Chicken and egg: child poverty and educational inequalities

Donald Hirsch

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CPAG promotes action for the prevention and relief of poverty among children and families with children. To achieve this, CPAG aims to raise awareness of the causes, extent, nature and impact of poverty, and strategies for its eradication and prevention; bring about positive policy changes for families with children in poverty; and enable those eligible for income maintenance to have access to their full entitlement. If you are not already supporting us, please consider making a donation, or ask for details of our membership schemes and publications.
Acknowledgements

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Donald Hirsch

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About the author

Donald Hirsch is an independent consultant who analyses social policy. As Special Adviser to the Joseph Rowntree Foundation, he has monitored welfare reform and poverty trends over the past ten years. He is the author of a wide range of reports on welfare reform, poverty, older workers, long-term care and education. A former journalist and education correspondent of *The Economist* in the late 1980s, in the early 1990s he was employed by the Organisation for Economic Co-operation and Development in Paris, where he produced a number of reports comparing different countries’ education systems.
Summary

Child poverty and unequal educational opportunities are inextricably linked. Children’s educational prospects reflect the disadvantages of their families. Those who are poor, whose parents have low qualifications and no or low-status jobs, who live in inadequate housing and in disadvantaged neighbourhoods, are less likely to gain good qualifications themselves at school.

The joining up of responsibility for schools, children and families in a single ministry shows a new government commitment to tackling poverty and educational disadvantage together. This requires, on the one hand, a direct assault on problems such as low income and poor housing, and, on the other, a narrowing of the ‘poverty gap’ in education: the extent to which poor children have worse educational prospects.

This briefing highlights the extent of this gap. In particular, it shows the extent to which at different stages of childhood and in later life, one’s social background interacts with educational prospects. Specifically:

- By age three, being in poverty makes a difference equivalent to nine months’ development in school readiness.
- At each stage of compulsory schooling, the poverty gap grows. In particular, there is a big jump early in secondary school, with poor children nearly two years behind by the age of 14.
- Children who do badly at primary school are less likely to improve at secondary school if they are poor. Children who are only slightly below average at primary school are more likely to be among the worst performers at secondary school if they are poor.
- Young people with parents in manual occupations remain far less likely than others to go to university. Even though their prospects have improved, they have not been the main beneficiaries of university expansion. Children of non-manual workers are over two and a half times as likely to go to university than children of manual workers.
- Children from poor families are more likely to have poor qualifications. There are more teenagers outside education, employment and training in the UK than in most other countries, and the rate has been rising.
- The association between growing up in poverty and being poor in adulthood has become stronger since the 1970s. This effect is closely linked to education, but its growth is also associated with a strengthening impact of child poverty itself on future outcomes.
CPAG has campaigned for many years to try to ensure that families with children are protected from poverty. This requires benefits and tax credits that provide an adequate safety net, jobs that pay a living wage and a government that does not tax poorer families excessively. Yet the long-term strategy to end child poverty requires more than this. The Government has recognised, as have campaigning groups, that a crucial goal must be to break the cycle in which children growing up in poverty do worse in education, and those with low educational qualifications go on to form the poor families of the future.

CPAG will continue to work on a wide front to analyse and address the immediate causes and effects of poverty, as well as long-term influences including the lack of educational opportunity. The creation of the Department for Children, Schools and Families suggests that the Government wants to create a holistic, joined-up approach to tackling child poverty. Too often in the past, measures to raise educational attainment have been divorced from efforts to help those groups who do worst in our education system, and assistance for low-income groups has not been linked to improvement in education outcomes. The time is right to bring these debates and strategies together.

To inform the debate, this briefing sets out some stark facts about the reduced educational chances of those who grow up in poverty, at different stages of their childhood, adolescence and adult lives. The graphs on the following pages illustrate the pervasive nature of the poverty gap in education. They suggest that, even at an early age, many children from poorer families have serious disadvantages in terms of their preparedness for school. Far from reducing these disparities, the school system allows the situation to get worse. As childhood progresses, so the gap widens, as pupils from the most disadvantaged backgrounds are the least likely to progress from weak performance in primary school to stronger performance in secondary school. And these differences persist into higher education and the transition to the labour market.

