



Department
for Education

Labour market outcomes: Executive Summary

Research report

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Purpose of the analysis

Labour market outcomes differ substantially between different groups. By breaking down the barriers to opportunity, the government is committed to improving labour market outcomes for all, irrespective of background. This analysis focuses on three areas of disparity: Ethnicity, Socioeconomic Status (SES) and Special Educational Needs (SEN).

This report looks at the early labour market outcomes of the 4.5 million individuals who were part of the cohorts that took their General Certificate of Secondary Education (GCSEs) exams in England between 2006 and 2009. The Longitudinal Education Outcomes (LEO) dataset contains a range of anonymised information about individuals including personal characteristics, education attainment, employment and income, and benefits claimed. Two outcomes are reported on: a measure combining earnings and employment (good outcome) and novel analysis using a measure of out-of-work benefits (poor outcome), both measured when individuals are in their mid to late 20s.

Good labour market outcome – the individual was in paid employment for at least one day in each of the 12 months of the 2017-18 tax year **and** had upper quartile earnings. Upper quartile earners represent around 15 per cent of each cohort and gender (around 60 per cent meet the employment definition above).

Poor labour market outcome – the individual was claiming out-of-work benefits for at least one day in each of six or more consecutive months of the 2017-18 tax year. This represents around 8 per cent of the males and around 12 per cent of the females in each cohort.

The majority of individuals (around 75 per cent) sit within neither category.

These categories focus narrowly on labour market factors and therefore are not intended to negate any individual's labour market choices, contribution to society or personal well-being, or whose economic contribution may be lower due to no fault of their own.

Differences in labour market outcomes could be driven by a range of factors, such as differences in educational performance, socio-demographic characteristics, geographic location or choices over different qualifications and study options. This research aims to understand the relative importance of these factors in explaining why gaps in earnings and employment and out-of-work benefits claims emerge between groups, and where those gaps cannot be fully explained by differences in characteristics that we can observe but does not imply any causality.

Breaking down the barriers to opportunity requires narrowing the range of labour market experiences for those from more deprived and less deprived groups. Understanding the drivers of differences in early career labour market outcomes is critical for the government's mission to break down barriers of opportunity for all.

It is some time since the individuals in this analysis were in school and their labour market outcomes are not necessarily reflective of the labour market chances of current pupils, however this analysis makes an important contribution by helping us understand at which phases and stages differences emerge between groups, why they materialise, and therefore where we need to focus to make progress to equalise opportunities.

Introduction

This report investigates the socioeconomic, demographic and education factors associated with labour market disparities of those with different backgrounds: ethnicity, socioeconomic status and SEN.

This Executive Summary document is a standalone overview of the key findings for each of the three groups. For further detail, there is a chapter for each group which contains key findings, background information and definitions, methodology and full results. In addition, a technical document and data tables accompany the report.

Executive summary – a brief overview of the main findings from the analysis

Chapter 1: ethnicity – a detailed examination of the labour market outcomes for seven ethnic groups (white British, Bangladeshi, Indian, Pakistani, black African, black Caribbean and Chinese). White British (as the majority ethnic group) is used as a comparator for other ethnic groups.

Chapter 2: socioeconomic status – a detailed examination of how labour market outcomes differ depending on socioeconomic status. An index of socioeconomic status is derived, for all individuals, from their free school meals status in combination with local area statistics. This index is divided into quintiles of socioeconomic status from the most disadvantaged to the least disadvantaged. The lowest SES quintile is used as the comparator group.

Chapter 3: special educational needs – a detailed examination of the labour market outcomes of those with and without SEN. The SEN Code of Practice 2002¹ was in place for these cohorts so the SEN categories used in this analysis are No SEN, SEN without a statement and Statement of SEN. Labour market outcomes for those with SEN are compared to those not identified with SEN.

Technical report – this document includes further details on the LEO dataset, derivation of variables used in the analysis, further technical details on the methodology used and information on sensitivity analysis carried out.

Data tables – breakdowns and results for the charts and analysis in each chapter in table form including results for all ethnic groups (in addition to the seven examined in the ethnicity chapter).

