Families and policies matter: how to enhance the well-being of children in poverty

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NAEP Reading Assessment for grade 4 (1994) & grade 12 (2002) — Percentage of students at or above proficient by race/ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity of Student</th>
<th>Grade 12</th>
<th>Grade 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>43%</td>
<td>37%</td>
</tr>
<tr>
<td>Black</td>
<td>16%</td>
<td>9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>AsianAmerican</td>
<td>34%</td>
<td>34%</td>
</tr>
</tbody>
</table>

(Rouse, Brooks-Gunn & McLanahan, 2005)
What defines “school readiness”?

A child’s **academic skills** (e.g., vocabulary size, complexity of spoken language, basic counting, “general knowledge”);

A child’s **social and emotional skills** (e.g., following directions, working in a group, impulse control) – which are as important as academic skills but not well studied.
Children who are not “ready” for school are more likely to...

- Perform less well in elementary & secondary school;
- Become teen parents;
- Engage in criminal activities;
- Suffer from depression.
Vocabulary scores for black and white three and four-year-olds

(From Jencks & Phillips, 1998)
Standard deviation units

If the standard deviation = 15 and white students score 12 points more than black students on average (a white-black gap of 12), then...

12/15 points = .80 standard deviation units (80% of the standard deviation)
If the white-minority gap in test scores is 1 standard deviation then...

84% of white children will perform better than the average minority child

16% percent of minority children will perform better than the average white child

Whites students are 13 times more likely than minority students to score in the top 5% and enroll in “gifted” class

The average textbook is written so that the average white student understands 75% of it

The average minority student will understand 53% of the same textbook, virtually guaranteeing that such a reader will not engage with the text

(From Rock & Stenner, 2005)
Racial / ethnic gaps in selected test scores and in family socio-economic status for kindergartners

(From Duncan & Magnuson, 2005)
Why might SES matter?

Is it what parents do with more resources?

- Purchase better child care/learning materials in home?
- Experience less stress & less depression, which leads to (perhaps) less harsh parenting?
- Purchase better health care?
Contributions of health conditions, parenting and preschool to racial gaps

• In what circumstances are there racial gaps?
• How much of the racial gap is ‘explained’ by each circumstance?
• What policies might reduce the racial gaps in circumstances?
## Reductions in test score gaps if health conditions were similar across racial groups

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low birth weight</td>
<td>Yes</td>
<td>Yes</td>
<td>~2% to 4%</td>
</tr>
<tr>
<td>Asthma</td>
<td>Yes</td>
<td>Yes</td>
<td>~2% to 3% on behavior scales</td>
</tr>
<tr>
<td>ADHD</td>
<td>Yes</td>
<td>Yes</td>
<td>~1% to 2%</td>
</tr>
<tr>
<td>Iron deficiency</td>
<td>Yes</td>
<td>Not clear</td>
<td>None</td>
</tr>
<tr>
<td>Lead</td>
<td>Yes</td>
<td>Yes</td>
<td>~2% to 3%</td>
</tr>
</tbody>
</table>

(From Reichman, 2005; Currie, 2005, The Future of Children)
Racial gaps in parenting behavior

Nurturance: Ways of expressing love, affection and care

Discipline: Responses to child behaviors that parents consider appropriate or inappropriate

Teaching: Didactic strategies for providing information or skills to the child

Language: Conversations & talking with the child language & literacy environment of the home

Monitoring: Keeping track or watchfulness

Management: Rhythm of the household; scheduling & completing scheduled events

Materials: Cognitively & linguistically stimulating materials provided in the home

(From Brooks-Gunn & Markman, 2005)
Racial and ethnic differences in parenting

White mothers are more likely to exhibit higher rates of the following parenting behaviors than do black mothers

– Language
– Teaching
– Provision of stimulating materials

The sizes of these effects are large:

– 20% to 40% of a standard deviation
– For each of the three parenting dimensions

These parenting differences are smaller when SES is controlled, but they do not disappear

(From Brooks-Gunn & Markman, 2005, The Future of Children)
Racial gaps in preschool attendance

• Enrollment in preschool at ages 3 and 4

• Enrollment in Head Start

• Quality of preschool programs?

(From Magnuson & Waldfogel, 2005, The Future of Children)
Preschool enrollment for four year-olds, from 1968 to 2002

(From Magnuson & Waldfogel, 2005, The Future of Children)
### Reductions in test score gaps if preschool enrollment were increased

<table>
<thead>
<tr>
<th>Description</th>
<th>Blacks</th>
<th>Hispanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increase Hispanic &amp; Black enrollment to 80%</td>
<td>4% to 20%</td>
<td>12% to 52%</td>
</tr>
<tr>
<td>2. Preschool for all children &lt;100% of poverty</td>
<td>2% to 12%</td>
<td>4% to 16%</td>
</tr>
<tr>
<td>3. Preschool for all children &lt;200% of poverty</td>
<td>2% to 12%</td>
<td>8% to 34%</td>
</tr>
</tbody>
</table>

