction in undesirable mental health outcomes if an agency optimized placement characteristics.<sup>80</sup>

<sup>80</sup> This assumes that the associations between placement characteristics and alumni outcomes found in the regression analyses simulations are indeed due to the effects of the placement experiences.

For the Mental Health domain, the estimated number of positive outcomes that were based on observed foster care experience scores was 7.8 (out of 10). When optimized, the foster care experience areas of *Placement History and Experience* and *Education Services and Experience* had a substantial estimated impact on the number of positive mental health outcomes. Optimization of these two experiences would be expected to significantly reduce the number of undesirable mental health outcomes (–22.0% and –13.0%, respectively).

The estimated effects of the remaining program areas on mental health were modest. Optimizing experiences in the area of *Foster Family Activities* was estimated to slightly increase the number of undesirable mental health outcomes by 6.4%—an unexpected finding that is difficult to explain given the positive effects of improving this foster care experience area for other outcomes. The variable driving these results is youth involvement in a high number of activities with foster families. In some cases this may be a strategy to offset child mental health difficulties. Optimizing all foster care experiences simultaneously predicted a dramatic decrease in undesirable mental health outcomes (–38.0%).

For the Education domain, two foster care experience areas were estimated to significantly reduce the number of undesirable outcomes: *Placement History and Experience* and *Resources upon Leaving Care* (–17.8% and –14.6%, respectively). Other effects were modest. Note that optimizing *Foster Family and Other Nurturing Supports* was estimated to result in a 7.0% increase in undesirable outcomes. A dramatic reduction in undesirable education outcomes (–25.5%) was estimated when optimizing all foster care experience areas.

For the Employment and Finances domain, optimizing the *Resources upon Leaving Care* foster care experience area was estimated to significantly reduce the number of undesirable outcomes (–12.2%). The estimated effects of optimizing other foster care experience areas were generally modest. When all foster care experience areas were optimized simultaneously, however, there was a dramatic estimated reduction in undesirable outcomes (–27.9%).

### **Optimizing All Foster Care Experience Areas**

To gauge the effect of optimizing all foster care experience areas, all 43 possible positive outcomes were summed across all six major outcome domains, including Physical Health, Marriage and Relationships, and Parenting. (Due to space limitations, details of these outcome domains are not included in this report.) Consistent with the analyses for the three major outcome domains that are described above, optimizing the foster care experience areas of *Placement History and Experience*, *Education Services and Experience*, and *Resources upon Leaving Care* led to a meaningful estimated reduction in undesirable outcomes across all outcomes (–9.1%, –6.6%, and –5.4%, respectively). When all foster care experience areas were optimized simultaneously, there was a 22.2% reduction in estimated undesirable outcomes across all outcomes.

## XII. RECOMMENDATIONS FOR CHANGES IN SERVICES FOR MENTAL HEALTH, EDUCATION, AND EMPLOYMENT AND FINANCES

The overarching question for all agencies is: What can agencies and communities do to improve outcomes for youth who are currently in care?

To answer this question, the following recommendations are clustered first by the major outcome domains—Mental Health, Education, and Employment and Finances—and then by the sources of the recommendations. The recommendations stem from the basic descriptive outcomes of the study, the foster care experience statistical simulations, and conversations with stakeholders.

The stakeholders included groups of young adults who had been placed in foster care, foster parents, caseworkers, and agency executives, as well as clinical and policy specialists from each of the three collaborating organizations and other public child welfare agencies.<sup>81</sup> The study team asked these stakeholders to help identify the stories behind the numbers and to solidify the study recommendations.

### Mental Health

#### Recommendations Based on Descriptive Outcomes

Comparing alumni mental health diagnoses to those of the general population provided clear evidence of severe mental health problems among alumni. It is critical to examine why mental illness is so prevalent for this group.

1. **Increase youth and alumni access to evidence-based medical and mental health treatment.** This study contributes new findings: PTSD and major depression may be the most far-reaching mental health conditions for alumni in young adulthood. PTSD and depression may contribute to difficulty in gaining or retaining employment, and their prevalence underscores the need to improve mental health in many ways, including the following:
  - a. Reform systems to increase mental health insurance coverage and Medicaid. A disproportionate number of foster care alumni suffer from PTSD, panic syndrome, generalized anxiety, major depression, and drug dependence. Federal and state governments should examine barriers to mental health care—including eligibility requirements that limit access to funding and worker capacity that may be insufficient to treat mental health problems—so that youth in care and alumni have greater access to effective treatment.
  - b. Provide specialized training to Medicaid-funded and other therapists to enable them to properly assess and treat PTSD, depression, social phobia, and other disorders.



<sup>81</sup> These people were chosen as “key informants” because of their past work in designing the study or their familiarity with the study design or early findings.

- c. Expand early and ongoing evidence-based treatment to help alleviate mental health disorders.<sup>82</sup> Treat youth with validated approaches, and validate promising new interventions.
- d. Extend foster care to age 21 to help ensure that the mental health needs of young adults are met through state-funded mental health treatment. Because mental health problems continue into adulthood for many alumni, an age extension through the Chafee Medicaid Option is needed for all alumni whose jobs do not provide coverage. Currently, only about nine states have implemented this option.

### Recommendations Based on Foster Care Experience Statistical Simulations

1. **Help maintain placement stability, which appears to have a large positive effect on adult mental health.** Optimizing the *Placement History and Experience* variables resulted in a decrease in negative mental health outcomes. While many factors influence placement stability,<sup>83</sup> minimizing placement changes while a youth is on his or her way to a permanent living situation warrants greater attention because of the apparent association of fewer changes with fewer mental health problems. Strategies include:
  - a. Strengthen initial placement decisions so that youth are less likely to move.
  - b. Train foster parents in how to implement social learning and other interventions that will minimize placement disruptions.<sup>84</sup>
  - c. Provide opportunities for youth to form positive attachments, and teach them skills for maintaining healthy relationships.
  - d. Continuous relationships with adults can facilitate youth development. If caseworkers help youth form and maintain healthy relationships with birth parents and siblings through regular visits, provide transportation for visits (e.g., bus passes), and provide phone cards while they are in care, youth may be less likely to run away or otherwise need to be moved.
2. **Increase education services and experiences.** Optimizing *Education Services and Experience* (i.e., by providing access to supplemental education services and tutoring and by having a low number of school changes) resulted in a decrease in negative mental health outcomes. Stability and support in the school environment may therefore have a positive effect on adult mental health.

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<sup>82</sup> The field needs more interventions that have been documented as effective by rigorous practice research (Kazdin & Weisz, 2003).

<sup>83</sup> James (2004). Placement disruptions might cause or exacerbate mental health problems. Additional research is required to more clearly specify the relationships among these factors.

<sup>84</sup> Briere (2004); Chamberlain, Moreland, & Reid (1992); Cohen, Mannarino, Zhitova, & Capone (2003); Kazdin & Weisz (2003); and Price & Chamberlain (forthcoming).

## Reactions and Recommendations Based on Conversations with Stakeholders

1. **Improve foster parent orientation and training with respect to youth mental health.** Agencies should provide foster parents with more comprehensive information about how to identify and address mental health difficulties that foster children experience. Training areas include:
  - a. Using a broad developmental context, inform foster parents about difficulties their child may encounter and how they can help manage emotional and behavioral problems.
  - b. Provide advocacy training so that foster parents know what the youth's rights are regarding access to mental health services in their community.
  - c. Increase the availability of respite care services so that foster parents can have a break from caregiving, and timely crisis intervention services to help when problems arise suddenly.
2. **Normalize the level of mental health symptomatology, and provide emotional support to youth in care.** Strategies include:
  - a. Teach youth in foster care to understand that mental health problems are common among maltreated children and that they can be managed with proper support and intervention.<sup>85</sup>
  - b. Encourage youth to grieve at their own pace. Youth need to be allowed to discuss the positive aspects of their birth family and to process their grief over entering foster care.
  - c. Be vigilant about confidentiality concerns. This issue is complicated by the fact that a youth's relationship with his or her therapist may be undermined by information that is shared between the therapist and caseworker and/or foster parents. The youth, therefore, may feel that it is not safe to be open.
3. **Address gaps in caseworker skills.**
  - a. Provide group work and other evidence-based treatment approaches to help youth grieve past losses, understand their thoughts and feelings, and to learn new ways of coping with mental health problems.<sup>86</sup> There has not been an enduring focus on these areas, especially for adolescents.
  - b. Caseworkers and counselors who are largely funded by Medicaid may need support to improve diagnosis and treatment of PTSD, generalized anxiety, and other common mental health disorders.
  - c. Given the higher rate of unmet mental health needs among children of color,<sup>87</sup> integrate culturally responsive mental health services with foster care programs.

