Practical Strategies Identified by Statistical Simulations to Address Post-Traumatic Stress Disorder of Youth in Foster Care

20th Annual Research Conference—A System of Care for Children’s Mental Health: Expanding the Research Base

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Acknowledgements

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- Washington Department of Health and Human Services
- The Northwest Alumni Studies team is grateful to and has learned much from the youth, alumni, parents and Casey field staff
I. Overview of National Child Welfare Statistics

II. Study Methods
   • Demographics

III. Risk Factors, Foster Care Experiences & Post-Traumatic Stress Disorder (PTSD)

IV. Optimization Analyses

V. Recommendations
1. Our ethical obligations to serve and protect children are clear.

2. The “materiality” (i.e., overall significance) is high ~ numbers served and funds expended.

3. Foster care can have a positive influence on child development (current outcome data are mixed).

4. Higher quality foster care will produce young adults ready to contribute to a stronger American work force because of good physical and mental health, and the life skills necessary to succeed.
In 2004, nearly three million U.S. children were reported as abused and neglected, with 872,000 confirmed victims.

513,000 youth were in care on September 30, 2005.
Children in Foster Care, 1988 - 2005

Last Day of Federal Fiscal Year
Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder (PTSD)

- Traumatic event leads to extreme distress and physiological activity
  - Restricted affect
  - Hypervigilance
  - Intrusive thoughts of trauma

- Interferes with employment, relationships, etc.
Post-Traumatic Stress Disorder (cont)

Lifetime prevalence of PTSD (based on DSM)

- General population: 1% to 14%.
- High risk samples (people who have experienced trauma): 3% to 58%.
- The National Comorbidity Survey-Replication (NCS-R): 6.8%.
- American war veterans: 6% to 15% (current PTSD).
“Nothing About Us Without Us”
Study Methods: 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 adulthood?

• We will start to build an equation:

Demos + Risk Factors + Agency + FC Experiences = PTSD

Control Variables
Study Methods: **Inclusion Criteria**

- Placed in family foster care before age 16.
- Spent a year or more in care between ages of 14 and 18, between 1988 and 1998.
- Served in Seattle, Tacoma, Yakima, or Portland by Casey or State agency.
- Case record reviews of 659 alumni, interviews with 479 (76% response rate).
Study Methods: Alumni Interviewed

State WA, 242

Casey WA, 82

State OR, 126

Casey OR, 29
Study Methods: **Data Weighting**

Data were weighted to adjust for:

1. Alumni we were unable to locate or interview due to death and institutionalization.

2. Differences between Casey and State alumni (e.g., age, gender, and race).
Study Methods: *Demographics*

- **Alumni of Color:** 54%
- **Female:** 61%
- **Male:** 39%
- **Caucasian:** 46%
- **Age: 20-22:** 30%
- **Age: 23-25:** 38%
- **Age: 26-33:** 32%

*Average Age: 24.2 Years*
## Risk Factors

<table>
<thead>
<tr>
<th>Most Common Form of:</th>
<th>Northwest Alumni</th>
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</thead>
<tbody>
<tr>
<td><strong>Maltreatment by Birth Family:</strong> sexual abuse with physical abuse and/or neglect</td>
<td>49.2%</td>
</tr>
<tr>
<td><strong>Reason for Initial Placement:</strong> maltreatment</td>
<td>64.3%</td>
</tr>
<tr>
<td><strong>Mental/Physical Health Diagnoses (before or during care):</strong></td>
<td></td>
</tr>
<tr>
<td>• ADHD</td>
<td>13.7%</td>
</tr>
<tr>
<td>• Physical or learning disability</td>
<td>13.1%</td>
</tr>
</tbody>
</table>
## Foster Care Experiences: Placement History & Experience

<table>
<thead>
<tr>
<th>Placement Variables</th>
<th>Northwest Alumni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean number of placements</td>
<td>6.5</td>
</tr>
<tr>
<td>Mean length of time in care (in years)</td>
<td>6.1</td>
</tr>
<tr>
<td>Mean placement change rate (placements/year)</td>
<td>1.4</td>
</tr>
</tbody>
</table>
Foster Care Experiences: 
**Educational Services & Experiences**

- Access to Tutoring & Other Educational Services: 89%
- 10 or More School Changes: 30%
Foster Care Experiences: Other Services & Supports

- Access to Therapeutic Services & Supports: 84%
- Participated in Activities with Foster Family: 46%
Foster Care Experiences:
*Preparation & Resources for Leaving Care*

- Preparation for Leaving Care (Had 3 of 4): 58%
- Resources Upon Leaving Care (Had 2 of 3): 29%
Foster Care Experiences: Foster Family & Other Nurturing Supports