The indicators shown in this briefing need to be understood in the context of wider debates about social mobility, about educational inequalities, about educational system failures, and about compounding factors such as poor housing and poor health.

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**Social mobility in the UK**

In 2005, research from the Sutton Trust suggested that social mobility across generations has declined in the UK in recent decades, although this may now have bottomed out. This study showed the following.
The extent to which poverty and disadvantages persist in some families from one generation to the next is heavily influenced by education.

The passing on of disadvantage across generations is stronger in the US and the UK than in Canada and a number of European countries. Unlike in the UK, in the US it has not worsened over time.

Children born in 1970 showed less mobility than those born in 1958. This is reflected in an increased link between social background and educational results. In particular, in the 1980s an expansion in staying-on rates after 16 mainly affected better-off children.

By the 1990s, however, post-16 staying-on rates extended to more disadvantaged families, although higher education expansion still benefited mainly the middle classes. The consequences for social mobility were mixed.

It is important to bear in mind that today’s social mobility evidence reflects educational effects from some years ago. We will not know for some time whether recent educational measures have started to improve mobility. But the historic evidence shows that this is a huge challenge.

Educational inequalities in the UK

The UK has one of the highest associations between social class and educational performance in the OECD. While overall educational performance is in many respects not bad by international standards, international studies have shown two particular weaknesses among UK teenagers. One is that on measures of knowledge and skills, the effect of social background is greater than in most other countries. The other is that a large minority of young people in the UK have negative experiences in their late teens. UNICEF’s low ranking of the UK on educational wellbeing is based on low expectations at age 15 and subsequently a larger proportion outside education without work or training.

System failures?

The failure of the education system to tackle large gaps in life chances by social background raises many important issues about provision. An analysis of these failings is beyond the scope of this briefing, but it is worth noting, for example, the following.

The extension of childcare to disadvantaged groups is an important part of the Government’s strategy, but much will depend on whether families are able to access the high-quality provision that is essential for children’s development. One recent evaluation of Sure Start suggests that it is not always reaching needy children – for example, because of cultural barriers in the case of some ethnic minority groups.
Poorer children are often excluded from educational opportunities available to others because of prohibitive costs.\(^5\)

Children from disadvantaged backgrounds often find the environment of school more oppressive or alienating. New Joseph Rowntree Foundation research shows that this occurs not just in secondary education but by the later primary years.\(^6\)

Complex funding streams have often impeded money from getting to children who need it most.\(^7\)

These and other features of the education system show that we are a long way from making the slogan of equality of educational opportunity a reality.

### Compounding factors

Children from poorer backgrounds experience multiple, cumulative disadvantages that are inextricably linked. Low income itself has been shown to have a causal relationship with educational attainment.\(^8\) The effects of pressures of income poverty are linked with other disadvantages, notably the following.

- **Health inequalities.** For example, low birthweight babies are more likely to develop learning disabilities; children in disadvantaged communities more often experience ill health that has a knock-on effect on their development.

- **Housing.** Children living in temporary and/or overcrowded accommodation find it harder to engage with the educational process. The Joseph Rowntree Foundation’s recent research shows the importance of the homework environment to social differences in education.\(^9\)

- **Labour market disadvantages.** The link between poor educational qualifications and poverty is compounded for some groups by unequal chances in the workplace, even among people with similar qualifications. For example, women who work part time earn on average 41 per cent less per hour than full-time male workers,\(^10\) and half of them are in jobs that do not match their skills or previous experience.\(^11\) A disabled person with good educational qualifications is three to four times more likely to lack but want paid work than a non-disabled person with similar qualifications.\(^12\)

### Conclusion

What role can the education system play in reducing disadvantage? It cannot, on its own, overcome the effect of economic inequality, but it can play an important part in reducing inequalities in life chances. Strategies to narrow the gap in education outcomes by social background need to be explored further.
Six stages of the education poverty gap

1 Differences in development in early childhood

Psychologists, educationalists, economists and policy makers all agree that development in the early years of life has a crucial effect on children’s futures. And the evidence shows clearly that these early experiences are strongly affected by children’s social background. Parents with more resources – material, cultural, intellectual – are able to give their children a better preparation for entering school.