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<sup>85</sup> Kendall-Tackett (2003).

<sup>86</sup> Clarke, DeBar, & Lewinsohn (2003) and Kazdin & Weisz (2003).

<sup>87</sup> Ringel & Sturm (2001).

## Education

Although graduation rates were quite high, the rates at which alumni completed high school with a GED credential were disproportionately higher than for the general population. While a considerable number of alumni had begun vocational and college programs, too few were graduating.

### Recommendations Based on Descriptive Outcomes

1. **Encourage youth not to settle for a GED credential.** Those who complete GED testing generally attain lower education levels and earn less than individuals who have high school diplomas. Strategies for increasing the rate at which youth obtain a high school diploma include:
  - a. Examine why GED credentials are more common among foster care alumni. Alumni have suggested that reasons may include mental health disorders (e.g., PTSD, depression, social phobia) and difficulty transferring records when changing schools.<sup>88</sup>
  - b. Make greater efforts to include graduation from high school in service plans.<sup>89</sup>
2. **Support better preparation for, access to, and success in postsecondary education programs.** Caseworkers, foster families, and other stakeholders should encourage young people in foster care to plan for college or vocational school, and support them in being adequately prepared for higher education and training. Inform older youth about local college-preparatory programs, such as GEAR UP, TRIO, and Upward Bound, and help them enroll in these programs.<sup>90</sup>

### Recommendations Based on Foster Care Experience Statistical Simulations

1. **Minimize placement change.** Optimizing the *Placement History and Experience* program area predicted a decrease in negative education outcomes. If youth don't change homes and schools, there is no need to transfer school records, and the youth are less likely to fall behind. Placement instability is a result of poor administrative processes, low agency support of foster parents, and behavioral problems of youth. All of these factors need to be studied and addressed.<sup>91</sup>
2. **Provide concrete resources to youth as they leave care.** Optimizing the *Resources upon Leaving Care* program area resulted in a decrease in negative education outcomes. It may be that having concrete resources such as a driver's license, \$250 in cash, and dishes and utensils results in more financial stability, allowing alumni to pursue their education goals. This foster care experience variable is likely a proxy for a more comprehensive independent living preparation; the value of that training is underscored and is worth investigating further.

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<sup>88</sup> Labor market outcomes among GED credential holders have been shown to be closer to those of noncredentialed high school dropouts than to graduates who hold traditional diplomas. [See Boesel, Alsalam, & Smith (1998); Cameron & Heckman (1993); Maloney (1993); and Smith (2003).] GED credential holders were only half as likely to complete associate's degrees and much less likely to complete bachelor's degrees. In the general population, recipients of high school diplomas are more likely to complete higher education, which provides significant economic benefits: median annual earnings in 2000 among workers ages 25 to 34 years old who had a high school diploma were \$21,627, compared with \$27,176 for those with an associate's degree and \$35,574 for those with a bachelor's degree. [U.S. Census Bureau 2001b. Downloaded January 31, 2005 from <http://www.census.gov/population/socdemo/education/ppi-157/tab08.pdf>. For more information about the income differential for various levels of education, see Grubb (1999).]

<sup>89</sup> The Washington State Public Policy Institute (2004) recently issued a cost-benefit analysis of social programs and argued strongly for investments in helping youth complete high school and plan their careers. Source: <http://www.wsipp.wa.gov/rptfiles/04-07-3901.pdf>. Also see Bos (1995, 1996) and Smith (2003). High school completion is an important milestone. For example, each dropout represents an average loss of \$58,930 in federal and state income taxes during the course of a lifetime. For the 3,881,000 youth between 16 and 24 years old who dropped out of high school in 1991, for example, an estimated \$228.7 billion in tax revenue will be lost over their lifetimes (Weber, 1988).

<sup>90</sup> Casey Family Programs (2003b).

<sup>91</sup> James (2004).

## Reactions and Recommendations Based on Conversations with Stakeholders

1. **Increase the likelihood of completing high school with a diploma.** Alumni have suggested these helpful strategies:
  - a. Improve identification and treatment of mental health problems that may act as barriers to classroom success (e.g., social phobia, depression, and the sleep and attention problems that accompany PTSD).
  - b. Educate school personnel about the challenges that youth in foster care face and the ways that they can advocate for these youth.<sup>92</sup>
  - c. Maintain enrollment in the same school, even if foster home placement changes.
  - d. Provide schooling in alternative schools that have smaller class sizes, nontraditional teaching practices, and more one-on-one instruction.
  - e. Provide mentors and tutors to promote study and career skills. Focus tutoring and skills development in areas of greatest need and at times when the youth may be most receptive to the assistance (e.g., some people are not ready to learn about financial issues at age 14 but are ready at age 17 or 21).
  - f. Advocate for youth enrollment in essential courses, and explore a full range of education options (e.g., classes beyond high school completion).
  - g. Ensure that youth in foster care have maximum access to public school. Place youth in alternative or nonpublic school settings only if it is absolutely necessary. Youth who have left school should receive support in re-enrolling, even if they have turned 18.
2. **Deliver education supports in more timely ways, in part by targeting education outcomes to increase completion of vocational training and college programs.** Ways to enhance these supports include:
  - a. Maximize the use of Chafee funds by state child welfare agencies, if not already maximized.
  - b. Provide Title IV-E education vouchers. (These funds can help youth meet basic needs like housing so that they can focus on their schoolwork.)
  - c. Promote enhanced career planning and support through TRIO and GEAR UP programs.<sup>93</sup>
  - d. Increase the use of existing vocational training and college scholarships.
  - e. Improve the Higher Education Act (HEA) and the Financial Aid Form layout to make it easier for foster care alumni to complete and qualify for special scholarships and loans.<sup>94</sup> (HEA can be a vital strategy for helping youth in foster care access degree programs at both two- and four-year institutions.)
  - f. Encourage more colleges to keep dorms open during holidays and other vacation periods for alumni who have nowhere to go. Stories of alumni with no place to live during college holiday breaks provide stark reminders of the importance of this service. Schools should diligently help alumni make and maintain connections to other adults, such as academic advisors and peer mentors.

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<sup>92</sup> For more resources and information, see *A Road Map for Learning: Improving Educational Outcomes in Foster Care* at [www.casey.org](http://www.casey.org).

<sup>93</sup> For more information about TRIO, GEAR UP, and other higher-education issues, see <http://www.trioprograms.org/abouttrio.html>, <http://www.ed.gov/about/offices/list/ope/trio/index.html>, [www.ed.gov/print/programs/gearup/index.html](http://www.ed.gov/print/programs/gearup/index.html), and Casey Family Programs (2003b).

<sup>94</sup> Casey Family Programs (2003b).

