The long-term consequences of long-term disadvantage

A report by FFT Education Datalab and the Northern Powerhouse Partnership | December 2022

THE NORTHERN POWERHOUSE PARTNERSHIP

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Executive summary

Building on existing research, highlighting the negative impact of long-term disadvantage in secondary schools, The Northern Powerhouse Partnership (NPP) and FFT Education Datalab present wide-ranging data demonstrating the longer-lasting impacts of long term disadvantage on life outcomes at 22.

This new research, utilising the data linkage of the National Pupil Database (NPD) and Longitudinal Educational Outcomes (LEO) dataset, reinforces research by The Institute of Fiscal Studies outlining the additional economic cost associated with growing up in poverty (Blanden et al., 2010). Consequently, these new LEO analyses present a compelling call for further cost-benefit analyses of the economic cost of long-term disadvantage versus early policy intervention, as the demise of productivity, associated with school disadvantage, limits our economic growth.

Key findings

- Disadvantage is associated with negative long-term outcomes. Pupils eligible for FSM whilst at school are less likely than their peers to be in education or employment aged 22 and are more likely to be in receipt of workless benefits.

- The length of time a young person is in receipt of at FSM represents a clear social gradient in terms of decreased employment and long-term education outcomes.

- Lower qualification rates at the end of compulsory schooling persist into early adulthood, including lower rates of degree-level study. The gap in educational outcomes established at 16 never recovers.

- There is little variation by government region in the relationship between disadvantage and outcomes, apart from significantly London, where outcomes among the most disadvantaged individuals are better than elsewhere.

- London is an outlier for the impacts of long-term disadvantage. In almost every region, those who are long-term disadvantaged are around 30% less likely to be observed in a sustained positive destination than those who had never been eligible for FSM. The exception is London, where they were only 16% less likely.

- Those who were long-term disadvantaged were most likely to go on to a sustained positive destination of they lived in London (69%) and least likely if they lived in the North East (54%).

- Additionally, qualification rates, a gateway to employment outcomes and higher wages, were substantially better in London than elsewhere for long-term disadvantaged – 54% achieved Level 3 qualifications compared with

36% in the West Midlands, the second best region on this measure. Rates are lowest in the South West (24%), South East (25%) and East Midlands (26%).

- Apart from London, those who are long-term disadvantaged are between 60 and 70% less likely to be participating in degree-level study than those who had never been eligible for FSM. In London, they were around 25% less likely.

- Long term disadvantage negatively impacts all ethnicity groups, but interacts differently for some ethnicities. For example, those from Chinese, Indian, Bangladeshi, Pakistani, Other Asian, and Black African backgrounds, outcomes are similar despite the length of disadvantage. It is notable that these have high concentrations in the capital, helping to explain the lesser impact long term disadvantage has there.

  For others, the time eligible for FSM has a high impact on outcomes, particularly those from White Irish, White British and Irish Traveller backgrounds. Ethnicity is a complex area to assess, and the variation in uptake of different ethnic groups, particularly Chinese pupils, in claiming FSM needs to be further considered (Iniesta-Martinez, Samaira and Evans et al., 2012).

Executive summary

- With so many long term disadvantaged from the high impact group in the North of England, defined previously as including White and Black Caribbean groups, the differential impact of the progress chasm by age sixteen has been of concern for many years, highlighted in the work most notably of FFT Education Datalab. The significant economic impact of this in later life not qualified till now. It is why any additional investment in education needs to be focused more on these children, not only addressing the wider funding pressures on the system at present.

- Abolishing opportunity areas, and refusing to create anymore in places and instead centrally controlled areas to received tilted Whitehall initiatives with no devolved funding, is a huge mistake. This is at the same time as philanthropists like the Steve Morgan Foundation and Shine take a place based approach in North Birkenhead to address the determinants sitting behind the wider disadvantage gap.

- The loss of any additional funding for disadvantaged children post-16 is difficult to justify, and any further pupil premium reform to increase the amount paid to schools with more long term disadvantaged children would need to be accompanied by ensuring this funding continued at least until eighteen.