An indication of just how important these are can be seen by looking at what children from different backgrounds, all born in 2000, could do by the age of three. This is summarised in Figure 1.

What the figures show

At the age of three, children from less advantaged backgrounds are already well behind their peers in identifying basic words and in other developmental milestones, such as counting, and recognising colours and shapes. Children in poverty are nine months behind the rest of the population in school readiness. Children whose parents lack educational qualifications are nine months behind the average, and 13 months behind the children of graduates. The risk of delayed development is also great if a child has a lone parent or is from a Black, Bangladeshi or Pakistani ethnic background.

The above figures show averages. Some children in poverty are doing well, despite their circumstances. But over a quarter of children in poverty are well over a year behind the average child in terms of school readiness.

Implications

These findings emphasise how early a large gap appears in children’s educational development. This emphasises the need for good-quality early childhood services. But it also shows the importance of support for families, in terms of financial help as well as services. Educational provision alone cannot tackle these strong effects of a disadvantaged background, which will only disappear with child poverty itself.
Figure 1

The poverty gap at age three, 2003

Definitions:
Poor = family income is below 60% median
Low parental education = no qualifications
High parental education = graduate qualification or equivalent

2 The growing divide in the school years

Far from reducing the differences between children from different social backgrounds, the education system allows this gap to grow. As shown by the latest Joseph Rowntree Foundation research, negative attitudes to and experiences of school start to develop among poorer children from primary school onwards. The widening gap in achievement can be seen by comparing test and exam results of students on free school meals, generally the least well-off children, with the rest.

What the figures show

During their years at school, children from families relying on free school meals do progressively worse, on average, relative to the norm. As shown in Figure 2, there is a particularly big jump in the first three years of secondary school, when the amount by which they fall behind rises from about one year to nearly two years of school progress. By the time they are 16, children on free school meals are more than one and a half GCSE grades, on average, behind their peers.

In recent years, there has been an improvement in performance in all social groups. More detailed figures show that at some ages children on free school meals have progressed faster and, at others, have progressed slower than other children. At best, these changes have narrowed the attainment gap by a very minor degree. For example, from 2002 to 2004 the gap narrowed by about a fifth of a term’s progress at Key Stage 3 and by about one-twentieth of a GCSE grade at Key Stage 4.

Note: this data relies on receipt of free school meals as an indicator of poverty. While it is the best available way of seeing how poverty affects school results, it is only a rough indicator; a more precise poverty measure may well show even greater effects.

Implications

These results show that the education system is failing in its basic task of providing each child with an equal opportunity to succeed, overcoming the effects of an unequal start in life. In facing the difficult challenge of narrowing the gap, rather than allowing it to widen, schools need to note, in particular, the large jump in social differences early in secondary school. This ties in with the finding that by the end of primary school, many disadvantaged children are starting to become alienated from the school system, and underlines the need for measures to keep them engaged at this age.
Figure 2

The poverty gap in school attainment, 2005

**SAT point scores: one point difference = one term’s progress**

- **Key Stage 1 (aged 7)**
  - Gap equivalent to 2.5 terms’ progress
  - Receiving free school meals: 13.4
  - Not receiving free school meals: 15.9

- **Key Stage 2 (aged 11)**
  - Gap equivalent to 2.9 terms’ progress
  - Receiving free school meals: 25.3
  - Not receiving free school meals: 28.2