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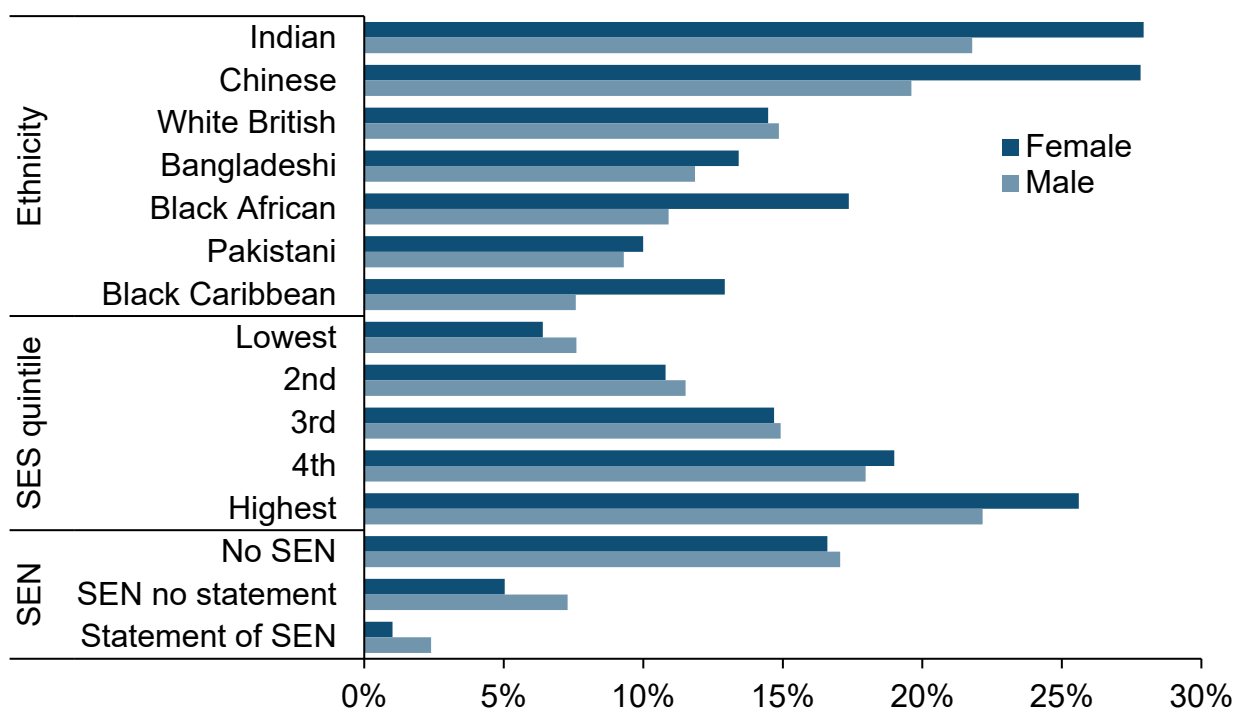
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/273877/special_educational_needs_code_of_practice.pdf

Observed differences in labour market outcomes

There are significant differences in the observed labour market outcomes across different groups. The characteristics most likely to impact the probability of being in a good outcome are (full results included in Figure 1):

- Growing up in the most affluent circumstances (highest SES quintile) greatly increases the probability that an individual achieves a good labour market outcome. In addition, Chinese and Indian individuals are also disproportionately likely to achieve this outcome.
- However, the presence of a statement of SEN significantly reduces this probability. We also found that, for males, having SEN without a statement, growing up in the lowest SES quintile and those from a black Caribbean background reduces the probability of achieving a good labour market outcome.
- The observed differences are greater for females than they are for males. For example, being in the highest SES quintile has a greater positive impact for females than for males, whereas being in the lowest has a greater negative effect.

Figure 1: Proportion of males and females in Good Outcome by ethnic group (selected), socioeconomic status and SEN

