Recent Changes in Intergenerational Mobility in the UK: A Summary of Findings

Main findings

- Recent changes in social mobility are studied by considering relationships between intermediate outcomes (degree attainment, test scores and non-cognitive abilities) and parental income for cohorts born between 1970 and 2000. There is no evidence that these relationships have changed over this period.

- This is in stark contrast with the strengthening relationship between intermediate outcomes and parental income that accompanied the previously well documented decline in social mobility that occurred for birth cohorts from 1958 and 1970.

- The decline in intergenerational mobility that occurred between these 1958 and 1970 cohorts is not ongoing, but neither has there been any significant improvement.

- Parental background continues to exert a very significant influence on the academic progress of children:
  
  - Those from the poorest fifth of households but in the brightest group at age three drop from the 88th percentile on cognitive tests at age three to the 65th percentile at age five. Those from the richest households who are least able at age three move up from the 15th percentile to the 45th percentile by age five.

  - If this trend were to continue, the children from affluent backgrounds who are doing poorly at age three would be likely to overtake the poorer but initially bright children in test scores by age seven.

  - Inequalities in degree acquisition meanwhile persist across different income groups. While 44 per cent of young people from the richest 20 per cent of households acquired a degree in 2002, only 10 per cent from the poorest 20 per cent of households did so.

- The UK remains low in the international rankings of social mobility when compared with other advanced nations.
Introduction

This is a summary of a report by Jo Blanden and Stephen Machin commissioned by the Sutton Trust to investigate recent changes in intergenerational mobility in the UK.

In 2005 the Trust commissioned a report from the authors which highlighted the fall in intergenerational mobility for children born in the UK in 1970 compared with those born in 1958. This revealed that the adult earnings of the 1970 cohort were more closely linked to the income of their parents when compared with those in the 1958 cohort.

Most notably, the proportion of people from the poorest fifth of families obtaining a degree increased from 5 per cent to 7 per cent, while the graduation rates for the richest fifth rose from 20 per cent to 37 per cent.

The research also found that social mobility in the UK and the US was lower than all other advanced nations for which there was comparable data during this period.


Partly due to lack of survey data for children born in the 1980s, but also because later cohorts have yet to reach adulthood, this follow-up work investigates the link between the income of parents and the intermediate outcomes of their offspring, rather than their adult earnings.

These outcomes include acquiring a degree by age 23, cognitive tests scores during the early years, and parents’ reports of behaviour during childhood. A key assumption is that, as demonstrated by previous studies, earlier educational and behavioural outcomes for children are a good (and reasonably constant) predictor of their future earnings as adults.

So inequalities in intermediate outcomes between children from poorer and richer households provides an indication of future mobility for children growing up in Britain today and in the recent past.

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4 The 1958 cohort study is known as the National Child Development Study (NCDS) and the 1970 cohort study known as the British Cohort Study (BCS).
Evidence for more recent cohorts

The evidence from more recent surveys suggests that the association between family income and intermediate outcomes has held constant for children born in the period 1970-2000 – parental background continues to have a significant influence on children’s academic progress.

The results presented in Table 2 below detail the mean values for children in different income groups, focusing on the differences or inequalities between those in the richest fifth of households and the poorest fifth of households.

Degree acquisition

The gap in graduation rates between those from the poorest and richest groups remained the same for those graduating (on average) in 1998 and those graduating five years earlier in 1993.

For those graduating in 2002, there was a slight widening of educational inequality in graduation rates compared with those acquiring degrees in the 1990s. The proportion of people acquiring degrees among the poorest income groups dropped from 11 to 10 per cent while the proportion acquiring degrees among the richest groups grew by 4 percentage points, from 40 per cent to 44 per cent. However, the small samples of people involved mean that these changes are statistically insignificant; consequently, the data would support the conclusion that there has been ‘no change’ in the gap in graduation rates.

Test scores

Children born around the Millennium from the poorest fifth of households rank on average at the 40th percentile on cognitive tests at age five, compared with children from the richest fifth of households who rank at the 58th percentile (a higher percentile denotes a higher performance in the tests).

The inequality in children’s performance in tests between low income and high income groups widened significantly between the 1958 and 1970 cohorts of children; changes on this scale are not seen for later cohorts of children.

Children’s behaviour

The research also shows that a stark divide exists in the behavioural traits of children from low income compared with those from high income parents. We use indicators of externalizing behaviour (fighting, disobedience, temper tantrums etc) to form an index of bad behaviour.