- **Key Stage 3 (aged 14)**
  - Gap equivalent to 5.1 terms’ progress
  - Receiving free school meals: 29.9
  - Not receiving free school meals: 35

**GCSE point scores: average for best eight subjects**

- **Key Stage 4 (aged 16)**
  - Gap equivalent to 1.7 grades at GCSE
  - Receiving free school meals: 27.7
  - Not receiving free school meals: 37.7

Source: www.dfes.gov.uk/rsgateway/DB/STA/t000657/SocialMobility26Apr06.pdf
3 Differences in progression from 11 to 16

Children who start off doing well at school tend, on average, to do well later on. But many children buck this trend, improving their performance later on at school or not fulfilling their early promise. Equal educational opportunities mean continuing to give children a chance, not writing them off. However, as well as a social divide in overall achievement, there is also a social divide in terms of the eventual results of students from different backgrounds who start off showing similar levels of ability and achievement.

What the figures show

Figure 3 considers the chance of a child with poor performance in primary education doing relatively better in secondary school, and of a child with modest performance in primary school becoming one of the worst performers in secondary school.

In every ethnic group, children from families with sufficiently low incomes to get free school meals do worse in both respects. Their chance of overcoming initial low achievement is lower, and their chance of becoming a low achiever is higher. This difference is especially marked for White children, both boys and girls, the great majority of whom persist with initial low achievement. Thus, even though, as discussed earlier, children from some ethnic minority groups come to school with greater disadvantages, in some cases they make better progress once they get to school, with fewer differences according to social background.

More detailed data shows a remarkable cross-over in who does well and badly at secondary school. For example, 60 per cent of White boys on free school meals who start in the top half of achievement end in the bottom half, whereas in all ethnic groups, non-poor girls with low grades aged 11 do much better on average at GCSE.

Implications

This evidence suggests that social background, gender and ethnicity significantly affect the degree to which children achieve their potential in secondary education. A child in poverty has worse prospects at secondary school than a non-poor child with exactly the same results at primary school. This poses a challenge to secondary schools to ensure that teachers’ expectations are not affected by children’s social backgrounds, and that they give adequate support to children whose lack of home resources might affect their ability to progress.
### Figure 3

**The poverty gap and progress at secondary school, 1998-2003**

#### Definitions:
- **Rising out**: student is in bottom 10% of performers at end of primary, but performs higher than the bottom quarter of students at GCSE.
- **Sinking into**: student has medium-low performance (25th-50th percentile) at end of primary, but in bottom 10% at GCSE.

#### Source:

<table>
<thead>
<tr>
<th></th>
<th>White British/Irish</th>
<th>Black Caribbean</th>
<th>Pakistani</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chance of rising out of low performance</td>
<td>Chance of rising out of low performance</td>
<td>Chance of rising out of low performance</td>
</tr>
<tr>
<td></td>
<td>Chance of sinking into low performance</td>
<td>Chance of sinking into low performance</td>
<td>Chance of sinking into low performance</td>
</tr>
<tr>
<td>Boys</td>
<td>Receiving free school meals</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>Not receiving free school meals</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>Girls</td>
<td>Receiving free school meals</td>
<td>11%</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>Not receiving free school meals</td>
<td>26%</td>
<td>5%</td>
</tr>
</tbody>
</table>

- **Receiving free school meals**
- **Not receiving free school meals**
4 Persisting inequalities in accessing an expanding higher education system

Since the late 1980s, there has been a dramatic expansion in higher education. Soon, half of young people may go to university, compared with only about one in seven two decades ago. Yet expanding opportunities have so far been taken up largely by better-off families, and the chance of going to university remains highly unequal between different social groups.

What the figures show

The top graph shows that children in families with manual occupations had nearly twice as much chance of going to university in 2000 than a decade earlier. However, this was from a very low starting point. In fact, the expansion in higher education has benefited the middle class most, in the sense that most of the extra students have parents in non-manual jobs.