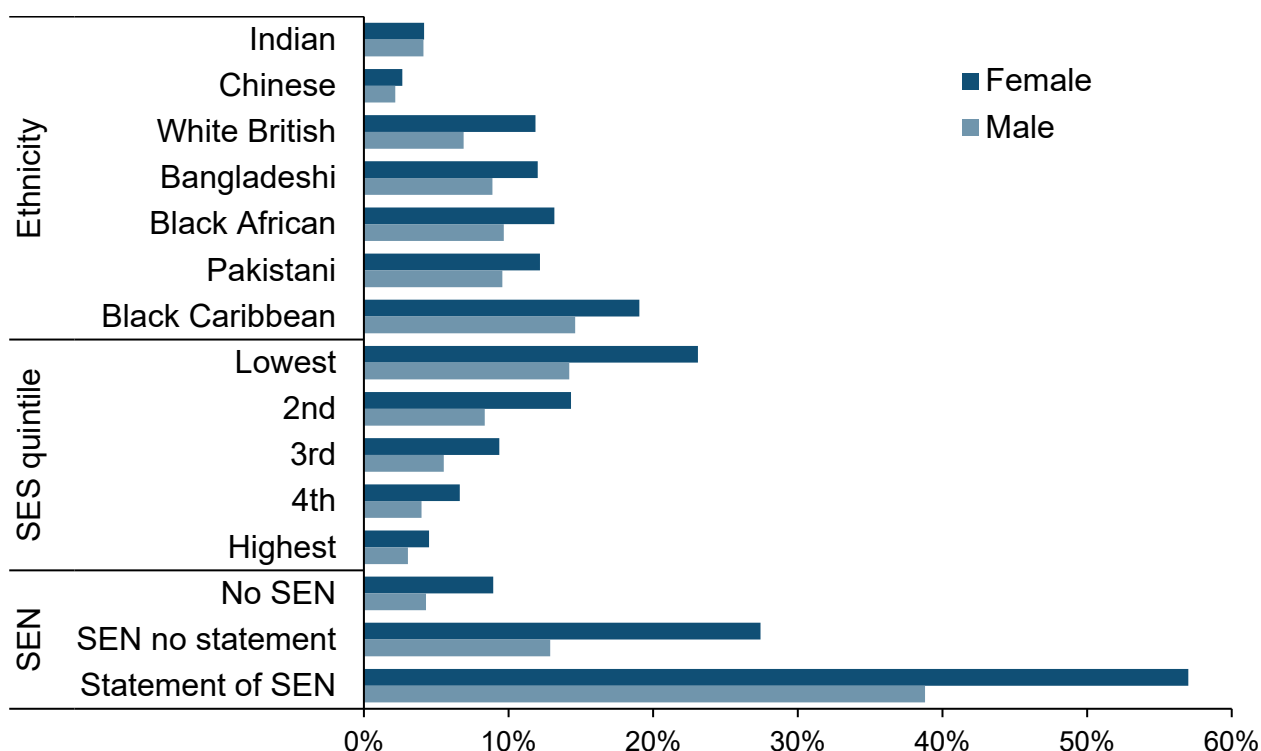


Source: Authors' analysis using Longitudinal Education Outcomes data

This analysis has also sought to understand the characteristics associated with individuals in a poor labour market outcome. The most common characteristics associated with this are (full results included in Figure 2):

- The presence of a statement of SEN is associated with the highest probability of being in a poor outcome. Having SEN without a statement, being from the black Caribbean ethnic group or growing up in the lowest SES quintile also increase the chance of a poor outcome.
- However, being from the Indian or Chinese ethnic group, growing up in a less disadvantaged SES background or no identification of SEN reduce the probability of a poor outcome.
- For all characteristics, females are more likely to be in a poor outcome than males. In addition, the difference between groups is greater. For example, the gap in the chance of poor outcome between those from the highest and lowest socioeconomic status quintiles is bigger for females than for males.

Figure 2: Proportion of males and females in Poor Outcome by ethnic group (selected), socioeconomic status and SEN



Source: Authors' analysis using Longitudinal Education Outcomes data

However, when we control for socioeconomic, demographic and education factors, we are able to account for the impact of a range of explanatory variables on the probability of an individual being in either a good, or poor, outcome. The full results presenting the impact of the control variables are presented in the relevant chapters of the report.

Explaining differences in labour market outcomes

Overall headlines

This analysis decomposes the total difference in outcomes between two groups into three components:

- **Characteristics:** the proportion of the difference in outcomes due to the different compositional makeup (socioeconomic, demographic and education) of the two groups. For example, some groups have higher levels of attainment which may help explain why they have stronger labour market outcomes.
- **Returns:** the proportion of the difference in outcomes which cannot be explained by accounting for raw differences in characteristics but is explained by differences in the labour market returns to those characteristics. For example, some groups may have higher returns to post-16 qualifications than others, which drives stronger outcomes. This in turn could be due to the different behaviours or experiences of individuals in these two groups with the same characteristics.
- **Unexplained:** the proportion of the difference in outcomes which cannot be explained by any of the socioeconomic, demographic and education factors in the data. For example, aspirations, social networks, cultural capital, recruitment practices, and so on.

