Consequences of Placing Children in Foster Care: Issues in Child Welfare Research

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www.mit.edu/~jjdoyle/research.html
Goals Today:

1. Describe research on the effects of foster care on long-term outcomes for children
   - Research separating Causation from Correlation
   - Interpretation can be subtle

2. Consider “The Big Questions” in child welfare
   - Child welfare literature
   - Your thoughts
   - Going Forward
Plan of Talk

Big Questions in Child Welfare
Why Answers Are So Important
Why The Questions Are Difficult to Answer
My Research
  – Effects of Foster Care Placement on Child Outcomes
  – Effects of Changes in Kinship Foster Care
Conclusions & Going Forward
Big Questions in Child Welfare

1. What Are the Effects of Foster Care Placement on Child Wellbeing?
Big Questions in Child Welfare

1. What Are the Effects of Foster Care Placement on Child Wellbeing?

Foster Care Placement: Difficult Decision
– What Types of Cases Benefit from Placement?
– What Types of Cases Show Harm from Placement?
Big Questions in Child Welfare

2. What Types of Placements Are Best? Relatives/Non-Relatives/Institutions

As before:
What Types of Cases Benefit from Particular Placement Types?
Plan of Talk

Big Questions in Child Welfare

Why Answers Are So Important

Why The Questions Are Difficult to Answer

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Conclusions & Going Forward
Child Welfare Affects Large Numbers of Children

>2 Million Investigations in the U.S. each year
Nearly 1 Million Found Abused/Neglected
>400,000 currently in Foster Care
$25+ Billion spent on Child Protection each year
Child Welfare Affects Particularly At-Risk Children

Maltreated Children: 4 times higher childhood mortality
1400 deaths/year attributed to abuse or neglect

Former Foster Children:
- 28% of the Homeless Population
- 20% of Prison Inmates in US (under the age of 30)
- 25% of Prison Inmates w/ Prior Convictions
- Children who are still in foster care at 17:
  - 2/3 of boys and 1/2 of girls have been arrested.
  - 3 times more likely to have sexually transmitted disease
  - 4 times more likely to have mental illness
Competing Goods

Child Protection       Family Preservation

Aggressive Protection $\rightarrow$ More Placements
  – More Type I Errors (False Positive)
  – Fewer Type II Errors (False Negative)

Incentives
  – Public Attention on Type II Errors: Failure to remove a child who is later found to be abused
Number of Children in Out-of-Home Care:
1950-2000
Children in Foster Care in the U.S.
1962-2009
Number of Children in Foster Care in the U.S. (per thousand children) 1962-2009
Plan of Talk

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Estimation Issues

To Answer The Questions, We Want to Estimate:

Change in (Average) Outcomes For Children Placed in Foster Care

Compared to:

What Would have Happened if They Remained at Home

Example: Homelessness (H):

$$E(H|\text{Foster Care} = 1) - E(H|\text{Foster Care} = 0)$$

Problem: Don’t Observe “What Would Have Happened”

Usual Solution: Randomized Trial (ethical concerns)
Estimation Issues

Previous Studies: Correlations

Confounding Factors

- Ex: High Homelessness Rate: May be Due to Abusive Family Background

- Key Question: What Would the Likelihood of Homelessness be if the child had not been in Foster Care?

Another Estimation Problem: Lack of Data
Plan of Talk

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My Research

Attempt to Go Beyond Correlations and get to Causation

Ideas Involve “Natural Experiments” that mimic a randomized trial

Interpretation: Results Apply to Cases “Affected by the Natural Experiment”
Child Protection and Child Outcomes: Measuring the Effects of Foster Care
Introduction

What are the Effects of Foster Care Placement on Long-Term Outcomes:

– Lack of Data

– Estimation Issues
  
  Children Placed are Selected: not randomly assigned
  Children Placed Come from Troubled Families
  Children Placed are Those Most Likely to Benefit
Background: Previous Evidence

Most Studies Compare FC with All Children
- More likely to be in Prison, Homeless, Suffer Mental Abuse
- Courtney et al. (2004): 2/3 of foster children who “age out” are arrested.

