EDUCATIONAL INEQUALITIES IN THE US

Sean Reardon’s work has called attention to large and growing achievement gaps between children from low and high socioeconomic status (SES) families in the US.
Trend in 90/10 Income Gap in Reading, 1940-2005 Cohorts

Reardon, 2011, in Whither Opportunity
LESSONS FROM FOUR PEER COUNTRIES

Bruce Bradbury, Miles Corak, Liz Washbrook, and I examined gaps using cohort data from:

- United States
- United Kingdom
- Canada
- Australia
## Box 1.1 The Cohort Studies

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>U.K.</th>
<th>Australia</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey name</td>
<td>Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K)</td>
<td>Millennium Cohort Study (MCS)</td>
<td>Longitudinal Study of Australian Children Kindergarten Cohort (LSAC-K)</td>
<td>National Longitudinal Study of Children and Youth (NLSCY)</td>
</tr>
<tr>
<td>Ages when children</td>
<td>5, 6, 7, 9, 11, 14</td>
<td>5, 7, 11</td>
<td>5, 9, 11</td>
<td>5, 7, 9, 11</td>
</tr>
<tr>
<td>Sample size (balanced panel)</td>
<td>8,370</td>
<td>11,762</td>
<td>3,940</td>
<td>4,346</td>
</tr>
</tbody>
</table>
MEASURING SOCIOECONOMIC STATUS (SES)

We used parental education as our measure of SES— it is a good proxy for permanent income, can be comparably measured, and is an important input to child development.

Based on the highest educated parent, we code families as

- low SES (HS or less)
- medium SES (some education beyond HS)
- high SES (BA or more)

Results were similar if we used family income.
SES & ACHIEVEMENT
-- THE US IS MOST UNEQUAL

Inequalities in children’s cognitive skills are significantly larger in the US than the other countries (Fig 5.1)
Figure 5.1 Achievement gaps by parental education are largest in the US at school entry.

At age 5

Gaps by parental education:

- High-medium gap
- Medium-low gap

Panel A

US reading: 0.54 (0.46, 0.54)
US math: 0.54 (0.47, 0.54)
UK reading: 0.35 (0.44, 0.35)
AU reading: 0.22 (0.25, 0.22)
CA reading: 0.32 (0.29, 0.32)
Panel B

At age 7/9

std dev difference

0.56 0.53
US reading US math

0.43 0.34
UK reading UK math

0.31
AU reading

0.28
CN reading

0.42 0.26
CN math
And at age 11

Panel C

<table>
<thead>
<tr>
<th></th>
<th>Std dev difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>US reading</td>
<td>0.56</td>
</tr>
<tr>
<td>US math</td>
<td>0.55</td>
</tr>
<tr>
<td>UK reading</td>
<td>0.34</td>
</tr>
<tr>
<td>AU reading</td>
<td>0.45</td>
</tr>
<tr>
<td>AU math</td>
<td>0.45</td>
</tr>
<tr>
<td>CN math</td>
<td>0.37</td>
</tr>
</tbody>
</table>
WE FOLLOW CHILDREN IN THE US EVEN LONGER — TO AROUND AGE 14

The US data uniquely measures outcomes in a comparable metric for a large sample of children on six occasions between kindergarten and 8th grade.
Figure 6.4 Over time, achievement gaps emerge between low and high SES children who started school with the same level of reading ability. High SES children always develop an advantage, whether they started with high, average or low ability.
Table 6.2 SES differences in early achievement account for more than half of the gaps we observe in reading at age 11

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>UK</th>
<th>AU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial ability age</strong></td>
<td>6 (Spring K)</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td><strong>Instrument age</strong></td>
<td>5 (Fall K)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Initial top-bottom education gap</strong></td>
<td>0.90</td>
<td>0.76</td>
<td>0.56</td>
</tr>
<tr>
<td><strong>Age 11 top-bottom education gap</strong></td>
<td>1.03</td>
<td>0.69</td>
<td>0.68</td>
</tr>
<tr>
<td>Of which:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attributed to initial differences</td>
<td>0.72 (70%)</td>
<td>0.40 (57%)</td>
<td>0.45 (66%)</td>
</tr>
<tr>
<td>Attributed to subsequent divergence</td>
<td>0.31 (30%)</td>
<td>0.29 (43%)</td>
<td>0.23 (34%)</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>9,650</td>
<td>10,717</td>
<td>3,333</td>
</tr>
</tbody>
</table>
WHAT CAN THE US DO TO REDUCE EARLY INEQUALITIES?