There is some variation in the size of the Unexplained component: for socioeconomic status and special educational needs, around 60 to 90 percent of the differences can be explained. In general, we see that more of the poor outcome gaps can be explained than the gaps in good outcome. For ethnicity, this is far more variable, ranging from almost all of the gap to less than a third.

Main drivers of differences:

- For socioeconomic status and special educational needs we see that, in general, pre- and post-16 attainment factors are most important in explaining these gaps
- However, the factors explaining differences in good and poor labour market outcomes between each pair of groups can be distinct and unique
- For ethnicity, the most important factors for explaining gaps between white British and other ethnic groups differ for each pair, for good and poor outcome and by gender. For some, it is the differences in education levels which are important, but for others, differences in where individuals grew up are more important, and for some the demographic variables are most important.

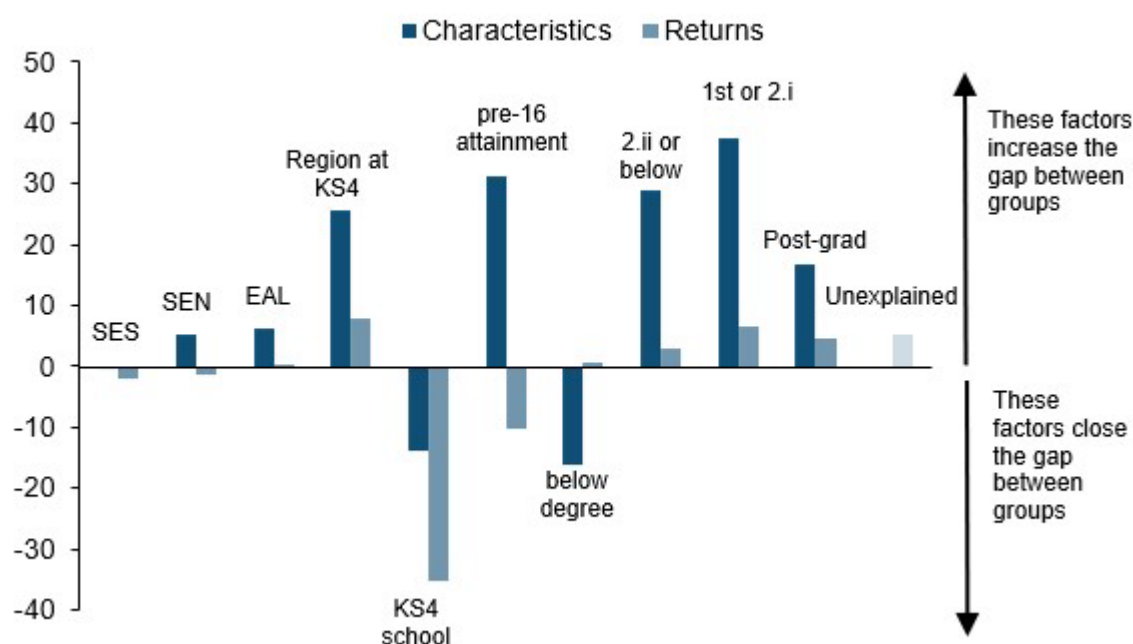
Ethnicity

For the decomposition ethnicity analysis, white British is used as a comparator group for the minority ethnic groups. Labour market outcomes are varied for different ethnic groups as are the factors which are important in explaining gaps between each ethnic group and white British. Here we look at two examples which highlight these differences, in both cases for males and good outcome: a comparison of Indian and white British, and a comparison of white British and black Caribbean.

Good outcome: Indian and white British males

On average, Indian males are more likely to be in a good labour market outcome than white British males (22 per cent compared to 15 per cent, respectively). This is a gap of 7 percentage points. Almost all of this gap is explained by the socioeconomic, demographic and education differences between these two groups.