Bibliography
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1. Introduction

We've been writing for a number of years[i] about the relationship between attainment and the amount of time pupils have been eligible for free school meals (FSM). We've also written[ii] about how this relationship differs between pupils from different ethnic backgrounds.

We now go beyond this analysis to examine the longer-term outcomes of long-term disadvantage. This includes post-school qualifications, employment and earnings. We focus on a small number of key outcomes in this report, with additional outcomes provided as an Appendix.

There are three recent pieces of work in this domain that this study aims to build upon.

The first is the IFS's recently published review[iii] of existing work on education inequalities. They looked at how education outcomes vary by gender, socio-economic status, ethnicity and region. They then examined how differences in education outcomes are related to differences in life outcomes.

The second[iv] and third[v] are pieces of analysis published by the ONS looking at long-term outcomes for disadvantaged pupils.

Much of this work looked at variation in outcomes by pupils' eligibility for free school meals (FSM) at a single point in time (for example, in the year GCSEs were taken). We build on this by considering pupils' FSM eligibility over their entire school careers. Additionally, while they were primarily concerned with pupil disadvantage in general terms, it is the persistence of disadvantage over time that we are concerned with.

2. Data

2.1. Background

We use linked data from the National Pupil Database (NPD) and Longitudinal Educational Outcomes (LEO) dataset.

NPD provides an almost complete history of enrolments in state-funded schools in England, together with data on attainment, absence and exclusions. It has also been linked to other educational datasets such as:

- the National Client Caseload Information System (NCCIS), which records activities undertaken in the first two years post-16
- the Local Authority Alternative Provision Census, which records educational provision paid for by local authorities but delivered outside the state-funded school system (e.g. independent schools)
- the Young Persons Matched Administrative Dataset (YPMAD), which records qualifications held at Level 3 of the National Qualifications Framework (A level and equivalent) and below from age 16 upwards.

The LEO dataset provides details of labour market participation including annual earnings, spells of employment and state benefits received. Details of qualifications/ courses studied post-16 within the further and higher education sectors are also available via the Individualised Learner Record (ILR) and Higher Education Statistics Agency (HESA) student record. These datasets cover the UK apart from ILR which is limited to England.

2.2. Defining cohorts

The aim of the project is to examine the longer-term outcomes of being disadvantaged while at school. Disadvantage is defined as the percentage of terms pupils are observed in School Census as being eligible for free school meals (FSM) from Reception to Year 11 (age 5 to 16).

This means we need to observe FSM history over a twelve year period. As the first School Census took place in January 2002, the oldest cohort we include are those in Reception that year and who would have reached the end of compulsory schooling (Year 11) in 2013. These pupils were born between 1st September 1996 and 31st August 1997. We also include the two cohorts born between 1st September 1997 and 31st August 1999.

We include in the cohorts all pupils we observe from Year 7 (age 12) to Year 11 (age 16) in state-funded schools (mainstream, special, alternative provision) and young people in local authority alternative provision. This means we do not include pupils who were observed attending state-funded primary schools but not secondary schools. These pupils may have entered the independent sector or migrated to other parts of the UK or overseas.
We label each cohort with the year in which they would have been expected to finish Key Stage 4.

2.3. Defining outcomes

We create a set of post-16 outcome measures covering education and labour market participation for each academic year post compulsory schooling.

The measures cover:

- Highest level of qualification, sourced from YPMAD for qualifications up to NQF level 3 and from ILR and HESA for qualifications at NQF level 4 and above[vi]
- Achievement of a grade C/4 in GCSE English
- Achievement of a grade C/4 in GCSE maths
- Recorded in custody in NCCIS
- Number of months recorded as not in employment, education and training (NEET) in NCCIS
- Enrolled on a qualification at NQF level 6 in a higher education institution
- Enrolled on a qualification at NQF level 6 in a higher education institution belonging to the Russell Group
- Earnings from employment and self-employment

We also calculate the number of days each year we observe individuals participating in various activities. These are:

- Number of days employed
- Number of days in receipt of workless benefits[vii]
- Number of days enrolled in schools
- Number of days enrolled in further education (colleges, work-based learning and other providers)
- Number of days enrolled in a higher education institution

We use the measures based on number of days to create a measure of a sustained destination. We define a sustained positive destination as being continuously enrolled in education (school, further education or higher education) or in employment for 180 days or more.