Later figures, shown in the bottom graph, suggest a minor improvement in the representation of less advantaged students in universities in the past decade. However, they remain a small minority.

The gap is particularly pronounced in higher-status universities. Despite efforts to improve access, the proportion of students from a lower socio-economic background at the top universities remains stuck at about one in six. Given that graduates of these universities tend to fill the best jobs, this shows that the prospects of someone from a poor background going on to succeed in a high-status occupation are likely to remain slim.

Implications

Government attempts to improve university access for less well-off children have a long way to go. Small improvements to date need to be stepped up. At the same time, the potential impact of higher fees on the participation of lower-income groups needs to be carefully monitored. Proposals for an improved grant scheme are welcome, but do not remove the important burden of student debt that could deter those from lower-income families from enrolling.
**Figure 4**

**The social gap in university entrance**

**Percentage entering higher education: long-term trend**

![Graph showing the percentage of non-manual and manual students entering higher education from 1990 to 2000.](image)


**Composition of university entrants: recent change**

![Graph showing the percentage of students from manual backgrounds and 'low participation neighbourhoods' from 1998/99 to 2004/05.](image)

5 An unequal transition from school to work

The social divide in educational outcomes feeds directly into unequal chances when entering the labour market. It is no coincidence that the UK is one of the countries with the widest gaps in school achievement by student background and also one of the developed countries in which the most young people leave school unqualified and end up not working or in poor, unstable jobs.

What the figures show

The top graph shows that few non-poor children now leave school without at least five GCSEs, but nearly one in five girls and more than one in four boys receiving free school meals are in this position.

Getting some GCSEs, even at low grades, helps give access to further learning. But those who obtain few or no qualifications at 16 are likely to leave school with poor prospects. The fact that there has been little change in the number of unqualified children in recent years helps explain the failure to reduce the number of young people who are neither at school nor in a job or training in their late teens (middle graph). Their numbers are higher in the UK than in most other countries – with only four out of 21 other OECD countries with higher rates.15

These are young people whose future prospects are poor. The bottom graph shows that 22 per cent of unqualified young people are not working in their late 20s compared with just 5 per cent of graduates.

Implications

These difficulties faced by disadvantaged and unqualified young people after leaving education will persist as long as young people become alienated from the school system. Solutions require education to become more relevant to them as they pass through school, and to change their perception of education from a system that is against them to one that provides support.
Figure 5

The poverty gap at age 16 and its knock-on effects

**Poorer children have a higher chance of leaving school unqualified**

Percentage aged 16 obtaining fewer than five GCSEs at any grade (2006)

<table>
<thead>
<tr>
<th></th>
<th>Receiving free school meals</th>
<th>Not receiving free school meals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11%</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>

**The numbers not working or learning in their late teens has risen**

Percentage of 16-18-year-olds not in education, employment or training

This affects prospects into adulthood

Percentage aged 25-29 (2007) who are:

<table>
<thead>
<tr>
<th></th>
<th>Unemployed looking for work</th>
<th>Economically inactive but want paid work*</th>
<th>No qualifications</th>
<th>GCSEs below grade C</th>
<th>GCSEs A*–C</th>
<th>A level or equivalent</th>
<th>Higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Girls</strong></td>
<td>10%</td>
<td>12%</td>
<td>7%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td>7%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

* These are people who would like to work but are not actively looking for a job

Source: www.poverty.org.uk
Transmission of disadvantage from one generation to the next becomes more prevalent

The gap in educational chances comes full circle when disadvantaged children fail to get qualifications, face poor job prospects as adults, and then are unable to give their own children a good start in life.

Studies that track people born in given years over the course of their lives allow us to see how poverty passes down through the generations – and the extent to which this phenomenon becomes more or less powerful over time.

What the figures show

The two age groups looked at in Figure 6 have both faced similar penalties for educational underachievement, both their own and that of their parents. Those whose parents received little education were more likely to be poor themselves in childhood (A). If they failed to get qualifications themselves, this disadvantage persists in adult life (B).