Figure 3: Decomposition analysis of Good Outcome for white British compared to Indian males: percentage of gap explained by each factor or group of factors



Source: Authors' analysis using Longitudinal Education Outcomes data

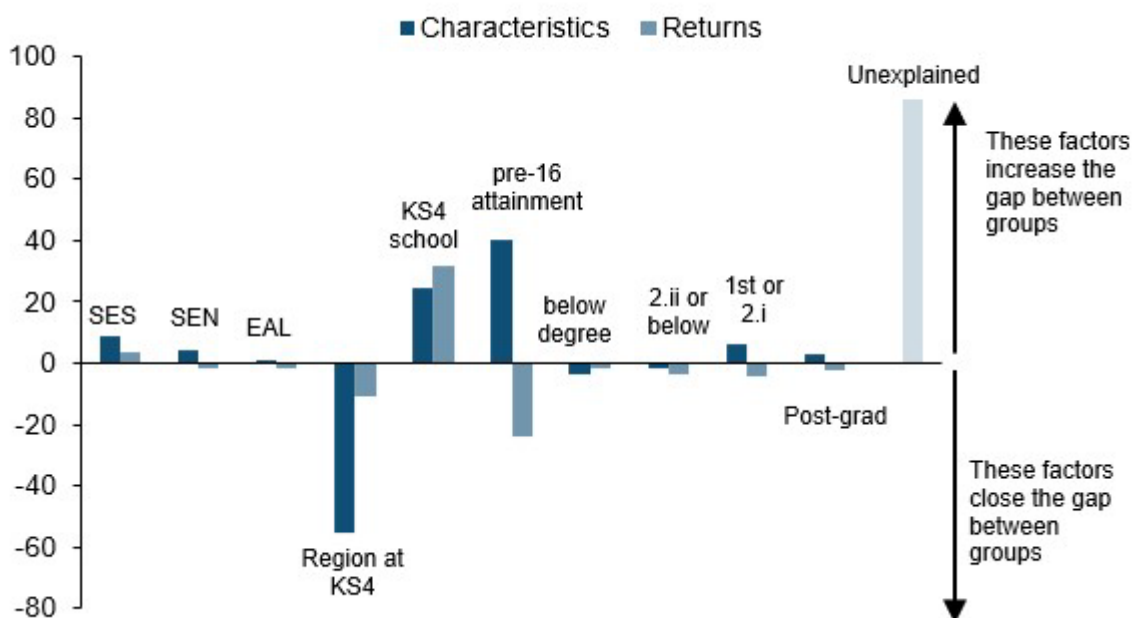
A large proportion of this gap is explained by the difference in the education levels of the two ethnic groups (see Figure 3), particularly at degree level and above, although pre-16 attainment is also important. The region during GCSEs also helps to explain this gap due to the differences in distribution of these ethnic groups across England (higher proportions of the Indian ethnic group in the South and London, lower proportions in the North) and better labour market returns for Indian males living in the same regions as

white British males. Conversely, factors relating to the school attended during key stage 4 (KS4) is associated with better labour market outcomes for white British males, suggesting that white British males are more likely to attend schools which increase labour market outcomes and have better returns to attending similar schools.

Good outcome: white British and black Caribbean males

There is also a 7 percentage point gap in good outcome between white British and black Caribbean males, but white British males are more likely to be in a good outcome than black Caribbean males (15 per cent compared to 8 per cent, respectively).

Figure 4: Decomposition analysis of Good Outcome for black Caribbean compared to white British males: percentage of gap explained by each factor or group of factors



Source: Authors' analysis using Longitudinal Education Outcomes data

Figure 4 shows the detailed decomposition for the gap in good outcome between white British and black Caribbean males. The unexplained component when decomposing this gap is substantial (86 per cent) i.e. a large part of the gap in good labour market outcomes between white British and black Caribbean males cannot be explained by their socioeconomic, demographic and education differences. In other words, the likelihood of a good outcome would be lower for a black Caribbean male who differed only in ethnicity from a white British male.

Although most of the gap between these two groups is not explained, the school attended during KS4 and pre-16 attainment are quite important in explaining part of the gap. White British males also have better labour market returns to the school they attended, but black Caribbean males do better with the same level of attainment. The region an individual lived in is also important, but this works to close the gap - the larger proportion of the black Caribbean ethnic group going to school in London, where labour market conditions are better, may account for this.

These two comparisons highlight how different the key factors can be for ethnicity, and we find even more variation with comparisons of other ethnic groups with their white British counterparts. For some, demographics are more important, others it is the pre- or post-16 education. In addition, the factors important for good outcome are not necessarily the same for poor outcome for an ethnic group, and there are gender differences too within ethnicities. This is discussed in more detail, along with full results for all ethnic groups examined, in the ethnicity chapter.

Socioeconomic status (SES)

This analysis examines the gaps in outcomes for those from the highest SES quintile (least deprived) and the lowest SES quintile (most deprived).

