Identifying and Describing Disproportionality and Disparities in Child Welfare: A Critical Discussion of Race and Research Methods

Alan J. Dettlaff
Nancy Rolock
Qiana Cryer
Krista Thomas
Framing the Issue

• Racial disproportionality and disparities have long represented preeminent concerns in child welfare.

• Recent research concerning differential rates of maltreatment and increased awareness of differential risk factors has brought increased attention to these concerns and has called into question the appropriateness of past efforts to address them.

• As understanding and awareness have evolved over time, it has become increasingly important to ensure that disproportionality and disparities are described and identified appropriately, both conceptually and empirically.
Defining Disproportionality

- Disproportionality refers to the state of being out of proportion.
- Disproportionality describes a condition when the percent of persons of a certain race or ethnicity in a target population differs from the percentage of persons of the same group in a reference (or base) population.
- In the child welfare system, disproportionality occurs when the proportion of one group in the child welfare population (e.g., children in foster care) is either proportionately larger (overrepresented) or smaller (underrepresented) than in the general population.
Defining Disparity

• While disproportionality refers to the state of being out of proportion, disparity refers to a state of being unequal.

• Disparity occurs when the ratio of one racial or ethnic group in an event is not equal to the ratio of another racial or ethnic group who experienced the same event.

• In the child welfare system, disparity is used to describe inequitable outcomes experienced by one racial or ethnic group at various decision-making points compared to another racial or ethnic group.

• Disparities can occur at every decision-making point, including the initial report of alleged maltreatment, acceptance of reports for investigation, substantiation of maltreatment, entries into substitute care, and exits from care.
Evolving Understanding

- Early research focusing on disproportionality
- Limitations of population-based denominator
- Emergence of disparity as a more useful indicator
- Emergence of decision-point analyses
- Impact of shifting dialogue and NIS-4
Current and Emerging Understanding

• Disproportionality and disparities have become value laden terms that imply inequities.

• Although much research has documented the presence of disproportionality and disparities, much less research has examined the factors explaining their presence.

• Differences in poverty and risk exposure are likely significant contributors to observed disparities and need to be considered.

• Differences in poverty and risk do not mean that bias is not present within child welfare systems.
Advancing Research

- Research is needed that examines the extent to which observed disparities result from differential need and the extent to which they result from bias.

- Caution needs to be taken when interpreting or making judgments concerning the presence of disproportionality and disparities.

- Methods for examining the factors explaining disparities need to be disseminated.

- Studies need to acknowledge limitations when all possible explanatory factors are not included.

- Racial disparities are not caused by a single factor.
The Decision-Making Ecology

Measurement Defined

• Disproportionality vs. disparity

• Population vs. decision based enumeration

• Reference group

• Advancing research
Definitions

Disproportionality

- The state of being out of proportion
- When the proportion of one group (i.e., children investigated) is proportionately larger (overrepresented) or smaller (underrepresented) than the general population

![Diagram showing child population and those in care, with percentages for African American, Caucasian, Hispanic, and Other categories.]

- **Black Disproportionality**
  - 54% African American
  - 15% Caucasian
  - Ratio: 3.6

- **White Disproportionality**
  - 39% African American
  - 65% Caucasian
  - Ratio: 0.6

- **Hispanic Disproportionality**
  - 6% African American
  - 14% Caucasian
  - Ratio: 0.4
Disparity

- The state of being unequal
- Often used to describe inequitable outcomes experienced by one group compared to another
- Can occur at any decision-making point
- Ultimately, disparities that occur in both entries to the child welfare system and exits from the system produce disproportionality

- **Black Disproportionality**
  - 54%
  - 15% = 3.6

- **White Disproportionality**
  - 39%
  - 65% = 0.6

- **Black to White Disparity**
  - 3.6
  - 0.6 = 6.0
Population vs. Decision-Point Enumeration

Population Enumeration

- Compares children in the general population to children involved with the child welfare system

Diagram:
- General population of children living in Illinois
- Children in foster care in Illinois
Population vs. Decision-Point Enumeration