However, the subsequent damage from growing up in poverty appears to have been twice as strong for the younger cohort shown here than the older cohort (C), suggesting that in the 1980s the risks associated with childhood poverty increased. Among both groups, much of this damage is linked to educational and employment outcomes, but for the younger group there appears to be a penalty arising from childhood poverty itself, over and above its effect on education/employment chances (D).

Implications

This evidence suggests that a decline in social mobility among those who entered work in the late 1980s compared with people 12 years older is linked partly to a more powerful association between childhood poverty and adult poverty. Thus, while improving the education system will be critical in equalising opportunities, as long as children continue to grow up in hardship they will suffer later on. This briefing has underlined the importance of tackling poverty itself alongside the social gap in educational outcomes. Unless both are done simultaneously, children growing up with unequal chances will become the next generation of parents without the resources to give their own children a good chance – and this ‘chicken and egg’ cycle will continue.
**Figure 6**

**Poverty passes to the next generation**

Results from studies tracking people born in 1958 and 1970

<table>
<thead>
<tr>
<th>Effect of various factors on the ‘relative odds’ of being poor</th>
<th>Older cohort (teenagers in 1970s)</th>
<th>Younger cohort (teenagers in 1980s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Poverty as a teenager: effect of having a father who left school at the minimum age (controlling for other factors)</td>
<td>1.7 times</td>
<td>2.2 times</td>
</tr>
<tr>
<td>B. Poverty in early 30s: effect of having low educational qualifications (men only, controlling for other factors)</td>
<td>2.0 times</td>
<td>1.9 times</td>
</tr>
<tr>
<td>C. Poverty in early 30s: effect of having been poor when a teenager (men only, including, for example, the effect this has via education)</td>
<td>2.1 times</td>
<td>3.9 times</td>
</tr>
<tr>
<td>D. Poverty in early 30s: effect of having been poor when a teenager (controlling for education and other factors)</td>
<td>1.1 times</td>
<td>1.5 times</td>
</tr>
</tbody>
</table>

**Explanation:**

‘Relative odds’ compare the chance of being poor with being not poor – so someone with a 20% chance of being poor has relative odds of 1 to 4 (20:80). If a particular factor raised their risk of poverty to 33 1/3%, the relative odds would be 1 to 2, and so would have doubled.

Notes

1. J Blanden, P Gregg and S Machin, Intergenerational Mobility in Europe and North America, Sutton Trust, 2005
2. See for example, OECD, Knowledge and Skills for Life: first results from PISA 2000, OECD, 2001, 308. Further evidence from the PISA 2006 survey will be published in December 2007
8. See for example, R Cassen and G Gindon, Tackling Low Educational Achievement, Joseph Rowntree Foundation, 2007, p45
9. See note 6
11. L Grant, S Yeandle and L Buckner, Working Below Potential: women and part-time work, Equal Opportunities Commission, 2005
12. www.poverty.org.uk indicator 28, graph 4
13. See note 6
14. Information supplied by the Sutton Trust
Future work from CPAG

Over the next year, CPAG will be undertaking policy and research work on the relationship between education, inequality and poverty. This will culminate in a major publication on educational inequalities. Written by academics and practitioners, the published report will consider what drives the attainment gap. Placing education policy and related issues in the context of the Government’s commitment to end child poverty, it will adopt a life chances approach to inequalities in educational outcomes. It will assess the extent to which schools can, and should, compensate children for early disadvantages, and whether an appropriate balance has been struck between expenditure on educational support services designed to compensate children from the disadvantages associated with poverty, and preventive measures that protect children and families from poverty in the first place. It will present conclusions and recommendations to address not only what schools can do to ensure better educational outcomes for poor children, but action the Government must take to deal with the social and economic inequalities that prevent children from realising their potential in their passage through the education system.