3 studies compare investigated children
- Davidson-Arad et al. (2003): N=92, Interviews 6 months after investigation & removed children have better quality of life indicators.
- Jonson-Reid and Barth (2000): N=160,000, Children who received in-home services showed less delinquency than those who were removed or who did not receive in-home services.
My Research: Data

Chapin Hall Center for Children (U of Chicago)

Illinois Administrative Data Linked across Programs:

Abuse Investigations Data Matched to:
– Juvenile Delinquency Court Records
– Teen Motherhood in Medicaid
– Employment in Unemployment Insurance Records
– Adult Arrests/Convictions/Prison from Illinois State Police
– & More...
ILLINOIS DATA SOURCES

Department of Children & Family Services:
July 1, 1990-June 30, 2001
-Child Age, Race, Sex, Address
  -Initial Reporter
  -Allegation
  -Perpetrator (Parent, Step-Parent, Cohabitating Adult)
  -Foster Care Entry (recorded through 2003)

Medicaid
1990-2003

Department of Employment Security
Employment & Earnings
2002

Juvenile Court
Of Cook County
1990-2000

Illinois State Police
Arrests/Imprisonment
2000-2005
Table 1: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outside Cook County</th>
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<td></td>
<td>Mean</td>
<td>Std Dev</td>
<td>Mean</td>
<td>Std Dev</td>
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<tr>
<td>Foster Care Placement</td>
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<tr>
<td>Race</td>
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<tr>
<td>white</td>
<td>0.71</td>
<td>0.46</td>
<td>0.12</td>
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<td>0.03</td>
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<td>Initial Reporter</td>
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<td>0.50</td>
<td>0.50</td>
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<td>Allegation</td>
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<td>lack of supervision</td>
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<td>0.44</td>
<td>0.35</td>
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<td>environmental neglect</td>
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<td>0.31</td>
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<td>0.36</td>
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<td>substantial risk of harm</td>
<td>0.35</td>
<td>0.48</td>
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<td>0.43</td>
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<td>physical abuse</td>
<td>0.20</td>
<td>0.40</td>
<td>0.17</td>
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<td>Observations</td>
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</table>

Children investigated between July 1, 1990 and June 30, 2003 and were at least 18 in 2005. Cook County includes the City of Chicago.
My Research: Main Idea

Consider Child Protection Investigators

– Most Families Are Effectively Randomized Families to Investigators
– Investigators Affect Removal
– Estimates of Interest:
  Children “Affected by the Natural Experiment”:
  Cases When Investigators May Disagree about a Placement Recommendation
Figure 1: Abuse Thresholds for Removal

CM1: Remove if $a > a_1$; CM2: Remove if $a > a_2$
Background

• All Investigations begin with State Central Register
• Case Assigned to a Field Team (County-level)
• Assigned to one of ~8 Investigators
• Decision 1: Determine if case has merit
• Decision 2: Emergency Removal
• Decision 3: Present Evidence to Judge for Longer Term Removal
Investigator Rotational Assignment

Exceptions

- Initial investigator reassigned for any future investigations
- Neighborhood Assignment
- Spanish-Speaking Cases
- Special Investigations
  Sexual Abuse

Data Restrictions

- Investigator in First Investigation
- Sub-team cells defined by:
  TEAM x ZIP x HISPANIC x YEAR
- Dropped from Analysis
Separating Causation from Correlation

Key Variable: How “Strict” is the Investigator?

In cases other than a particular family’s case, what fraction of children investigated by that family’s case manager are placed, relative to placement rates of other investigators on the same team in a given year

Economics jargon: Investigator placement rate is an “instrumental variable”
Figure A1A: FC Placement & Predicted FC Placement vs. CM Removal Differential:
Outside Cook County

- FC Placement
- P(Placement|X)

- Placed

CM Placement Differential

Placed

-0.25 -0.20 -0.15 -0.10 -0.05 0.00 0.05 0.10 0.15 0.20 0.25
Interpretation

Investigator Type vs. Foster Care Placement

Investigators:

– do not supervise child once in foster care
– are not associated with observable characteristics
– focus on gathering facts for foster care placement recommendation
Figure 1A: FC Placement & Arrest Rate vs. CM Placement Differential:
Outside Cook County

- FC Placement
- Arrested
Figure 2A: Arrested vs. $P(\text{Placement}|Z)$:
Outside Cook County
Figure 3A: Delinquency as a function of $P(z)$
Figure 4A: Teen Motherhood as a function of $P(z)$
Figure 5A: Earnings as a function of $P(z)$

Quarterly Earnings

$P(R=1|Z=z)$

$1.100$ $1.100$ $1.100$ $1.100$ $1.100$

$0.17$ $0.21$ $0.22$ $0.23$ $0.24$ $0.26$
Summary: Large Effects

Long-term Outcomes
- 3x Higher Arrest Rate
- 3x Higher Delinquency
- 2x Higher Teen Motherhood
- 40% Lower Employment

Childhood Health:
- No Effects for Childhood Burns / Broken Bones
- 3x more likely to receive wellness visit
Types of Cases

Some Evidence that “Marginal Cases” (Larger Negative Effects of Foster Care Placement) are Found for:

– African Americans
– Girls
– Young adolescents (11-13 year olds)
– Victims of Abuse (compared to neglect)