(Magnuson & Waldfogel, 2005)
Head start enrollment

About 10% of all 3 and 4 year-olds are in Head Start
- 20% of black children
- 15% of Hispanic children
- 4% of white children

If Head Start did not exist, gaps in preschool enrollment would increase (compared to white children)
- 9 percentage points for black children
- 31 percentage points for Hispanic children

Gaps in school readiness would increase if Head Start did not exist
Quality of preschool and school readiness

1. Attending high quality preschool programs is associated with school readiness

2. Effects have been demonstrated for children whose parents are low income or have low levels of education

3. Effects are sometimes larger for Black/Hispanic than White children
Indicators of high quality preschool

- Teacher training
- Teacher education
- Teacher to child ratios
- Class size
- Language and conversation
- Organization of classroom
Reductions in test score gaps if quality were improved in Head Start and in other preschool programs

<table>
<thead>
<tr>
<th></th>
<th>Blacks</th>
<th>Hispanics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve quality of HS</td>
<td>4% to 10%</td>
<td>4% to 8%</td>
</tr>
<tr>
<td>2. Improve quality of HS &amp; other, children &lt;100% poverty</td>
<td>6% to 10%</td>
<td>0 to 2%</td>
</tr>
<tr>
<td>3. Increase quality of HS &amp; other, children &lt;200% poverty</td>
<td>4% to 14%</td>
<td>2% to 6%</td>
</tr>
</tbody>
</table>

(From Magnuson & Waldfogel, 2005, The Future of Children)
Intervention strategies for reducing school readiness gaps

• Socio-economic
  – Income Supplementation
  – Parental Education
  – Marriage Promotion

• Health
  – Prevention of low birth weight
  – Health Care
Intervention strategies for reducing school readiness gaps (cont.)

• Parenting
  – Home Visiting Programs
  – Center-based Programs with Parenting Component
  – Parental Language and Literacy Programs
  – Parent Behavior Training Programs

• Preschool Programs
  – Expanding Access
  – Expanding Quality
  – Pre-Kindergarten Programs
  – Head Start
  – Subsidies
Programs unlikely to reduce readiness gaps

- Public health insurance coverage
- Education and support programs for pregnant mothers to reduce LBW
- Home visiting parenting programs
Programs likely to reduce gaps slightly

- Education programs for low education mothers
- Income supplementation for welfare-to-work program participant
- Income tax credits
Health strategies likely to reduce gaps modestly

- Enrollment in health programs
- Quality of health care
- WIC nutrition programs
Education strategies likely to reduce gaps modestly

• High quality early education programs

• Parenting component focusing on literacy and reading for low-literate mothers

• Parenting component for mothers of children with moderate behavior problems
## Percentage of children in different care arrangements

<table>
<thead>
<tr>
<th></th>
<th>Birth to 1 Year-old</th>
<th>1-2 Years-old</th>
<th>3 Years-old</th>
<th>4 Years-old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Only</td>
<td>58</td>
<td>47</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>Relative</td>
<td>20</td>
<td>21</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Non-relative</td>
<td>14</td>
<td>16</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Center or School Based</td>
<td>12</td>
<td>23</td>
<td>43</td>
<td>66</td>
</tr>
</tbody>
</table>

(From the 2005 NHES Early Childhood Program Participation Survey and the Digest of Education Statistics, 2004, Table 45)

Note: does not sum to 100 due to multiple arrangements.
Quality of care in different settings

Care ratings:

- Kith and kin = 3.5
- Family child care = 4.0
- For-profit centers = 4.2
- Non-profit centers = 5.0

1=inadequate, 7=excellent

Child care global quality measures

*Early Childhood Environment Rating Scale* (37 items)
- Space and furnishings
- Personal care routines
- Language-Reasoning
- Activities
- Interaction
- Program Structure

*Family Day Care Environment Rating Scale* (29 items)
- Space & furnishing for care and learning
- Basic care
- Language and reasoning
- Learning activities
- Social Development
Distribution of quality in Fragile Families and Child Well-being study

Excellent 10%

Good 33%

Minimal 37%

Inadequate 20%

(Rigby, Ryan & Brooks-Gunn, 2006. Data based on 786 three-year-olds in 13 Cities from the Fragile Families Study.).
Evaluation of early childhood education state policies

• Percentage of children served
• Programs offered
• Policies and dollars
• Policies and regulations
• Indicators of quality within programs
• Program implementation
• Child outcomes
Early childhood education benchmarks

• Comparisons with the United States
• Comparisons with other states
• Clustering of states
• Change over time within states
State early childhood education policies: Four approaches

• Preschool investment
• Subsidy generosity
• Regulation stringency
• Tax generosity
## Subsidy generosity in 12 states