- g. Require the Advisory Committee on Student Financial Assistance to provide recommendations for expanding access for foster care youth to federal financial aid.<sup>95</sup>

Another area the advisory committee might look into is the potential barrier to application of financial aid for “informal” foster care youth—those who are not formally part of the foster care system but live with caregivers other than their birth parents (i.e., in “kinship care”). These youth may be failing to apply for federal financial aid because the application does not have a category for recognizing their special circumstances and includes other categories (e.g., “ward of the state”) that could create confusion. The Free Application for Federal Student Aid (FAFSA) should specifically state that “unusual circumstances not shown on this form” includes kinship care (as it does in the case of “loss of employment”). This modification in the FAFSA form would make it easier for foster care youth in kinship care to demonstrate that they meet the special-circumstances test for financial aid.<sup>96</sup>

- h. Encourage TRIO and GEAR UP programs to make foster care youth a priority. HEA funds outreach programs to prepare disconnected youth for postsecondary education. For example, two federal TRIO programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds to progress through the “academic pipeline.” Talent Search and Upward Bound programs identify, motivate, and support students as they complete secondary school and undertake a program of postsecondary education. Both programs provide a spectrum of services, including assistance in secondary school reentry, entry to GED programs, assistance in completing college admission and financial aid applications, personal and career counseling, instruction, summer housing, and academic tutorials.<sup>97</sup> GEAR UP is a program designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. It provides grants to states and partnerships to provide services at high-poverty middle and high schools. Funds are also used to provide college scholarships to low-income students.<sup>98</sup>

3. **Promote vocational education.** Recommendations include:

- a. Ensure that agency staff, foster parents, and youth are aware of vocational options.
- b. Strengthen agency and youth connections to vocational services through special agreements, internships, and taking youth to potential job sites.

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<sup>95</sup> Casey Family Programs (2003b).

<sup>96</sup> Foster care youth would benefit greatly if these “special analyses and activities” of the advisory committee addressed their special needs and circumstances. For example, the advisory committee might look into how more foster care youth can be encouraged to apply for financial aid and how the application process could be streamlined.

<sup>97</sup> Both TRIO and GEAR UP target disadvantaged students and are extremely important in terms of identifying youth for college awareness opportunities, but neither program specifically emphasizes foster care youth as a population that requires special attention. The reauthorization of HEA should address this issue by identifying services to foster care youth as a “permissible service” in these programs. Foster care youth deserve to receive special attention because they tend to move frequently from school to school, have difficulty learning in a traditional classroom setting, and come from impoverished and broken homes. All these factors make foster care youth very difficult—but especially important—to serve.

<sup>98</sup> The *Opening Doors* national demonstration project of the Manpower Development Research Corporation (MDRC) is testing the following three innovations to improve education outcomes among alumni of foster care: (1) enhanced financial aid to supplement direct and indirect costs; (2) enhanced student services (e.g., stronger academic advising, personal and crisis counseling, career counseling); and (3) curricular and instructional innovations. For more information about the MDRC *Opening Doors* national demonstration project, see [http://www.mdrc.org/project\\_24\\_2.html](http://www.mdrc.org/project_24_2.html).

4. **Extend or eliminate the age limit at which alumni can receive aid from scholarship programs.** Some youth pursue scholarship programs immediately after they emancipate, largely because such programs may not be available to them later. Alumni have suggested that this may be a setup for failure, given that short-term access to scholarships may compel them to begin postsecondary schooling before they are emotionally, socially, and economically ready.

## Employment and Finances

### Recommendations Based on Descriptive Outcomes

1. **Strengthen housing programs and other supports to prevent homelessness after leaving care.**
  - a. Perform further research about what factors might prevent homelessness.
  - b. Encourage youth to pursue lifelong relationships with foster parents and other supportive adults so that the youth have a place to go during difficult times. This may require after-care supports for the foster parents to help support this key activity.
  - c. Reform systems to strengthen transitional housing and public/community housing systems. Government agencies can work with local Section 8 landlords to help allocate apartments for low-income foster care alumni.<sup>99</sup> As with other groups whose special needs have been recognized (such as battered women), alumni would benefit from new housing models that provide not only housing subsidies but also home-based case management or other adult guidance (e.g., Scattered-Site, sober living,<sup>100</sup> Master-Lease Models, and HUD, HOME, and Section 8 housing assistance).
2. **Overhaul independent living preparation.** As evidenced by the uneven findings for employment preparation, life skills preparation, education, and income, alumni varied widely in their level of readiness for emancipation from foster care.
  - a. Federal and state funds are being spent on a variety of untested life skills training, employment services, and education supports. Redirect these funds to the most promising programs, and rigorously evaluate them.<sup>101</sup>
  - b. For every youth, develop a comprehensive transition development plan that includes planning for supportive relationships, community connections, education, life skills assessment and development, identity formation, housing, employment experience, physical health, and mental health.<sup>102</sup>
  - c. Increase youth access to Individual Development Accounts (IDAs), special “youth opportunity passports,” and asset-accumulation strategies like debit accounts.<sup>103</sup>
  - d. Implement “booster session” programs that provide a toll-free phone number and various fallback services to alumni after they turn 21. This service could also include ongoing access to special job or housing search help well beyond the current age limitations.

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<sup>99</sup> Choca et al. (2004) and Van Leeuwen (2004).

<sup>100</sup> See Polcin (2001).

<sup>101</sup> Clark & Davis (2000); Massinga & Pecora (2004); and Shirk & Stangler (2004).

<sup>102</sup> Casey Family Programs (2001); Massinga & Pecora (2004); and Mech (2003).

<sup>103</sup> See Jim Casey Youth Opportunities Initiative at [www.jimcaseyouth.org](http://www.jimcaseyouth.org).

## Recommendations Based on Foster Care Experience Statistical Simulations

1. **Minimize placement change.** Optimizing the *Placement History and Experience* program area decreased negative employment and finances outcomes. Having fewer placement changes may allow youth in care to develop better social support networks, which can assist in finding employment and can serve as a safety net when a youth encounters financial difficulties.
2. **Optimize education services and experiences.** Optimizing the *Education Services and Experiences* program area decreased negative outcomes. Having better school experiences may lead to better education outcomes, which in turn can improve employment and finances.
3. **Provide youth who are exiting care with concrete resources.** The study's optimization of the *Resources upon Leaving Care* program area indicated that having a critical mass of such resources is important (e.g., a driver's license, \$250 in cash, dishes and utensils).

## Reactions and Recommendations Based on Conversations with Stakeholders

1. **To lower rates of homelessness and unemployment, consider a range of permanency options to help youth establish lifelong connections.** Strategies include:
  - a. Expand permanency options to include guardianship, placement with family members, ways of maintaining connections with foster parents, and other forms of permanent connections that are most appropriate for each child or adolescent.<sup>104</sup>
  - b. Promote strong family and social support networks to help buffer stress and provide concrete support such as employment leads, financial advice, and other assistance.<sup>105</sup> Support youth to connect to birth and extended family members in a positive way, even if they are unable to live with them.
  - c. Continuously revisit the option to be adopted throughout foster care—right up through discharge and beyond.
2. **Begin life skills training and employment opportunities at an earlier age, with repeated exposures.**
  - a. Provide youth in high school with the tutoring and employment experience they need to show them that education and vocational training do matter when it comes to earning a living wage. (This may require changes in some aspects of the Child Labor Act, because it limits employment opportunities for youth.)<sup>106</sup> At the same time, avoid involving youth in employment before they are fully able to discern how to handle the relationships that may develop with older staff and customers.<sup>107</sup>

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<sup>104</sup> Brooks (1994); Casey Family Programs (2003a); Geen (2004); Grizenko & Pawliuk (1994); Rutter (1987, 2000); and Werner (1993).

<sup>105</sup> Chaskin (2000) and Geen (2004).

<sup>106</sup> Williams, Stenslie, Abdullah, Grossman, & Shinn (2002).

<sup>107</sup> Some caution is warranted in making sure the employment experience is properly supervised. There are compelling findings from Steinberg and others that exposing young children to these low-wage jobs also exposes them to people (ages 19 to 23) who have cars, apartments, and drugs—some of these people are the children's higher-status shift managers [Steinberg & Avenevoli (1998) and Steinberg & Cauffman (1995)].