Daily earnings are calculated by dividing annual earnings by days employed (where days employed are observed). We ignore the top and bottom 0.5% of values as these seem implausible. Note that data on hours worked is not currently available.

The key outcomes we summarise in this report are:

- Proportion of individuals observed in a sustained positive destination at age 22, i.e. observed either in education (schools, further education or higher education institutions) or employment for at least 180 days
- Proportion of individuals in receipt of workless benefits for at least 180 days at age 22
- Average earnings from employment and self-employment at age 22

- Proportion of individuals by highest qualification level achieved by ages 18, 19, 20, 21 and 22
- Proportion of individuals enrolled in a higher education institution at age 21

Further outcomes are provided in the Appendix.

2.4. Attrition

Although administrative data doesn't suffer from sample attrition in the same way as survey data it nonetheless exists. Some individuals cease to be observed in any of the data sources. This may arise due to emigration, death or being economically inactive. However, these events are unobserved. Table 1 shows the possible extent of attrition within the data used.

Table 1: A summary of attrition by cohort

KS4 Year	% observed after KS4 year	% observed in 2019	% with 2019 earnings data	Total Cohort (000s)
2013	99%	92%	74%	604.8
2014	99%	93%	72%	592.1
2015	99%	94%	71%	587.3

In each cohort, over 99% of individuals are observed in at least one year following Key Stage 4 in at least one data source. This is the group we include in our analysis.

However, 8% of the 2013 cohort was not observed in 2019. 74% of the 2013 cohort were observed to have earnings data in 2019.

Attrition is related to gender. 10% of boys from the 2013 cohort were not observed in 2019 compared to 5% of girls. Among the boys, the most disadvantaged were more likely (12%) than those never eligible for free school meals (9%) to not be observed in 2019. This is summarised in Table 2.

Table 2: A summary of attrition from the 2013 Key Stage 4 cohort by gender

	% observed in 2019		Total Cohort (000s)	
% terms FSM	Boys	Girls	Boys	Girls
Never FSM	90.7%	94.6%	207.2	197.4
<=25%	90.4%	95.3%	27.2	25.9
25% to 50%	89.4%	95.2%	24.6	23.0
50% to 80%	88.2%	94.5%	25.6	24.4
80% or more	87.6%	94.3%	25.3	24.3
Total	**90.1%**	**94.7%**	**309.9**	**294.9**

Attrition is also related to region. Generally, those from the 2013 who attended schools in the North East of England were most likely to be observed in 2019 and those in London were least likely. This is summarised in Table 3.

Table 3: A summary of attrition from the 2013 Key Stage 4 cohort by the region in which individuals attended school at age 16. Attrition is shown separately for those who were never eligible for free school meals (FSM), those who were eligible for 25% of school terms or fewer, and those who were eligible for 80% of school terms or more. Attrition rates for those who were eligible for more than 25% but fewer than 80% of terms are omitted.

	% observed in 2019, by % terms eligible for FSM			Total cohort (000s), by % terms eligible for FSM		
Region	Never	<=25%	80% or more	Never	<=25%	80% or more
North East	94.5%	94.2%	93.3%	18	3	4
East Midlands	93.3%	93.9%	91.3%	38	5	3
North West	93.8%	93.2%	91.6%	53	7	9
Yorkshire and the Humber	93.4%	93.4%	91.1%	40	6	5
West Midlands	93.0%	93.3%	90.7%	43	6	7
South West	92.8%	93.0%	91.9%	44	5	3
South East	92.2%	91.6%	90.1%	72	8	4
East	92.3%	91.8%	89.8%	50	6	3
London	89.6%	91.5%	89.8%	45	8	12

3. Results

3.1 Context

Distribution of disadvantage

Table 4 summarises the number of pupils in the three Key Stage 4 cohorts by disadvantage.