<table>
<thead>
<tr>
<th>State</th>
<th>Subsidy Eligibility $</th>
<th>Subsidy Spending $</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>29,304</td>
<td>487</td>
</tr>
<tr>
<td>MA</td>
<td>24,925</td>
<td>603</td>
</tr>
<tr>
<td>IL</td>
<td>22,770</td>
<td>345</td>
</tr>
<tr>
<td>TX</td>
<td>40,524</td>
<td>358</td>
</tr>
<tr>
<td>MI</td>
<td>25,076</td>
<td>390</td>
</tr>
<tr>
<td>IN</td>
<td>20,704</td>
<td>405</td>
</tr>
<tr>
<td>WI</td>
<td>26,819</td>
<td>524</td>
</tr>
<tr>
<td>TN</td>
<td>26,194</td>
<td>684</td>
</tr>
<tr>
<td>NY</td>
<td>27,659</td>
<td>733</td>
</tr>
<tr>
<td>PA</td>
<td>29,908</td>
<td>481</td>
</tr>
<tr>
<td>VA</td>
<td>46,638</td>
<td>357</td>
</tr>
<tr>
<td>CA</td>
<td>34,507</td>
<td>522</td>
</tr>
</tbody>
</table>

(State policy data from National Child Care Information Center; www.nccic.org; NCCF, and State ECE Policies)
## Subsidy generosity in 12 states

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<thead>
<tr>
<th>State</th>
<th>Subsidy Eligibility</th>
<th>Subsidy Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>Average</td>
<td>Average</td>
</tr>
<tr>
<td>MA</td>
<td>Below average</td>
<td>High</td>
</tr>
<tr>
<td>IL</td>
<td>Below average</td>
<td>Low</td>
</tr>
<tr>
<td>TX</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>MI</td>
<td>Below average</td>
<td>Below average</td>
</tr>
<tr>
<td>IN</td>
<td>Low</td>
<td>Below average</td>
</tr>
<tr>
<td>WI</td>
<td>Average</td>
<td>Average</td>
</tr>
<tr>
<td>TN</td>
<td>Average</td>
<td>High</td>
</tr>
<tr>
<td>NY</td>
<td>Average</td>
<td>High</td>
</tr>
<tr>
<td>PA</td>
<td>Average</td>
<td>Average</td>
</tr>
<tr>
<td>VA</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>CA</td>
<td>Above average</td>
<td>Average</td>
</tr>
</tbody>
</table>

(State policy data from National Child Care Information Center; www.nccic.org; NCCF, and State ECE Policies)
## Staff training in 12 states

<table>
<thead>
<tr>
<th>State</th>
<th>Hours of Training</th>
<th>Stringency</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>99</td>
<td>Average</td>
</tr>
<tr>
<td>MA</td>
<td>240</td>
<td>Stringent</td>
</tr>
<tr>
<td>IL</td>
<td>189</td>
<td>Stringent</td>
</tr>
<tr>
<td>TX</td>
<td>53</td>
<td>Average</td>
</tr>
<tr>
<td>MI</td>
<td>0</td>
<td>Low</td>
</tr>
<tr>
<td>IN</td>
<td>36</td>
<td>Below average</td>
</tr>
<tr>
<td>WI</td>
<td>147</td>
<td>Above average</td>
</tr>
<tr>
<td>TN</td>
<td>36</td>
<td>Below average</td>
</tr>
<tr>
<td>NY</td>
<td>23</td>
<td>Below average</td>
</tr>
<tr>
<td>PA</td>
<td>18</td>
<td>Below average</td>
</tr>
<tr>
<td>VA</td>
<td>24</td>
<td>Below average</td>
</tr>
<tr>
<td>CA</td>
<td>150</td>
<td>Stringent</td>
</tr>
</tbody>
</table>

(NCCF, State ECE Policies)
States with lowest scores (1990-2002)

National Center for Children and Families (NCCF) - Teachers College, Columbia University

www.policyforchildren.org

Preschool Investment
Subsidy Generosity
Tax Generosity
Regulation Stringency
States with the highest scores (1990-2002)

- Alaska
- Connecticut
- New York
- Hawaii
- Minnesota

- Preschool Investment
- Subsidy Generosity
- Tax Generosity
- Regulation Stringency

National Center for Children and Families (NCCF) - Teachers College, Columbia University
www.policyforchildren.org
Notes: \( N = 50 \) at each time point. Subsidy policy levels in 1991 unknown. Thus, 1994 policy levels are used to proxy 1991 subsidy policy choices.
## Five different policy approaches

<table>
<thead>
<tr>
<th>Policy Approaches</th>
<th>Number of States</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1</td>
<td>MN</td>
</tr>
<tr>
<td>Preschool Investment</td>
<td>8</td>
<td>KY, IL, NJ, OK</td>
</tr>
<tr>
<td>Child Care Tax</td>
<td>8</td>
<td>AR, CO, OH, OR</td>
</tr>
<tr>
<td>Subsidy and/or Regulation</td>
<td>21</td>
<td>RI, VA, VT, WI</td>
</tr>
<tr>
<td>Limited Policies</td>
<td>12</td>
<td>AL, AZ, MS, SC</td>
</tr>
</tbody>
</table>

(NCCF, State ECE Policies)
Indicators of high quality preschool

• Performance Standards
• Accreditation
• Attendance
Early childhood education
child outcomes

• No Child Left Behind
• FACES and Head Start
• Head Start Impact Study
• Early Head Start Evaluation
• State Pre-K Evaluations