- b. Provide youth who are preparing to emancipate with greater access to experiential life skills training (for example, employment and driver's education), in addition to classroom-based training. The MacArthur Foundation transition scholars have documented that major American institutions have not kept pace with societal changes to remove barriers to youth transition to adulthood.<sup>108</sup>
  - c. Prioritize employment preparation, skill development, and employment experience in all independent living programs. Ensure that no young person leaves foster care without substantial employment experience.
  - d. Improve coordination between child welfare and local workforce board-sponsored employment programs. Youth in foster care are a priority population to be served by workforce programs.
  - e. Provide on-the-job training experiences in addition to classroom training.
  - f. Expand the number of jobs that are available to youth in care via special agreements with local employers, stipends, summer internships, and other strategies.
  - g. Establish mentoring programs that connect youth with individuals who can help them achieve better education and employment outcomes.
3. **Help youth find and pay for transportation options to help them get to work.**
- a. Help youth overcome obstacles in obtaining a driver's license and car insurance. Very often, affordable auto insurance for youth is contingent on having an adult (usually a parent) as the primary policy holder. Develop strategies for youth who cannot be added to an adult's policy. Youth and alumni report that they are often not allowed to drive due to liability concerns, making it difficult to get to job interviews or to work on time.
  - b. Provide subsidized or free passes for public transportation.
4. **Decrease youth dependence on agency staff and foster parents when it undermines their ability to succeed independently.** The sobering employment and income findings underscore the need to be vigilant about the special needs of youth and the progress that they are making toward independent living. Providing everything for a youth may not build the personal discipline and self-reliance needed for later success. Foster parents and caseworkers need to prepare youth to be able to negotiate the systems they encounter by providing life skills training, on-the-job coaching, and other means.

### Summary

According to stakeholders and research data, encouraging youth to establish lifelong connections may have the greatest implication for the overall well-being of foster youth. These connections promote social and emotional functioning, as well as improve employment and financial outcomes.

Overall, in the statistical simulations of the foster care experience, optimizing certain program areas can lead to the best estimates of alumni outcomes—so striving to achieve the best situation on these key program components and foster care experience variables in all domains is a worthwhile goal.

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<sup>108</sup> See <http://www.pop.upenn.edu/transad/index.htm> for the reports from The Network on Transitions to Adulthood (MacArthur Foundation).



### New Research Questions

The Northwest Alumni Study raised a number of questions that *new* research should address around the following issues:

1. **PTSD and other mental health problems.** Given the high prevalence of PTSD and other mental health disorders among alumni, what are the rates for these problems among youth who are currently in foster care? What aspects, if any, of the placement experience may intensify PTSD? What clinical interventions and other supports might be most useful for reducing those rates? What psychotropic medications are being prescribed, and with what effects?
2. **Intervention improvements to life-skills development.** Which strategies work best for certain groups of youth and communities? The field needs random assignment or quasi-experimental tests of the most promising approaches. Evaluations should be supplemented by intensive case studies to capture contextual nuances and key implementation issues.
3. **Child attachments.** Low rates of placement change facilitate enduring positive relationships with adults, which have been identified as strong predictors of positive adult outcomes. To what extent do youth who are currently in foster care have attachment disorders? What factors help youth build and maintain positive attachments? How does placing siblings together, or providing regular sibling contact, affect this attachment process?
4. **Cultural identity and other personal identity issues.** The long-term effects of identity issues, including sexual identity, have rarely been studied in child welfare. Recent research studies of Casey youth in foster care underscore the importance of cultural identity for youth adjustment and behavior.<sup>109</sup> What are the dynamics of this developmental process? What practical steps can caseworkers and foster parents take to encourage positive growth?

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<sup>109</sup> McCubbin, Anctil, Anderson, O'Brien, Pecora, & Day (under review) and O'Brien, Pecora, Terasawa-Davis, & Curtis (under review).

## Conclusion

In contrast to what is portrayed in the media and many research reports, some youth who are placed in foster care benefit from the protection, emotional care, and services provided to them while they are in care. Through a complex set of analyses, the Northwest Alumni Study explored the strengths and achievements of young adults who have overcome child maltreatment, family instability, school disruptions, and other challenges to become self-sufficient members of their communities across the United States.

At the same time, the study documented the inability of service delivery systems to help some alumni secure and maintain jobs that pay a living wage and provide health insurance, and to complete vocational training or education. Through statistical simulations, the study also identified program areas that, when optimized by Casey and state agencies, hold the greatest promise for improving the outcomes for youth in care. Rigorous field trials are important next steps in confirming these simulated findings. To help support these reforms, state agency administrators see value in pursuing Council on Accreditation practice and caseload standards.

Federal initiatives are beginning to identify common demographics, a census of children served, common performance indicators, and benchmark standards for foster care.<sup>110</sup> This standard-setting process would be bolstered by additional research that identifies the types of services and in-case program performance levels that are linked with positive adult outcomes.

Finally, many of the needed improvements will be more successful if they are anchored in larger structural *and* community-based reforms that involve the private and public sectors, including neighborhood associations, faith-based organizations, Parent Teacher Associations, and local businesses.<sup>111</sup>

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**Encouraging youth to establish lifelong connections may have the greatest implication for the overall well-being of foster youth.**

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<sup>110</sup> U.S. Department of Health and Human Services (2003).

<sup>111</sup> Bass, Shields, & Berman (2004); Lindsey (2004); Lindsey & Schwartz (2004).

## XIV. REFERENCES

- American Association for Public Opinion Research. (2005). *Standard definitions: Final dispositions of case codes and outcome rates for surveys*. Ann Arbor, MI: AAPOR. <http://www.aapor.org>.
- American Humane Association, Children's Division, American Bar Association, Center on Children and the Law, Annie E. Casey Foundation & Casey Family Services. (1998). *Assessing outcomes in child welfare services: Key philosophical principles, concepts for measuring results, and core outcome indicators*. Englewood, CO: American Humane Association, Children's Division.
- Baumrind, D. (1995). *Child maltreatment and optimal caregiving in social contexts (Vol. 1)*. Michigan State University series on children, youth, and families.
- Barnett, D., Manly, J. T., & Cicchetti, D. (1993). Defining child maltreatment: The interface between policy and research. In D. Cicchetti and S. Toth (Eds.) *Child abuse, child development and social policy*. Norwood, NJ: Ablex Publishing Corporation.
- Bass, S., Shields, M. K., & Berman, R. E. (2004). Children, families and foster care: Analysis and recommendations. *The Future of Children*, 14(1), 5–29. [www.futureofchildren.org](http://www.futureofchildren.org).
- Berrick, J. D., Needell, B., Barth, R. B., & Johnson-Reid, M. (1998). *The tender years: Toward developmentally sensitive child welfare services for very young children*. New York: Oxford University Press.
- Besharov, D. J., & Hanson, K. W. (1994). *When drug addicts have children: Reorienting child welfare's response*. Washington, D.C.: Child Welfare League of America.
- Bess, R., & Scarcella, R. (2005). *Child welfare spending during a time of fiscal stress*. Washington, D.C.: The Urban Institute. Downloaded February 2, 2005 from: <http://www.urban.org/Template.cfm?NavMenuID=24&template=/TaggedContent/ViewPublication.cfm&PublicationID=9142>.
- Biehal, N., & Wade, J. (1996). Looking back, looking forward: Care leavers, families and change. *Children and Youth Services Review*, 18, 425–446.
- Boesel, D., Alsalam, N., & Smith, T. M. (1998). *Educational and labor market performance of GED recipients*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Boney-McCroy, S., & Finkelhor, D. (1996). Is youth victimization related to trauma symptoms and depression after controlling for prior symptoms and family relationships? A longitudinal, prospective study. *Journal of Consulting and Clinical Psychology*, 64, 1406–1416.
- Bos, J. M. (1995). *The labor market value of remedial education: Evidence from time series data on an experimental program for school dropouts*. New York: Doctoral dissertation, New York University.
- Bos, J. M. (1996). *Effects of education and educational credentials on the earnings of economically disadvantaged young mothers*. New York: Manpower Demonstration Research Corporation, Working Paper, December 1996.
- Brandford, C., & English, D. (2004). *Foster youth transition to independence study*. Seattle, WA: Office of Children's Administration Research, Washington Department of Social and Health Services.
- Braitman, L. E., & Rosenbaum, P. R. (2002). Comparing treatments using comparable groups of patients. *Annals of Internal Medicine*, 137(8), 693–695.
- Briere, J. (2004). *Psychological assessment of adult posttraumatic states: Phenomenology, diagnosis, and measurement*. Washington, D.C.: American Psychological Association (Second Edition).
- Brooks, R. B. (1994). Children at risk: Fostering resilience and hope. *American Journal of Orthopsychiatry*, 64, 545–553.
- Buehler, C., Orme, J. G., Post, J., & Patterson, D. (2000). The long-term correlates of family foster care. *Children and Youth Services Review*, 22(8), 595–625.
- Burt, M. R., Aron, L. Y., Douglas, T., Valente, J., Lee, E., & Iwen, B. (1999). *Homelessness: Programs and the people they serve summary report: Findings of the national survey of homeless assistance providers and clients*. Washington, D.C.: Urban Institute. [http://www.huduser.org/publications/homeless/homelessness/ch\\_3c.html](http://www.huduser.org/publications/homeless/homelessness/ch_3c.html).