Table 4: A summary of the 2013, 2014 and 2015 end of Key Stage 4 cohorts by disadvantage. The cohort size has been adjusted to only include those individuals who were observed in at least one year following the end of Key Stage 4. This is 99% of the initial cohort.

	Key Stage 4 cohort		
% terms FSM	2013	2014	2015
Cohort size (000s)	**599**	**586**	**581**
Never FSM	66.7%	67.0%	66.9%
<= 25%	8.9%	8.9%	9.3%
25% to 50%	8.0%	8.1%	7.9%
50% to 80%	8.1%	7.7%	7.9%
80% or more	8.2%	8.2%	7.9%

We see that the majority of individuals in each cohort, around 67%, were never eligible for FSM whilst at school. There are roughly equal proportions of individuals in each of the other disadvantage groupings. Around 8% of individuals in each cohort were eligible for FSM for at least 80% of their time at school. These are the individuals we refer to as “long-term disadvantaged".

Disadvantage of ethnicity

Disadvantage varies by ethnic background. *Table 5* (overleaf) shows the breakdown of individuals in the 2013 Key Stage 4 cohort by ethnicity and disadvantage. Those from Irish Traveller, White Romany, Black African or Bangladeshi backgrounds were most likely to have spent the longest proportion of their school careers eligible for FSM. In contrast, those from a Chinese, Indian, White British or Other White background were most likely to have spent none of their school careers eligible for FSM.

Table 5: A summary of the 2013 Key Stage 4 cohort by ethnicity and disadvantage. Sorted in descending order of the proportion of individuals who were eligible for free school meals (FSM) for at least 80% of terms.

		% terms eligible for FSM				
Ethnicity	Cohort size (000s)	Never	<=25%	25% to 50%	50% to 80%	80%+
Traveller of Irish Heritage	<1	17.1%	3.3%	7.4%	21.7%	50.5%
White Romany	1	31.6%	7.6%	16.3%	16.2%	28.2%
Black African	17	40.3%	8.7%	10.4%	15.1%	25.5%
Bangladeshi	8	33.7%	13.9%	13.9%	16.5%	22.0%
Other	8	47.8%	8.1%	10.5%	13.1%	20.4%
Other Black	3	40.7%	11.4%	12.5%	16.5%	18.8%
Mixed White/Black Caribbean	8	44.3%	11.2%	12.9%	15.8%	15.8%
Pakistani	19	47.3%	13.0%	12.0%	12.1%	15.7%
Black Caribbean	9	45.7%	13.6%	13.4%	14.1%	13.2%
Mixed White/Black African	2	51.5%	9.9%	11.4%	14.4%	12.9%
Other Mixed	8	56.9%	9.9%	10.2%	11.6%	11.4%
White Irish	2	67.8%	7.4%	6.2%	7.4%	11.2%
Mixed White/Asian	5	64.1%	8.7%	8.4%	9.5%	9.3%
Not obtained	6	65.8%	8.1%	8.5%	8.1%	9.4%
Refused to say	4	64.0%	9.5%	8.5%	9.0%	9.1%
Other Asian	8	67.2%	9.0%	7.9%	7.0%	8.9%
Other White	25	70.7%	7.3%	7.2%	7.3%	7.5%
White British	451	70.2%	8.6%	7.4%	7.2%	6.5%
Indian	14	76.8%	8.6%	5.7%	4.8%	4.2%
Chinese	2	83.3%	5.5%	4.5%	3.6%	3.2%
Total	**599**	**66.7%**	**8.9%**	**8.0%**	**8.1%**	**8.2%**

Disadvantage by region

Disadvantage also varies by region, as shown in Table 6. Those attending schools in London at age 16 were the most likely to have spent at least some of their school careers eligible for FSM, while those attending schools in the South East were the least likely (47% in London vs 25% in the South East).