There is a significant disparity between the labour market outcomes of those from the most affluent quintile and the most deprived quintile. For example, for men in the most deprived quintile, just 8 per cent had a good outcome compared to 22 per cent in the least deprived quintile (a 15 percentage point gap).

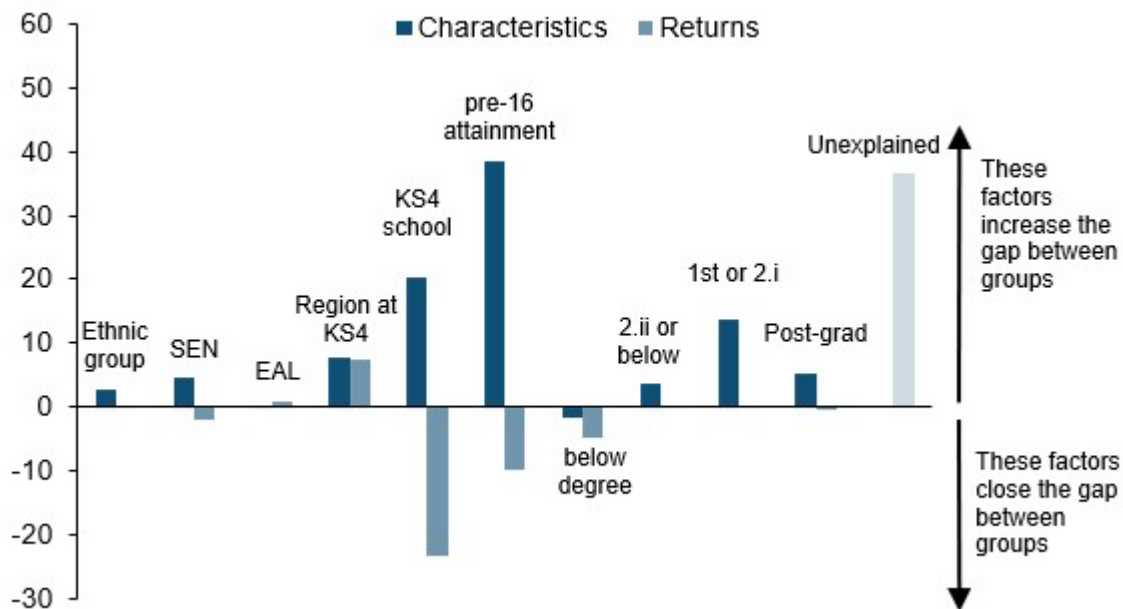
When we account for demographic and education factors, the data can explain 63 per cent of the difference between the most and least deprived quintile.

Figure 5 shows the detailed contributions for each factor for both the characteristics and returns components for men and good outcome. The majority of the differences in the probability of achieving a good outcome between the most and least deprived fifth is driven by differences in pre- and post-16 education: in particular individuals from more advantaged backgrounds perform better at school and are more likely to attend and do well at higher education, all of which contribute to a greater likelihood of a good labour market outcome. Factors related to the school attended at KS4 (type of school, school progress and peer demographics and attainment) are also important.

These differences in education are partially offset by differences in the labour market returns to pre-16 attainment and the school attended during GCSEs. For example, males from more deprived backgrounds appear to have stronger relative returns to attending a higher quality school and from similar attainment levels.

A smaller proportion of the difference between those from the most and least deprived backgrounds is explained by differences in demographic and personal characteristics, such as ethnicity, region, and SEN and English as an additional language (EAL) status.

Figure 5: Decomposition analysis of Good Outcome for high SES compared to low SES males: percentage of gap explained by each factor or group of factors



Source: Authors' analysis using Longitudinal Education Outcomes data

These results are broadly consistent for females, although the difference in achievement to degree level or above between the two socioeconomic groups has more importance. In addition, the returns components for the KS4 school and pre-16 attainment are much more similar in size for females than for males. The gap in the chance of good outcome between females from the least and most disadvantaged backgrounds is wider than it is for males.

For poor outcomes, again the gap between the highest and lowest SES quintiles is wider for females than for males, but pre-16 attainment is by far the most important factor in explaining these gaps for both males and females. In contrast to good outcome, the school attended during KS4 does not appear to have a role in explaining the difference in poor outcome between different socioeconomic groups.