- Cameron, S. V., & Heckman, J. J. (1993). The nonequivalence of high school equivalents. *Journal of Labor Economics*, 11(1), 1–47.
- Casey Family Programs. (2001). *It's my life: A framework for youth transitioning from foster care to successful adulthood*. Seattle, WA: Casey Family Programs.
- Casey Family Programs (2003a). *Family, community, culture: Roots of permanency—A conceptual framework on permanency from Casey Family Programs*. Seattle, WA: Author.
- Casey Family Programs (2003b). *Higher education reform: Incorporating the needs of foster youth*. Seattle, WA: Author.
- Casey Family Services. (1999). *The road to independence: Transitioning youth in foster care to independence*. Shelton, CT: Author. [www.caseyfamilyservices.org](http://www.caseyfamilyservices.org).
- Chamberlain, P., Moreland, S., & Reid, K. (1992). Enhanced services and stipends for foster parents: Effects on retention rates and outcomes for children. *Child Welfare*, 5, 387–401.
- Chaskin, R. J. (2000). *Building community capacity*. Piscataway, NJ: Aldine-Transaction Books.
- Chernoff, R., Combs-Orme, T., Risley-Curtiss, C., & Heisler, A. (1994). Assessing the health status of children entering foster care. *Pediatrics*, 93(4), 594–601.
- Chibnall, S., Dutch, N., Jones-Harden, B., Brown, A., Gourgine, R., Smith, J., et al. (2003). *Children of color in the child welfare system: Perspectives from the child welfare community*. Washington, D.C.: U.S. Department of Health and Human Services Administration for Children and Families Children's Bureau, Administration for Children and Families.
- Child Welfare League of America. (2003). *Making children a national priority: A framework for community action*. Washington, D.C.: Author.
- Choca, M. J., Minoff, J., Angene, L., Byrnes, M., Kenneally, L., Norris, D., Pearn, D., & Rivers, M. (2004). Can't do it alone: Housing collaborations to improve foster youth outcomes. *Child Welfare*, 83(5), 469–492.
- Clark, H. B., & Davis, M. (2000). *Transition to adulthood: A resource for assisting young people with emotional or behavioral difficulties*. Baltimore, MD: Paul H. Brookes.
- Clarke, G. N., DeBar, L. L., & Lewinsohn, P. M. (2003). Cognitive-behavioral group treatment for adolescent depression. In A. E. Kazdin (Ed.), *Evidence-based psychotherapies for children and adolescents* (pp. 120–134). New York, NY: Guilford Press.
- Clausen, J. M., Landsverk, J., Ganger, W., Chadwick, D., & Litrownik, A. (1998). Mental health problems of children in foster care. *Journal of Child & Family Studies*, 7(3), 283–296.
- Cohen, J. A., Mannarino, A. P., Zhitova, A. C., & Capone, M. E. (2003). Treating child abuse-related posttraumatic stress and comorbid substance abuse in adolescents. *Child Abuse & Neglect*, 27(12), 1345–1365.
- Cook, R. (1992). Are we helping foster care youth prepare for the future? *Children and Youth Services Review*, 16(3/4), 213–229.
- Coulling, N. (2000). Definitions of successful education for the “looked after” child: A multi-agency perspective. *Support of Learning*, 12(1), 30–36.
- Courtney, M., Piliavin, I., Grogan-Kaylor, A., & Nesmith, A. (2001). Foster youth transitions to adulthood: A longitudinal view of youth leaving care, *Child Welfare*, 80, 685–717.
- Courtney, M. E., Terao, S., & Bost, N. (2004a). *Midwest evaluation of the adult functioning of former foster youth: Conditions of youth preparing to leave state care*. Chicago, IL: Chapin Hall Center for Children at the University of Chicago.
- Courtney, M. E., Terao, S., & Bost, N. (2004b). *Midwest evaluation of the adult functioning of former foster youth: Conditions of youth preparing to leave state care in Illinois*. Chicago, IL: Chapin Hall Center for Children at the University of Chicago.

- Curtis, P. A., Dale, G., Jr., & Kendall, J. C. (Eds.). (1999). *The foster care crisis: Translating research into policy and practice*. Lincoln, NE: University of Nebraska Press.
- Fanshel, D., Finch, S. J., & Grundy, J. F. (1990). *Foster children in a life course perspective*. New York, NY: Columbia University Press.
- Fanshel, D., & Shinn, E. B. (1978). *Children in foster care: A longitudinal investigation*. New York, NY: Columbia University Press.
- Festinger, T. (1983). *No one ever asked us. A postscript to foster care*. New York, NY: Columbia University Press.
- Ford, B. M. (1983). An overview of hot-deck procedures. *Incomplete Data in Sample Surveys, Vol. 2*. New York, NY: Academic Press.
- Fromm, S. (2001). *Total estimated cost of child abuse and neglect in the United States—Statistical evidence*. (Technical Report) New York, NY: Edna McConnell Clark Foundation.
- Garland, A. F., Hough, R. L., Landsverk, J. A., McCabe, K. M., Yeh, M., Ganger, W. C., et al. (2000). Racial and ethnic variations in mental health care utilization among children in foster care. *Children's Services: Social Policy, Research, & Practice, 3*(3), 133–146.
- Geen, R. (2004). The evolution of kinship care policy and practice. *Future of Children, 14*(1), 130–149.
- Goerge, R., Wulczyn, F., & Fanshel, D. (1994). A foster care research agenda for the 90's. *Child Welfare, 73*(5), 525–547.
- Greene, J. P. & Winters, M. A. (2005). *Public high school graduation and college-readiness rates: 1991–2002*. New York, NY: Manhattan Institute. Downloaded February 15, 2005, from: [http://www.manhattan-institute.org/pdf/ewp\\_08.pdf](http://www.manhattan-institute.org/pdf/ewp_08.pdf).
- Grizenko, N., & Pawliuk, N. (1994). Risk and protective factors for disruptive behavior disorders in children. *American Journal of Orthopsychiatry, 64*, 534–544.
- Grubb, W. N. (1999). *Learning and earning in the middle: The economic benefits of sub-baccalaureate education*. New York, NY: Community College Research Center.
- Hill, R. B. (2001). *The role of race in foster care placements*. Paper presented at The Race Matters Forum sponsored by the University of Illinois at Urbana-Champaign, January 9–10, 2001.
- Hines, A. M., Lemon, K., Wyatt, P., & Merdinger, J. (2004). Factors related to the disproportionate involvement of children of color in the child welfare system: A review and emerging themes. *Children and Youth Services Review, 26*, 507–527.
- Hislop, F. H., Wulczyn, K. B., & Goerge, R. M. (2000). *Foster care dynamics 1983–1998. A report from the multi-state foster care data archive*. Chicago, IL: Chapin Hall Center for Children.
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine, 351*(1), 13–22.
- Horowitz, S. M., Simms, M. D., & Farrington, R. (1994). Impact of developmental problems on young children's exits from foster care. *Journal of Developmental & Behavioral Pediatrics, 15*(2), 105–110.
- Institute of Medicine. (2001). *Coverage matters: Insurance and health care*. Retrieved January 21, 2005, from <http://www.iom.edu/includes/dbfile.asp?id=4147>.
- James, S. (2004). Why do foster care placements disrupt? An investigation of reasons for placement change in foster care. *Social Service Review, 78*(4), 601–627.
- Kazdin, A. E. & Weisz, J. R. (2003). *Evidence-based psychotherapies for children and adolescents*. New York, NY: Guilford.
- Kendall-Tackett, K. (2003). *Treating the lifetime health effects of childhood victimization*. Kingston, NJ: Civic Research Institute.