London also had the highest levels of long-term disadvantage, with 15% of individuals having spent at least 80% of their time at school eligible for FSM. The North East (12%) and the North West (11%) had the second and third highest levels of long-term disadvantage.

Table 6: A summary of the 2013 Key Stage 4 cohort by the region in which individuals attended school at age 16 and disadvantage. Sorted in descending order of the proportion of individuals who were eligible for free school meals (FSM) for at least 80% of terms.

		% terms eligible for FSM				
Region at age 16	Cohort size (000s)	Never	<=25%	25% to 50%	50% to 80%	80%+
London	83	53.4%	9.4%	9.9%	12.4%	14.8%
North East	30	59.5%	9.8%	8.4%	10.0%	12.3%
North West	84	62.9%	8.6%	8.3%	9.4%	10.9%
West Midlands	68	63.5%	9.3%	8.6%	8.8%	9.7%
Yorkshire and the Humber	61	65.2%	9.7%	8.1%	8.2%	8.7%
East Midlands	52	71.4%	8.8%	7.6%	6.6%	5.7%
East	68	73.4%	8.7%	7.2%	6.3%	4.4%
South West	59	74.4%	8.4%	6.9%	5.9%	4.3%
South East	94	75.3%	8.2%	7.0%	5.6%	3.9%
Total	**599**	**66.7%**	**8.9%**	**8.0%**	**8.1%**	**8.2%**

Other school-age characteristics by disadvantage

Being disadvantaged whilst at school is associated with variations in other characteristics. *Table 7* summarises a selection of these for the 2013 Key Stage 4 cohort.

We see that the likelihood of being identified with a special educational need (SEN) whilst at school increases with increasing disadvantage, as does ever having a Statement of SEN. The most disadvantaged members of the cohort were around twice as likely as those who were never eligible for FSM to have had an identified SEN, and around three times as likely to have had a Statement of need. They were also more likely to have spent most of their school careers with an identified SEN, and to have achieved lower scores in Key Stage 2 tests in English and maths.

Table 7: A summary of selected school-age characteristics of the 2013 Key Stage 4 cohort by disadvantage. The percentage of the cohort who were ever identified as having any special educational needs (SEN) at school and as having SEN with a Statement of need are shown, along with the percentage who spent at least 80% of their school careers with an identified SEN (long-term SEN). Average Key Stage 2 scores in English and maths are shown in fractions of National Curriculum levels.

% terms FSM	Cohort size (000s)	% ever SEN	% ever Statement	% long-term SEN	avg KS2 English	avg KS2 maths
Never FSM	400	33.5%	3.2%	4.6%	4.64	4.68
<=25%	53	51.4%	5.4%	8.1%	4.37	4.38
25% to 50%	48	57.4%	6.6%	9.8%	4.28	4.29
50% to 80%	49	63.9%	7.8%	11.6%	4.17	4.19
80% or more	49	68.9%	9.8%	14.7%	4.03	4.07
Total	**599**	**42.4%**	**4.6%**	**6.7%**	**4.50**	**4.53**