Negative effects found across all groups, however
Limitations

Narrow measures of safety

Outcomes only available for children who remain in Illinois
<table>
<thead>
<tr>
<th>Variable</th>
<th>IL</th>
<th>NJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Length of Stay (months)</td>
<td>48</td>
<td>16</td>
</tr>
<tr>
<td>Kinship placement</td>
<td>50%</td>
<td>18%</td>
</tr>
<tr>
<td>Permanency w/in 1 year</td>
<td>25%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Sources: US DHHS; NJ DYFS
Foster Care Population in New Jersey
2006-2009

- 2006: 11000
- 2007: 10000
- 2008: 9000
- 2009: 8000
Additional Outcomes:

Short-term Outcomes
  Test Scores (Chicago)

Additional Long-term Outcomes
  – Mortality
  – Treatment for Sexually Transmitted Diseases
Additional Approaches:

Policy Interventions
(Family preservation services)

Media events
Conclusions

• Investigator Removal Tendencies are Associated with Removal in Subsequent Cases
• Large Negative Effects of Removal for Marginal Cases
• Size of effects suggests caution in interpretation
• Taken together: children at the margin of removal perform better when they remain home:
  – Adult Arrests
  – Delinquency
  – Teen Pregnancy
  – Employment & Earnings
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Conclusions & Going Forward
Kinship Foster Care and Child Outcomes:

Measuring the Effects of A Change in Financial Incentives for Relative Caregivers
Are Children Better Off with Relative Foster Care Providers?

Anecdotal Pros (less traumatic) & Cons (providers are parents of abusive/neglectful parents)

Difficult to Answer

– Lack of data
– Homes are Chosen: Not Randomly Assigned
Are Children Better Off with Relative Foster Care Providers?

Idea: Exploit Reform in Illinois Foster Care System

- Wage offer to Relatives of New Foster Care Entrants Drops by 30% in 1995
- Compare Children Investigated Just Before & After
- Rich Data as Before
- Children “Affected by the Natural Experiment”: Cases Whose Relatives Respond to the Change in the Subsidy Offer
Background

Entry into Foster Care

– Initial Report (police, physician, family…)
– Investigation Office: Looks for Relative First

Illinois: Large Growth in Foster Care System

– 14,000 in 1986; 50,000 in 1995
– Spending increased to over $1 billion
Background

Illinois Reform: Two-tiered system put in place

Licensed caregivers receive higher payment

Unlicensed: monthly subsidy is ~30% lower
(e.g. 9-year old child: $410 to $285 per month)

In practice, few get licensed
– Space requirements and intrusiveness given as reasons.
Figure 1:
Fraction of Foster Children Going to Relatives

![Graph showing the fraction of foster children going to relatives over time. The graph compares the percentage of children going to relatives within Illinois (IL) and outside Illinois (Outside IL) from 1990 to 2000. The percentage for IL starts at around 70% in 1990, peaks around 1995, and then decreases to around 60% by 2000. The percentage for Outside IL starts lower and remains relatively stable throughout the period.]
Figure 1A: Foster Children Going to Relatives

- Pre-reform
- Post-reform

Month of FC Entry

Data points from 1990 to 1999 showed a trend in the number of foster children going to relatives before and after a reform.
Findings

Care of Relatives Does Respond to Subsidy

30% drop in Subsidies $\iff$ Relatives are 20% less likely to provide care even among abuse cases

Response Varies by Child Characteristic

Larger for children requiring mental health services, and children under 10
Limitation: Concurrent Reforms

Admissions of pre-existing informal kinship care no longer allowed

Study: Considered abuse cases, with similar results
Findings on Quality of Care

(Observable) Child Outcomes do not appear to worsen with lower subsidies

- 1-year Quit Rate unchanged at 30% (compared to 49% for non-relative homes)
- No change in wellness visits; injuries; test scores in Chicago Public Schools

Traditional FC vs. Kinship FC (on the margin)
Selection effect may mitigate income effect
Conclusions

Following a 30% drop in subsidies, relatives are 15-20% less likely to provide care.

Children requiring mental health services, and children under 10 saw bigger responses.

Lower subsidies did not appear to lower quality.
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Research Conclusions

• Children “on the margin of placement” in Illinois during 1990s:
  Better Outcomes if remained at home
• Found across all types, particularly African American children, girls, and young adolescents

• Kinship Caregivers “on the margin of providing care” respond to financial incentives and are similar in (observable) quality to non-relative caregivers
Going Forward

Research in Other States
(Replication/Different Settings)

Other “Natural Experiments”

**Randomized Trials:**

* e.g. Family Reunification Services
  - Fixed budget → randomly assign field offices that can offer the services
Going Forward

Big Questions in Child Welfare

1. What Are the Effects of Foster Care Placement on Child Wellbeing?
2. What Types of Placements Are Best? Relatives/Non-Relatives/Institutions
3. What do Practitioners Want to Know?