- Kessler, R. C. (1991). The National Comorbidity Survey. *DIS Newsletter*, 7, 1–2.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., et al. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *Journal of the American Medical Association*, 289(23), 3095–3105.
- Kessler, R. C., & Magee, W. (1994). Childhood family violence and adult recurrent depression. *Journal of Health and Social Behavior*, 35, 13–27.
- Kessler, R. C. & Üstün, T. B. (2004). The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). *International Journal of Methods in Psychiatric Research*, 13(2), 93–121.
- Kessler, R. C., & Walters, E. E. (2002). The National Comorbidity Survey. In M. T. Tsuang, M. Tohen, & G. E. P. Zahner (Eds.), *Textbook in Psychiatric Epidemiology* (2nd ed., pp. 343–361). New York, NY: John Wiley and Sons.
- Kohl, P. L., Gibbons, C. B., & Green, R. L. (2005, January 16). Findings from the National Survey of Child and Adolescent Well-Being (NSCAW): Applying innovative methods to understanding services and outcomes for maltreated children; Paper presented at the Society for Social Work and Research, Miami, FL.
- Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, B. K., Marmar, C. R., et al. (1990). *Trauma and the Vietnam War generation*. New York, NY: Brunner/Mazel.
- Lau, A. S., Leeb, R. T., English, D. J., Graham, C., Briggs, E. C., Brody, K. E., et al. (in press). What's in a name? A comparison of methods for classifying predominant type of maltreatment. *Child Abuse and Neglect*.
- Landsverk, J., Davis, I., Garland, A., Hough, R., Litrovnik, A., & Price, J. (1995). *A developmental framework for research with victims of child maltreatment placed in foster care*. San Diego, CA: Center for Research on Child and Adolescent Mental Health Services, Children's Hospital.
- Leslie, L. K., Hurlburt, M. S., Landsverk, J., Rolls, J. A., Wood, P. A., & Kelleher, K. J. (2003). Comprehensive assessments for children entering foster care: A national perspective. *Pediatrics*, 112(1 Pt 1), 134–142.
- Lindsey, D. (2004). *The welfare of children*. New York, NY: Oxford University Press.
- Lindsey, D., & Schwartz, I. M. (2004). Advances in child welfare: Innovations in child protection, adoptions and foster care. *Children and Youth Services Review*, 26(11), 999–1005.
- Little, R. J. (1982). Direct standardization: A tool for teaching linear models for unbalanced data. *The American Statistician*, 36, 38–43.
- Maloney, T. (1993). *Will a secondary education increase the earnings of female dropouts?* Working paper. Auckland, New Zealand: Department of Economics, University of Auckland.
- Massinga, R., & Pecora, P. J. (2004). Providing better opportunities for older children in the child welfare system. *The Future of Children* 14(1), 151–173. <http://www.futureofchildren.org>.
- McCloskey, L. A., & Walker, M. (2002). Posttraumatic stress in children exposed to family violence and single-event trauma. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 108–115.
- McCubbin, L., Anctil, T., Anderson, C., O'Brien, K., Pecora, P. J., & Day, K. (under review). *The effects of kinship placement, racial matching and foster parent support on racial identity and self esteem among foster care alumni of color*.
- McDonald, T. P., Allen, R. I., Westerfelt, A., & Piliavin, I. (1996). *Assessing the long-term effects of foster care: A research synthesis*. Washington, D.C.: Child Welfare League of America.
- McMillen, J. C., Zima, B. T., Scott, L. D., Auslander, W. F., Munson, M. R., Ollie, M. T., et al. (2005). Prevalence of psychiatric disorders among older youths in the foster care system. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(1), 88–95.
- Mech, E. V. (2003). *Uncertain futures: Foster youth transition to adulthood*. Washington, D.C.: Child Welfare League of America.

- Minty, B. (1999). Annotation: Outcomes in long-term foster family care. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 40(7), 991–1001.
- National Center on Education Statistics. (2003a). *Distribution of 18- to 29-year-olds, by high school completion status and selected characteristics: 1997 to 1999*. <http://nces.ed.gov/programs/digest/d02/dt107.asp>.
- National Center on Education Statistics. (2003b). Table 107.—Distribution of 18-to 29-year-olds, by high school completion status and selected characteristics: 1998 to 2000. Downloaded March 21, 2005, from <http://nces.ed.gov/programs/digest/d01/tables/PDF/table107/pdf>.
- Nelson, D. (2004). Moving youth from risk to opportunity. In *The 2004 KIDS COUNT Data*, Baltimore, MD: Annie E. Casey Foundation. <http://www.aecf.org/kidscount>.
- O'Brien, K., Pecora, P. J., Terasawa-Davis, C., & Curtis, A. (under review). *The relationship between cultural identification, family adjustment and emotional health for youth in foster care*. Seattle: Casey Family Programs.
- Pecora, P. J., Kessler, R. C., Williams, J., Downs, A. C., English, D., & White, J. (forthcoming). *What works in foster care?* Oxford, England: Oxford University Press.
- Pecora, P. J., Whittaker, J. K., Maluccio, A. N., Barth, R., & Plotnick, P. R. (2000). *The child welfare challenge: Policy, practice, and research (2nd ed.)*. Piscataway, NJ: Aldine-Transaction Books.
- Pecora, P. J., Williams, J., Kessler, R. C., Downs, A. C., O'Brien, K., Hiripi, E., et al. (2003). *Assessing the effects of foster care: Early results from the Casey National Alumni Study*. Seattle, WA: Casey Family Programs.
- Pew Commission on Children in Foster Care. (2004). *Fostering the future: Safety, permanence and well-being for children in foster care*. Pew Charitable Trusts. Downloaded June 8, 2004, from [http://www.pewtrusts.com/pdf/foster\\_care\\_final\\_051804.pdf](http://www.pewtrusts.com/pdf/foster_care_final_051804.pdf).
- Polcin, D. L. (2001). Sober living houses: Potential roles in substance abuse services and suggestions for research. *Substance Use and Misuse*, 36(3), 301–311.
- Price, J., & Chamberlain, P. (forthcoming). *Enhancing support and parenting skills for foster parents: Effects on child behavior problems and placement disruption rates*. Eugene, OR: University of Oregon, Oregon Social Learning Center.
- Reilly, T. (2003). Transition from care: Status and outcomes of youth who age out of foster care. *Child Welfare*, 82(6), 727–746.
- Ringel, J. S., & Sturm, R. (2001). National estimates of mental health utilization and expenditures for children in 1998. *Journal of Behavioral Health Services & Research*, 28(3), 319–333.
- Robins, L. N., Wing, J., Wittchen, H. U., Helzer, J. E., Babor, T. F., Burke, J., et al. (1989). The Composite International Diagnostic Interview: An epidemiologic instrument suitable for use in conjunction with different diagnostic system and in different cultures. *Archives of General Psychiatry*, 45, 1069–1077.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57, 316–331.
- Rutter, M. (2000). Psychosocial influences: Critiques, findings, and research needs. *Development and Psychopathology*, 12, 375–405.
- Ryan, J., & Testa, M. (2004). *Child maltreatment and juvenile delinquency: Investigating the role of placement and placement instability*. Champaign-Urbana, IL: University of Illinois at Urbana-Champaign School of Social Work, Children, and Family Research Center.
- Shirk, M., & Stangler, G., (2004). *On their own: What happens to kids when they age out of the foster care systems*. Boulder, CO: Westview Press.
- Silver, J., DiLorenzo, P., Zukoski, M., Ross, P. E., Amster, B. J., & Schlegel, D. (1999). Starting young: Improving the health and developmental outcomes of infants and toddlers in the child welfare system. *Child Welfare*, 78(1), 148–165.