Provide more support for early learning:
- evidence-based parenting programs for families with infants and toddlers
- universal high quality preschool for 3 and 4 year olds

Provide more support for families:
- address low earnings (e.g. increase minimum wage)
- expand income supports (e.g. EITC, CTC)
- strengthen food/nutrition programs (e.g. SNAP, school meals, WIC)
- strengthen health programs (e.g. Medicaid)
- extend work-family policies (e.g. paid family leave)
WHAT DO WE KNOW ABOUT EARLY LEARNING?

Janet Currie’s landmark studies of Head Start provided the first causal evidence that Head Start works to raise achievement for disadvantaged children and reduce inequalities (Currie & Thomas, 1995; Currie & Thomas, 1999; Garces, Thomas, & Currie, 2002; Currie & Neidell, 2007).

Researchers building on that foundation continue to study the effects of Head Start as well as newer preschool and pre-K programs.

Current challenges in that work include:

- the changing counterfactual (Zhai, Waldfogel, & Brooks-Gunn, 2014; Kline & Walters, 2016)

- the continuing issue of fade-out (e.g. Magnuson, Ruhm, & Waldfogel, 2007; Bailey, Duncan, Odgers, & Yu, 2017)
WHAT DO WE KNOW ABOUT POLICIES TO SUPPORT FAMILIES?

Janet Currie has done path-breaking work here as well, showing the causal effects of a host of public policies on child health and development (e.g. Bitler & Currie, 2005). Indeed, she’s written 2 books on this (Currie, 1995; Currie, 2006).

Doug Almond has also done path-breaking work, leveraging historical data to show that public policies have improved child health and development (e.g. Almond, Hoynes, & Schanzenbach, 2011).

Subsequent research has confirmed that income transfers matter for child development, particularly in early childhood (e.g. Milligan & Stabile, 2011; Dahl & Lochner, 2012). Drawing on this evidence, a number of us are advancing proposals for a universal child allowance.

There are also several studies showing causal effects of work-family policies such as paid family leave on child health and development (Rossin-Slater, 2017). PFL has been enacted by 6 states (CA, RI, NJ, NY, WA, MA) and DC and is under consideration in Congress.

Policies typically deliver support for early learning OR income support, but not both.

My colleagues and I are currently evaluating a program Room to Grow that combines these – delivering parenting education and referrals AND material support to low-income women who are seen every 3 months starting before birth to when the child is age 3.

Expectant mothers are randomized in 3rd trimester, with half offered a slot in Room to Grow and half assigned to a control condition. We are collecting background data at baseline, proximal outcomes at 10 months and 25 months, and child and family outcomes at 36 months.

Stay tuned …
WIDENING THE LENS — BRINGING IN OTHER COUNTRIES

Thus far, my comparative work has focused on 4 peer countries – all Anglo/American – leaving open the question of whether/how gaps differ in other countries.

Broadening the lens can provide new insights into the sources of inequalities in child development, and possible remedies.

For that reason, my colleagues and I are working on extending the analysis to include data from other countries.
NEXT STEPS

New project studying SES gaps in cognitive skills, behavior, and health in early childhood, school age, and adolescence in France, Germany, Japan, Netherlands, UK, US

Proposed network studying SES gaps in a larger set of countries, adding Australia, Canada, Denmark, Korea, Norway to the group above

Proposed project studying SES gaps in Latin American countries, including Chile, Columbia, Uruguay, and others
THANKS

To Australian Research Council, NORFACE, Russell Sage Foundation, Sutton Trust, and WT Grant Foundation for supporting the research on achievement gaps

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To Pivotal Ventures, Robert Wood Johnson, Russell Sage Foundation, and Washington Center for Equitable Growth for supporting the research on paid family leave

To Robert Wood Johnson and Viking Foundation for supporting the evaluation of Room to Grow

To National Institute of Child Health and Human Development (NICHD) for supporting the Columbia Population Research Center (CPRC)
EXTRA SLIDES
Figure 3.3 Children in the U.S. are least likely to be living with both biological parents.
Figure 3.4 Although all four countries have many immigrant parents, in the U.S. children of the least educated parents are most likely to have an immigrant parent – but selective immigration policies means that the reverse applies in Australia and Canada.
Figure 3.7 Highly educated parents are much more likely to read to their children every day. However, Canadian parents with low education read to their children as often as highly educated parents from the other three countries.
Figure A4.11 Australia and UK provide universal preschool, but in the US and Canada, enrollment varies by SES.
Figure 3.8 In the absence of government taxes and transfers, child poverty would be as high in the other countries as it is in the US. But government benefits do more to reduce poverty in the other countries than they do in the US.

Source: Bradbury and Jantti (2001)