Full results can be found in the socioeconomic status chapter of the report.

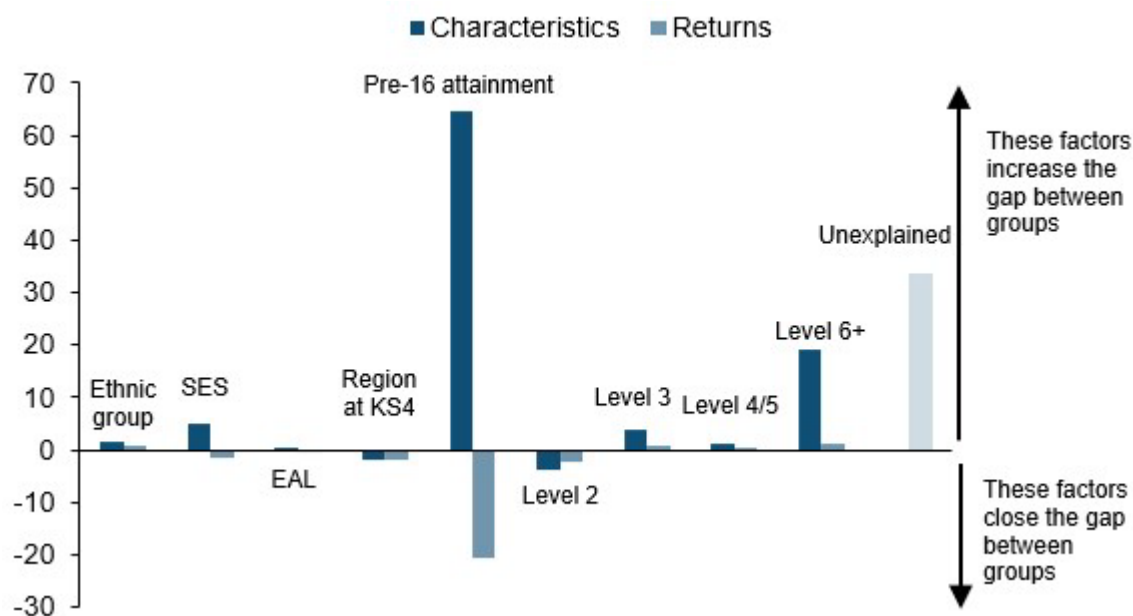
Special educational needs (SEN)

This analysis compares the labour market outcomes of those with and without statements of SEN with those not identified with SEN. Here we look in detail at the gaps in good outcome between males with SEN without a statement and males with no SEN.

There is a large difference in the probability of achieving a good labour market outcome between males with no SEN (17 per cent) and those with SEN without a statement (7 per cent). In other words, there is a 10 percentage point gap between these two groups. Around a third of this gap in good outcomes can be explained by the socioeconomic, demographic and education factors.

The detailed decomposition for this comparison can be seen in Figure 6. It is clear from this chart that the differences in pre-16 attainment (achievement in key stage 2 (KS2) and KS4) between males with no SEN and those with SEN without a statement are very important in explaining the gap in good outcome. Those with SEN do seem to have better returns to the same level of pre-16 attainment which closes the gap a little. Differences in degree level and above achievement also explains some of this gap, but demographics and the region an individual grew up in are relatively unimportant.

Figure 6: Decomposition analysis of Good Outcome for no SEN compared to SEN without statement males: percentage of gap explained by each factor or group of factors



Source: Authors' analysis using Longitudinal Education Outcomes data

When examining the gaps in good outcome for males between those with no SEN and those with a statement of SEN, we find that the important factors are the same, but that

the gap in outcomes is much larger, although more of this gap can be explained. This holds true for the female SEN good outcome gap but the gaps are larger for females and higher proportions of the gaps are explained by the socioeconomic, demographic and education factors.

These factors (pre-16 attainment and degree level achievement) are also the factors which explain most of the gap in poor outcome between those with and with SEN, for both males and females.

It should be noted that type of need is not examined in this report and there may be large disparities **within** the SEN groups for those with different needs. For those with more severe needs, a 'good' labour market outcome may be short of the definition used here.

Since these individuals were in school, there have been increases in the incidence of particular types of need. In addition, the SEN system has changed, with education, health and care (EHC) plans differing from statements of SEN, so that while these results still have relevance, the current SEN landscape has important differences.

Full results can be found in the special educational needs chapter of the report.



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