- Smith, T. M. (2003). Who values the GED? An examination of the paradox underlying the demand for the general educational development credential. *Teacher's College Record*, 105(3), 375–415.
- Steinberg, L. & Avenevoli, S. (1998). Disengagement from school and problem behavior in adolescence: A developmental-contextual analysis of the influences of family and part-time work. In R. Jessor & M. Chase (Eds.), *New perspectives on adolescent risk behavior* (pp. 392-424). New York, NY: Cambridge University Press.
- Steinberg, L., & Cauffman, E. (1995). The impact of school-year employment on adolescent development. In R. Vasta (Ed.), *Annals of child development*, Volume 11 (pp. 131-166). London, England: Jessica Kingsley Publishers.
- U.S. Census Bureau (2000a). *Percent of high school and college graduates of the population 15 years and over, by age, sex, race, and Hispanic origin: March 2000*. (Table 1a.) Washington, D.C.: Author. Downloaded February 10, 2005, from: <http://www.census.gov/population/socdemo/education/p20-536/tab01a.pdf>.
- U.S. Census Bureau (2000b). *Profile of selected economic characteristics: 2000*. (March 2001 Current Population Survey: Table DP-3.) Washington, D.C.: Author. [http://factfinder.census.gov/bf/\\_lang=en\\_vt\\_name=DEC\\_2000\\_SF3\\_U\\_DP3\\_geo\\_id=01000US.html](http://factfinder.census.gov/bf/_lang=en_vt_name=DEC_2000_SF3_U_DP3_geo_id=01000US.html).
- U.S. Census Bureau. (2000c). *Educational attainment by sex: 2000* (Table QT-P20.) <http://factfinder.census.gov/>.
- U.S. Census Bureau. (2001a). Poverty status of people by selected characteristics in 2000. *Current population survey, March 2001*. Washington, D.C.: Author. [http://pubdb3.census.gov/macro/032001/pov/new01\\_001.htm](http://pubdb3.census.gov/macro/032001/pov/new01_001.htm).
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau (1998). *Child maltreatment 1996: Reports from the states to the national child abuse and neglect data system*. Washington, D.C.: U.S. Government Printing Office. <http://www.acf.hhs.gov/programs/cb/publications/ncands96/index.htm>.
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau (1999). *Child maltreatment 1997: Reports from the states to the national child abuse and neglect data system*. Washington, D.C.: US Government Printing Office. <http://www.acf.hhs.gov/programs/cb/publications/ncands97/index.htm>.
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau (2003). *Child welfare outcomes 2001: Annual report to Congress*. Washington, D.C.: U.S. Government Printing Office. <http://www.acf.dhhs.gov/programs/cb/publications/cwo01/chapters/executive.htm>.
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau (2004a). *Child maltreatment 2002*. Washington, D.C.: U.S. Government Printing Office. <http://www.acf.hhs.gov/programs/cb/publications/cm02/cm02.pdf>.
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau. (2004b). *The AFCARS Report—Preliminary FY 2002 estimates as of August 2004*. Washington, D.C.: Author. Downloaded February 2, 2005, from <http://www.acf.hhs.gov/programs/cb/publications/afcars/report9.htm>.
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau. (2005). *AFCARS—Adoption and Foster Care Analysis and Reporting System: Trends in foster care and adoption*. Washington, D.C.: Author. Downloaded February 2, 2005, from <http://www.acf.hhs.gov/programs/cb/dis/afcars/publications/afcars.htm>.
- Van Leeuwen, J. (2004). Reaching the hard to reach: Innovative housing for homeless youth through strategic partnerships. *Child Welfare*, 83(5), 453–468.
- Ware, J., Kosinski, M., & Keller, S. D. (1998). *SF-12: How to score the SF-12 physical and mental health summary scales* (3rd ed.). Lincoln, RI, and Boston, MA: QualityMetric Incorporated and the Health Assessment Lab.
- Washington State Public Policy Institute. (2004). *Benefits and cost of prevention and early intervention programs for youth*. Olympia, WA: Washington State Public Policy Institute. <http://www.wsipp.wa.gov/rptfiles/04-07-3901.pdf>.

- Weber, J. M. (1988). The relevance of vocational education to dropout prevention. *Vocational Education Journal*, 63(6), 36–38. (As cited in ERIC digest: Vocational education's role in dropout prevention ERIC ID: ED355455. Retrieved September 24, 2004, from <http://www.ericfacility.net/ericdigests/ed355455.html>).
- Wedeven, T., Pecora, P. J., Hurwitz, M., Howell, R., & Newell, D. (1997). Examining the perceptions of alumni of long-term family foster care: A follow-up study. *Community Alternatives: International Journal of Family Care*, 9(1), 88–106.
- Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai Longitudinal Study. *Development and Psychopathology*, 5, 503–515.
- White, C. R., Holmes, K. E., O'Brien, K., & Pecora, P. (2005). *Casey Family Programs Young Adult Survey, 2004*. Seattle, WA: Casey Family Programs.
- Widom, C. S. (1989). Does violence beget violence? A critical examination of the literature. *Psychological Bulletin*, 106, 3–28.
- Williams, J., McWilliams, A., Mainieri, T., Pecora, P. J., & La Belle, K. (in press). *Enhancing the validity of foster care follow-up studies through multiple alumni location strategies*. *Child Welfare*.
- Williams, J., Stenslie, M., Abdullah, M., Grossman, C., & Shinn, C. (2002). In their Own Words—Listening to the Voices of Foster Care Alumni. Presentation at the National Foster Parent Association Annual Education Conference, May 2002 in Las Vegas, NV.
- Woodruff, K. (2004). *Placement stability definitions to promote consistency in state data reporting for the federal outcome measure*. Washington, D.C.: Child Welfare League of America National Working Group to Improve Child Welfare Data.
- World Health Organization (1996). *Composite International Diagnostic Interview Version 2.0: 1996*. Geneva: World Health Organization.
- Wulczyn, F., & Brunner-Hislop, K. (2001). *Teens in out-of-home care: Background data and implications. Findings from the multistate data archive*; University of Chicago, Chapin Hall Center for Children.
- Wulczyn, F. H., & Goerge, R. M. (1992). Foster care in New York and Illinois: The challenge of rapid change. *Social Service Review*, 66(2), 278–294.