3.2 Outcomes

The likelihood of being in a sustained positive destination at age 22

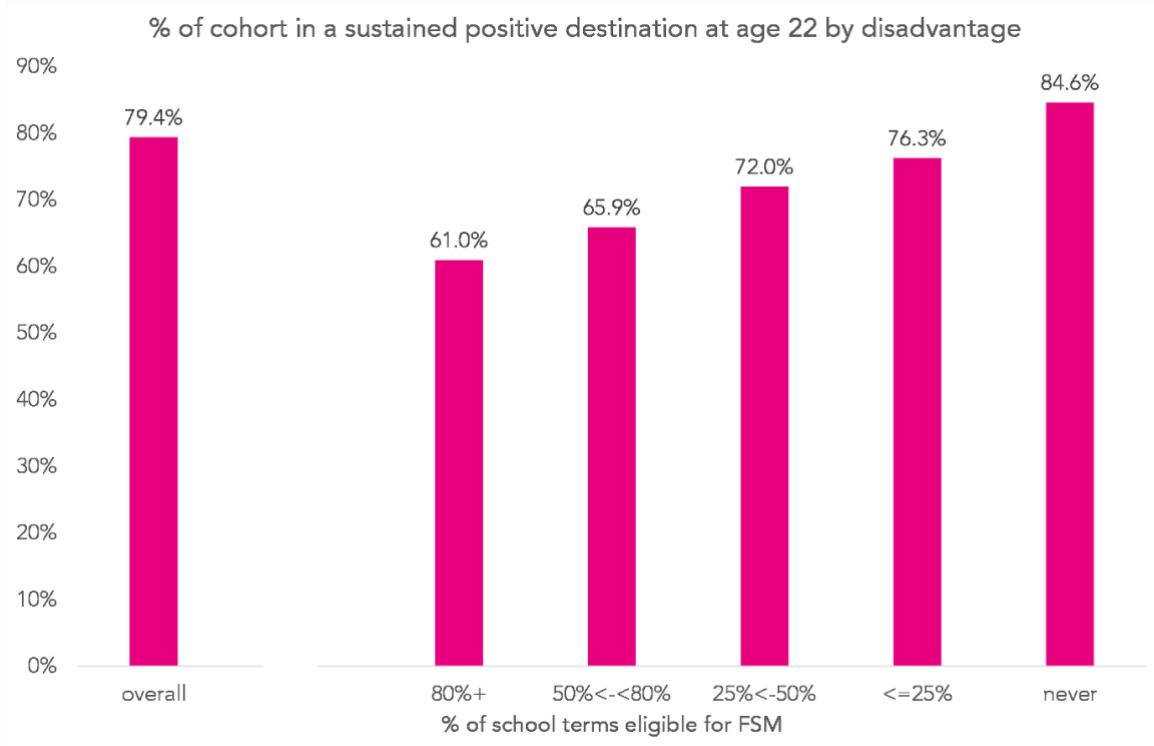

Figure 1: Chart showing the proportion of the 2013 Key Stage 4 cohort who were observed in a positive destination at age 22 by disadvantage. A positive destination is defined as being either in employment or enrolled at an education institution for at least 180 days.

We begin by investigating how the likelihood of being observed in a sustained positive destination at age 22 varies by disadvantage. Figure 1 shows the results of this measure for the 2013 cohort overall and by disadvantage.

We see a clear relationship, with greater disadvantage associated with a lower likelihood of being observed in a sustained positive destination. Long-term disadvantaged pupils were around 30% less likely to go on to a sustained positive destination than those who had never been eligible for FSM (61% vs 85%, respectively), and around 20% less likely than those who had been eligible for FSM for the shortest period (61% vs 76%).

Looking at employment and education separately, the same pattern is evident. Long-term disadvantaged pupils were around 50% less likely to be observed in higher education for a sustained period and around 30% less likely to be in employment for a sustained period than those who had never been eligible for FSM. These results are summarised in Table 8

Table 8: The proportion of individuals in the 2013 cohort observed in further education (FE), higher education (HE) and employment destinations for at least 180 days in the year they turned 22. Results are shown overall and broken down by disadvantage.

% terms FSM	Cohort size (000s)	Any sustained destination	Sustained FE destination	Sustained HE destination	Sustained employment
Overall	**599**	**79.4%**	**7.3%**	**25.0%**	**68.1%**
Never FSM	400	84.6%	7.5%	29.0%	72.1%
<= 25%	53	76.3%	7.4%	18.9%	67.2%
25% to 50%	48	72.0%	7.1%	17.6%	62.9%
50% to 80%	49	65.9%	6.6%	15.5%	57.3%
80%+	49	61.0%	6.5%	15.6%	51.6%