Population Enumeration

- Compares children in the general population to children involved with the child welfare system

- General population of children living in Illinois

- Children entering foster care in Illinois
Population vs. Decision-Point Enumeration

Population Enumeration

• Compares children in the general population to children involved with the child welfare system

Decision Based Enumeration

• Uses the children at risk as the comparison group
Population vs. Decision-Point Enumeration

General Population
- Children in Illinois
  - Not Investigated for Maltreatment
    - Not Substantiated
    - Substantiated
      - Not Placed in Foster Care
        - At Home Services
          - Entered Foster Care
          - Exiting Foster Care
            -Exited Foster Care
              - Still in Care after 3 years

Reference Group

Multiple comparison groups

• One group compared to each of the other racial/ethnic groups

One comparison group

• One group compared to another (usually White)
• One group compared to all who are not part of that group
### Reference Group

**Disparity Indices (DI)**

<table>
<thead>
<tr>
<th>System Contact Level</th>
<th>Race</th>
<th>Counts</th>
<th>Census</th>
<th>Rate per 1,000</th>
<th>DM*</th>
<th>Compared w/</th>
<th>Compared w/</th>
<th>Compared w/</th>
<th>Compared w/</th>
<th>Compared w/</th>
<th>Compared w/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>All Others</td>
<td>Black</td>
<td>White</td>
<td>Hispanic</td>
<td>Asian/PI</td>
<td>Native American</td>
</tr>
<tr>
<td>Entries</td>
<td></td>
<td>35,074</td>
<td>100.00</td>
<td>9,664,476</td>
<td>100.00</td>
<td>3.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>6,642</td>
<td>19.02</td>
<td>663,451</td>
<td>7.18</td>
<td>9.58</td>
<td>2.651</td>
<td>3.039</td>
<td>1.000</td>
<td>2.907</td>
<td>2.633</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>9,789</td>
<td>27.83</td>
<td>2,971,474</td>
<td>30.75</td>
<td>3.29</td>
<td>0.912</td>
<td>0.277</td>
<td>0.344</td>
<td>1.000</td>
<td>0.905</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>16,912</td>
<td>48.36</td>
<td>4,468,438</td>
<td>48.10</td>
<td>3.64</td>
<td>1.007</td>
<td>1.014</td>
<td>0.380</td>
<td>1.104</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Asian/PI</td>
<td>1,104</td>
<td>3.16</td>
<td>320,710</td>
<td>3.34</td>
<td>1.16</td>
<td>0.321</td>
<td>0.209</td>
<td>0.121</td>
<td>0.352</td>
<td>0.319</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>472</td>
<td>1.35</td>
<td>121,452</td>
<td>0.84</td>
<td>3.75</td>
<td>1.604</td>
<td>1.612</td>
<td>0.605</td>
<td>1.759</td>
<td>1.593</td>
</tr>
<tr>
<td>In Care (PIT)</td>
<td></td>
<td>74,076</td>
<td>100.00</td>
<td>9,664,476</td>
<td>100.00</td>
<td>7.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>20,687</td>
<td>27.72</td>
<td>663,451</td>
<td>7.18</td>
<td>4.916</td>
<td>1.000</td>
<td>4.534</td>
<td>4.381</td>
<td>16.832</td>
<td>2.305</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>19,532</td>
<td>26.20</td>
<td>2,971,474</td>
<td>30.75</td>
<td>6.58</td>
<td>0.832</td>
<td>0.800</td>
<td>0.221</td>
<td>1.000</td>
<td>0.966</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>31,636</td>
<td>42.84</td>
<td>4,468,438</td>
<td>48.10</td>
<td>6.81</td>
<td>0.832</td>
<td>0.795</td>
<td>0.228</td>
<td>1.035</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Asian/PI</td>
<td>1,685</td>
<td>2.29</td>
<td>320,710</td>
<td>3.34</td>
<td>1.77</td>
<td>0.230</td>
<td>0.212</td>
<td>0.059</td>
<td>0.269</td>
<td>0.260</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>1,024</td>
<td>1.41</td>
<td>211,452</td>
<td>0.84</td>
<td>12.94</td>
<td>1.676</td>
<td>1.685</td>
<td>0.434</td>
<td>1.967</td>
<td>1.900</td>
</tr>
</tbody>
</table>