## APPENDIX A: RESEARCH TEAMS AND ADVISORS FOR THE ALUMNI STUDIES

### Northwest Alumni Study Investigators

Peter J. Pecora, Ph.D., Principal Investigator, Casey Family Programs and Professor, School of Social Work, University of Washington

A. Chris Downs, Ph.D., Co-Principal Investigator, Casey Family Programs

Diana J. English, Ph.D., Co-Principal Investigator, Research Director, Child Welfare League of America (formerly with and representing the Washington Department of Social and Health Services, Children's Administration, Division of Children and Family Services)

Steven G. Heeringa, Ph.D., Co-Principal Investigator, Institute for Social Research, University of Michigan

Ronald C. Kessler, Ph.D., Co-Principal Investigator and Professor, Department of Health Care Policy, School of Medicine, Harvard Medical School

James White, Ph.D., Co-Principal Investigator, Portland State University (formerly with and representing the Oregon Department of Human Services, Division of Children, Adults, and Families)

### Casey National Alumni Study Investigators

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Steven G. Heeringa, Ph.D., Co-Principal Investigator, Institute for Social Research, University of Michigan

Ronald C. Kessler, Ph.D., Co-Principal Investigator and Professor, Department of Health Care Policy, School of Medicine, Harvard Medical School

### Project Coordinators for the Northwest and Casey National Alumni Studies

Merrily Wolf, B.A., Casey Alumni Studies Coordinator (1995–1998)

Jason Williams, M.S., Casey Alumni Studies Coordinator (1998–2003); currently Research Analyst, University of Alaska Child Welfare Evaluation Program

Kirk O'Brien, Ph.D., Casey Alumni Studies Coordinator and Senior Research Analyst, Casey Family Programs

### Project Staff Members

Carol Brandford, Research Manager, Washington Department of Social and Health Services, Children's Administration, Division of Children and Family Services, Office of Children's Administration Research

Nathaniel Ehrlich, University of Michigan Study Director for the Alumni Studies (1999–2001)

Nancy Gebler, University of Michigan Study Director for the Alumni Studies (1996–1998)

Mary Herrick, Casey Research Assistant (2002–2004)

Eva B. Hiripi, Senior Biostatistician, Department of Health Care Policy, Harvard Medical School

Kate E. Holmes, Research Specialist, Casey Family Programs

Brian Judd, Research Assistant, Casey Family Programs (1998–2002)

Alisa McWilliams, Survey Manager, University of Michigan

### **Project Staff Members (continued)**

Sarah Morello, Research Assistant, Casey Family Programs (2001–2003)

Catherine Roller White, Research Specialist, Casey Family Programs

Tamera Wiggins, Doctoral Intern, Casey Family Programs (2004)

### **Agency Administrator Project Advisors**

Rob Abrams, Assistant Regional Administrator, Oregon Department of Human Services; Children, Adults and Families; Community Human Services

Sherry Brummel, Research Manager, Washington DSHS Office of Children's Administration Research

Adam Diamond, Staff Assistant, Department of Health Care Policy, Harvard Medical School

Paul Drews, Regional Administrator for the Metro Region, Oregon Department of Human Services; Children, Adults and Families; Community Human Services

James Edmondson, Managing Director of Field Offices, Casey Family Programs

Steve Gordon, Chief Operating Officer, Casey Family Programs

Carolyn Graf, Transitional Resources Unit, Oregon Department of Human Services; Children, Adults and Families; Community Human Services

Mark Marsh, Managing Director of Field Offices, Casey Family Programs

Ruth Massinga, Chief Executive Officer, Casey Family Programs

Ken Perry, Senior Manager, Casey Family Programs)

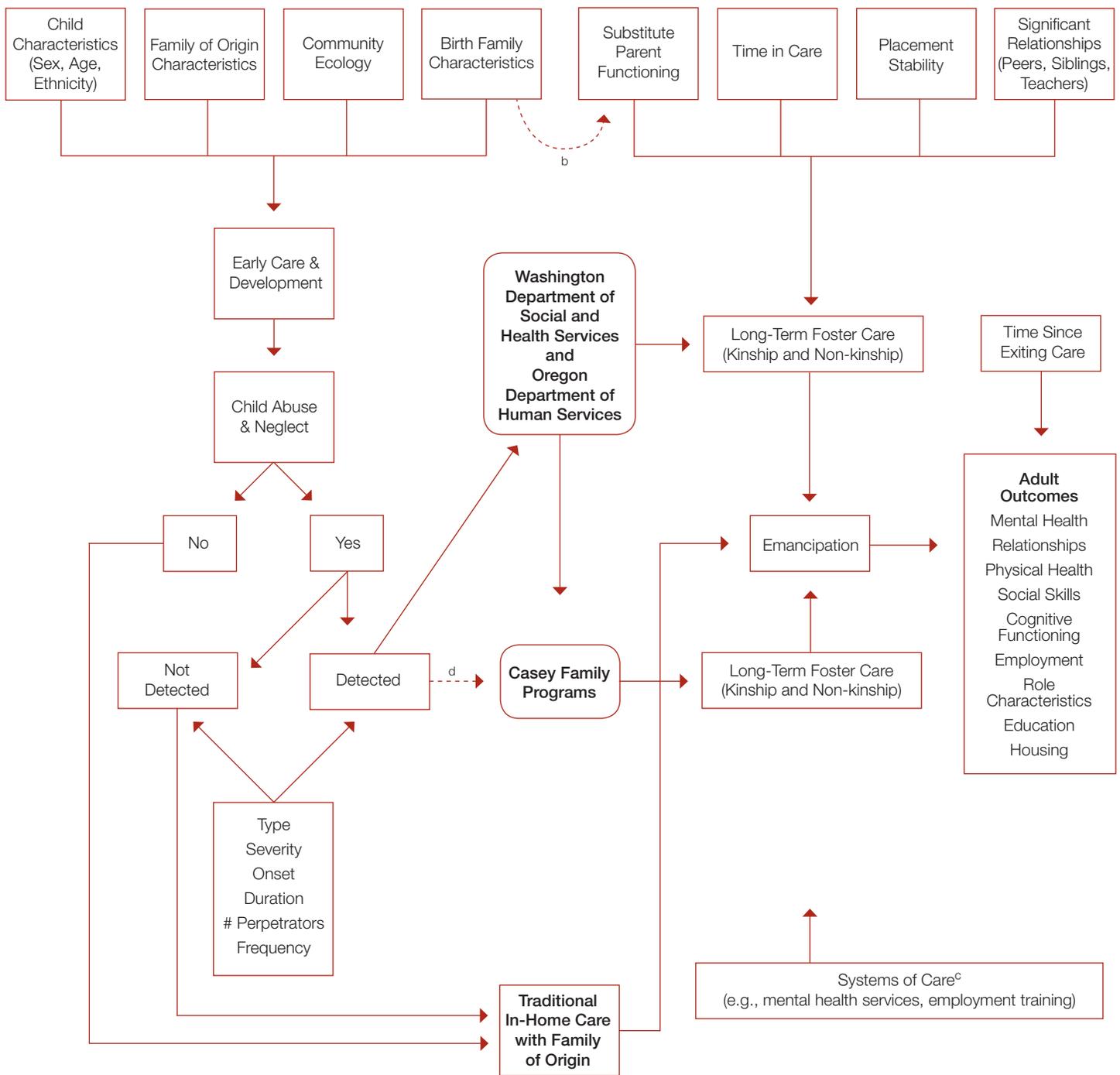
### **Acknowledgments**

Special thanks to the staff members and agency collaborators of the Northwest Foster Care Alumni Study for their efforts in making this report possible.

We especially appreciate the foster care alumni who helped design the study, shared their stories, and interpreted the findings; the Casey, Oregon state, and Washington state staff who helped us locate alumni; and the Survey Research Center study leaders (Nat Ehrlich, Nancy Gebler, Tina Mainieri, and Alisa McWilliams) and interviewers at the University of Michigan who assisted us with the study.

We appreciate the technical advice from John Emerson regarding education issues. Richard Barth, Natasha Bowen, Robin Nixon, Janet Preston, Octavia Nixon, Lissa Osborne, and James Whittaker provided expert consultation on an earlier draft of this summary; all remaining errors are the responsibility of the authors.

## APPENDIX B: DEVELOPMENTAL FRAMEWORK FOR THE ALUMNI STUDIES<sup>a</sup>



<sup>a</sup> Framework adapted from Landsverk, Davis, Garland, Hough, Litrovnik, & Price (1995). [Revised: 2-04-02. For more information, please contact Research Services at Casey Family Programs, 206-282-7300.]

<sup>b</sup> Birth families often influence foster parent service delivery and functioning (e.g., visitation).

<sup>c</sup> This study focuses only on a few systems-of-care variables, including mental health services, groupwork, and employment training.

<sup>d</sup> A small percentage, about 11%, of Casey's youth do not enter from state agencies.