- High Positive Foster Parenting: 23%
- Foster Family Helped with Ethnic Issues: 62%
- Overall, Foster Parents Were Very Helpful: 36%
- Had a Close/Confiding Relationship with an Adult: 46%
- Felt Loved While in Care: 82%
Foster Care Experiences:
Foster Family & Other Nurturing Supports

- No Child Maltreatment, 67%
- Physical Abuse Only, 6%
- Physical Neglect Only, 10%
- Physical Abuse & Physical Neglect Only, 9%
- Sexual Abuse & Other, 4%
- Sexual Abuse Only, 4%

Child Maltreatment by Foster Parent or Other Caregiver
Outcomes: Assessing Mental Health

Composite International Diagnostic Interview (CIDI)

- Non-clinician mental health instrument
- World Health Organization-approved tool with high reliability and validity
- Assesses mental health during lifetime and over the previous 12 months
- Used as part of the Northwest Alumni Study and National Comorbidity Study-Replication (NCS-R)
Post-Traumatic Stress Disorder

Twelve-Month PTSD Diagnoses Among Foster Care Alumni and the General Population Matched by Age, Race and Gender

- Alumni: 25.2%
- General Population: 4.6%
Optimization Analyses

• Statistical simulations were conducted that estimated the degree to which optimizing certain foster care experiences might affect alumni PTSD.
  • Foster care experience areas were optimized separately and simultaneously
    – After controlling for demographics, risk factors and agency
Optimization Analyses (cont)

• PTSD was regressed on observed foster care experiences.
  • Using the coefficients, optimized levels of foster care experiences were placed in the regression equation.
  • Estimated predicted PTSD using observed foster care experiences was compared to estimated predicted PTSD using optimal foster care experiences.
Foster Care Experience Domains

1. Placement History & Experience
2. Educational Services & Experience
3. Access to Therapeutic Services & Supports
4. Activities with Foster Family
5. Preparation for Leaving Care
6. Leaving Care Resources
7. Foster Family & Other Nurturing Supports
### Example: Placement History

<table>
<thead>
<tr>
<th>Placement History &amp; Experience</th>
<th>Observed Data</th>
<th>Simulated Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level</td>
<td>%</td>
</tr>
<tr>
<td>Number of Placements</td>
<td>Low (3 or fewer)</td>
<td>31.9</td>
</tr>
<tr>
<td></td>
<td>Medium (4 to 7)</td>
<td>35.8</td>
</tr>
<tr>
<td></td>
<td>High (8 or more)</td>
<td>32.3</td>
</tr>
<tr>
<td>Length of Time in Care (in years)</td>
<td>Low (fewer than 3.6)</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td>Medium (3.6 to 5.9)</td>
<td>27.6</td>
</tr>
<tr>
<td></td>
<td>High (5.9 or more)</td>
<td>39.9</td>
</tr>
<tr>
<td>Placement Change Rate (placements per year)</td>
<td>Low (fewer than 0.61)</td>
<td>27.6</td>
</tr>
<tr>
<td></td>
<td>Medium (0.62 to 1.23)</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>High (1.23 or more)</td>
<td>43.1</td>
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### Example: Placement History

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<tr>
<th>Placement History</th>
<th>Observed Data</th>
<th>Simulated Data</th>
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<tbody>
<tr>
<td></td>
<td>Level</td>
<td>Optimized Level</td>
</tr>
<tr>
<td>Number of Reunification Failures</td>
<td>Low (0)</td>
<td>Low (0)</td>
</tr>
<tr>
<td></td>
<td>Medium (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High (2 or more)</td>
<td></td>
</tr>
<tr>
<td>Number of Runaways</td>
<td>Low (0)</td>
<td>Low (0)</td>
</tr>
<tr>
<td></td>
<td>Medium (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High (2 or more)</td>
<td></td>
</tr>
<tr>
<td>Number of Unlicensed Living Situations with Friends/Relatives</td>
<td>Low (0)</td>
<td>Low (0)</td>
</tr>
<tr>
<td></td>
<td>Medium (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High (2 or more)</td>
<td></td>
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</tbody>
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## Optimization Results: *MH Domain*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Estimate Before Optimization</th>
<th>Estimated After Optimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>No PTSD</td>
<td>76%</td>
<td>85% 82% --- --- 78% 75% --- 90%</td>
</tr>
</tbody>
</table>

- **Decreased Estimated PTSD**
- **Increased Estimated PTSD**
Recommendations

1. Increase youth and alumni access to evidence-based mental health treatment
   • More group work and cognitive behavioral treatment approaches

2. Increase mental health insurance coverage.
   • E.g., states can extend Medicaid coverage beyond age 18 by using the waiver clause in the Chafee legislation.

3. Minimize placement change
More Information/Contact Us

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Search “Northwest Alumni Study”

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