Source: Needell & Putnam-Hornstein Center for Social Services Research University of California at Berkeley
Reference Group

Disparity Index for Investigated Reports: 2006 to 2010
(African American to White)

<table>
<thead>
<tr>
<th>Year</th>
<th>Community A</th>
<th>Community B</th>
<th>Community C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4.7</td>
<td>2.9</td>
<td>2.8</td>
</tr>
<tr>
<td>2007</td>
<td>4.0</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>2008</td>
<td>3.9</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>2009</td>
<td>3.8</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>2010</td>
<td>3.7</td>
<td>2.3</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Disparity Index for Investigated Reports: 2006 to 2010
(Hispanic to White)

<table>
<thead>
<tr>
<th>Year</th>
<th>Community A</th>
<th>Community B</th>
<th>Community C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0.99</td>
<td>0.89</td>
<td>0.61</td>
</tr>
<tr>
<td>2007</td>
<td>0.96</td>
<td>0.86</td>
<td>0.52</td>
</tr>
<tr>
<td>2008</td>
<td>0.73</td>
<td>0.71</td>
<td>0.45</td>
</tr>
<tr>
<td>2009</td>
<td>0.71</td>
<td>0.66</td>
<td>0.36</td>
</tr>
<tr>
<td>2010</td>
<td>0.70</td>
<td>0.60</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Disparity Index for Investigated Reports: 2006 to 2010
(Hispanic to African American)

<table>
<thead>
<tr>
<th>Year</th>
<th>Community A</th>
<th>Community B</th>
<th>Community C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0.19</td>
<td>0.28</td>
<td>0.22</td>
</tr>
<tr>
<td>2007</td>
<td>0.21</td>
<td>0.27</td>
<td>0.20</td>
</tr>
<tr>
<td>2008</td>
<td>0.19</td>
<td>0.26</td>
<td>0.19</td>
</tr>
<tr>
<td>2009</td>
<td>0.18</td>
<td>0.25</td>
<td>0.16</td>
</tr>
<tr>
<td>2010</td>
<td>0.16</td>
<td>0.21</td>
<td>0.17</td>
</tr>
</tbody>
</table>
Comparison group is ‘all others’
2006 California: Racial Disparity Indices

When using the “all others” as the reference group a weighted risk ratio (WRR) may produce more stable results

- A WRR uses the community-level risk for the racial/ethnic group for the numerator and a weighted risk for all other children for the denominator.

- Allows comparison of communities with dissimilar population distributions by normalizing it to the state population distribution.

- When risk ratios are based on small numbers, minor variations in the number of children in either the numerator or denominator produces dramatic changes in the size of the risk ratio.

- The WRR standardizes the demographic distribution to match that of the state to which the community belongs. This allows for comparisons across communities and enables states to rank communities and target assistance.

Additional information:

Reference Group

• **Group A to Whites**
  • The conventional comparison
  • Same comparison group for all races/ethnicities

• **Group A to all children not part of group A**
  • Does not set White as the standard
  • The comparison group includes children of many races/ethnicity

• **Group A to each of the other groups**
  • Most comprehensive approach
  • May be difficult to summarize
Advancing Research

• Thus far our discussion has focused on descriptive data. To further advance this issue we need to look towards more complicated analysis.

• Poverty has been identified as a key factor
The relationship between child victimization and child poverty rates in Illinois. Chicago, IL: University of Illinois at Chicago. Available at: www.socialwork.uic.edu/cwrc
Advancing Research

- Decision-making ecology
- Differential risk
- Individual level considerations
- Community level considerations
Contact Information

Child Welfare Research Collaborative
Jane Addams College of Social Work
University of Illinois at Chicago

cwrc@uic.edu

312-413-2307

Visit our website: http://www.socialwork.uic.edu/cwrc