The rise in inequality in behavioural attributes among children in more recent cohorts is small compared with the magnitude of the rise across the previous 1958 and 1970 cohorts.
Table 2: Inequality in Intermediate Outcomes by Parental Income in Recent Cohorts

<table>
<thead>
<tr>
<th>Percentage acquiring degrees by age 23</th>
<th>Lowest 20 Percent of Family Income</th>
<th>Middle 60 Percent of Family Income</th>
<th>Highest 20 Percent of Family Income</th>
<th>Educational Inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>... in 1993</td>
<td>7</td>
<td>15</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>... in 1998</td>
<td>11</td>
<td>23</td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>... in 2002</td>
<td>10</td>
<td>21</td>
<td>44</td>
<td>34</td>
</tr>
<tr>
<td>Change (1993-2002)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average percentile ranking in cognitive tests at age 5 (higher ranking equals higher scores)</th>
<th>Lowest 20 Percent of Family Income</th>
<th>Middle 60 Percent of Family Income</th>
<th>Highest 20 Percent of Family Income</th>
<th>Educational Inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>... in 1991</td>
<td>38.4</td>
<td>52.8</td>
<td>52.7</td>
<td>14.4</td>
</tr>
<tr>
<td>... in 2004</td>
<td>40.8</td>
<td>50.8</td>
<td>56.9</td>
<td>15.1</td>
</tr>
<tr>
<td>... in 2006</td>
<td>40.4</td>
<td>51.3</td>
<td>58.4</td>
<td>18.1</td>
</tr>
<tr>
<td>Change (1991-2006)</td>
<td>3.7</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

All changes over time over this period are statistically insignificant.
**Millennium children**

Results for children born in 2000 and 2001 and tracked in the Millennium Cohort Study suggest that the inequalities in cognitive test scores for those born at the turn of the 21st century are similar to those previously reported for children born in 1970.

Children from the poorest fifth of households who are in the brightest group at age three rank in the 88th percentile on cognitive tests, but drop to the 65th percentile by age five; meanwhile children from the richest fifth of households who are in the lowest achieving group rank in the 15th percentile on cognitive tests at age three, but rise to the 45th percentile by age five. The improvement in performance for the worse performers at three is much stronger for those in higher compared to lower income groups.

This means the gap in test scores between high achieving children from poor backgrounds and low achieving children from affluent backgrounds has shrunk from more than 70 percentiles at age three to 20 percentiles by age five. If this trend were to continue, the children from affluent backgrounds would be likely to overtake the poorer children in test scores before age seven.

**Evolution of Test Scores by Ability Grouping and Family Income for children in the Millennium Cohort Study**

![Graph showing the evolution of test scores by ability grouping and family income for children in the Millennium Cohort Study.](image)

Notes:
- Low income is bottom quartile of family income averaged over the age three and five surveys. High income is top quartile.
- Low ability is defined as bottom quartile in vocabulary score at age three, high ability is defined as top quartile in vocabulary score at age three.

These early trends mirror those revealed for children born in 1970, with low achieving children from rich backgrounds eventually overtaking high achieving children from poor backgrounds between age five and ten.

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International comparisons

The UK position in the international rankings of social mobility remains very poor:

- An OECD report\(^5\) from 2007 surveying all known international studies on mobility in OECD countries, mainly focusing on those born in the 1950s and 1960s, finds that the UK has the lowest intergenerational earnings mobility of 12 advanced countries.

- A 2006 comparative study\(^6\) looked at the association between 13 year olds’ test scores in 1995 and 1999 and ‘books at home’ (a proxy for parental background). It places the UK bottom of the international rankings of 54 countries, with the closest relationship between test scores and parental background.

- Another recent study\(^7\) of 7 OECD countries finds that UK adults aged between 30 and 39 have the strongest association between their test scores and their father's education.

Conclusions

Taking all these results together suggests that the sharp decline in intergenerational mobility that occurred between between the 1958 and 1970 cohorts has not continued for more recent generations of children. However, at the same time mobility levels have not reversed or started to improve, and remain very low.

The fall in intergenerational mobility between the 1958 and 1970 cohorts appears to have been an episode. Social mobility worsened and took a step change downwards, leaving the UK close to the bottom of the intergenerational league table of mobility.

Parental background continues to exert a significant influence on the academic progress of recent generations of children. Stark inequalities are emerging for today’s children in early cognitive test scores -- mirroring the gaps that existed and widened with age for children born 30 years previously.

Inequalities in degree acquisition meanwhile persist across different income groups, with those from high income groups still over four times as likely to graduate as those from low income groups.

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\(^5\) Intergenerational Transmission of Disadvantage - Mobility or Immobility Across Generations? By Anna Christina d'Addio, OECD, 2007

\(^6\) How Equal Are Educational Opportunities? Family Background and Student Achievement in Europe and the United States, L Woessmann (2004)

\(^7\) Changes in intergenerational income mobility in Britain, in M. Corak (ed.) Esping-Anderson (2005)