.**The likelihood of receiving workless benefits at age 22**

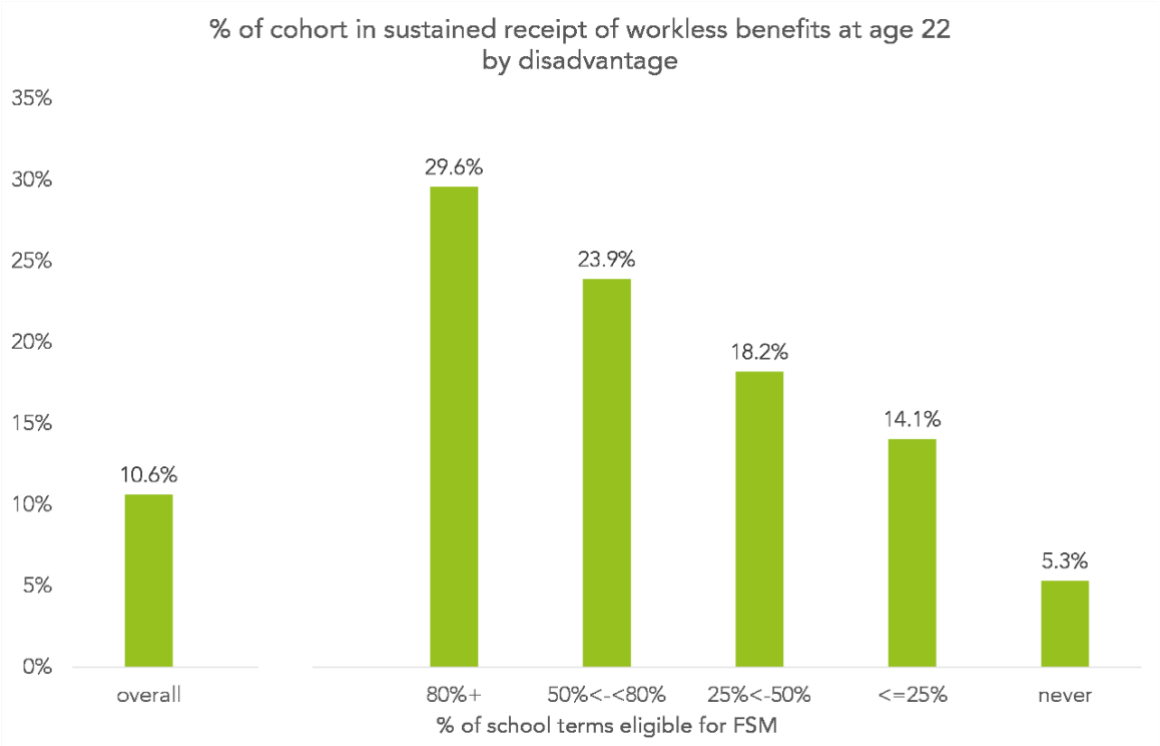

Figure 2: Chart showing the proportion of the 2013 Key Stage 4 cohort who were observed receiving workless benefits at age 22 for at least 180 days. The results are split by disadvantage.

We turn now to a different outcome: receiving workless benefits. This measure is more prone to time-related distortion than our previous measure. At age 22 many who went into higher education have yet to enter the labour market fully. This makes it hard to compare workless benefit rates between groups with different higher education participation.

With this caveat in mind, we show the proportion of the 2013 cohort who were observed receiving workless benefits for a sustained period of time in Figure 2. Workless benefit rates increased with disadvantage. Almost a third (29%) of long-term disadvantaged pupils were observed receiving workless benefits at age 22. They were around five and a half times more likely to be in this position than those who had never been eligible for FSM (5%), and around twice as likely as those who had been eligible for the shortest period (14%).

Average earnings at age 22

The final labour market outcome we will consider is the average earnings per individual in the year they turn 22. This measure is prone to distortion in the same way as workless benefits – many of those who participated in higher education would not have entered the labour market fully yet. It also suffers from another problem. Because we do not have any data on the number of hours worked, it isn't possible to distinguish individuals who were paid a high wage over a short period of time from those paid a low wage over a long period of time.

We present average earnings by disadvantage for the 2013 cohort in Figure 3, omitting from our calculation individuals with no earnings data due to attrition or labour market inactivity. We see from Table 9 (overleaf) that the likelihood of being included in the earnings calculation increases with decreasing disadvantage. This is because the least disadvantaged pupils were the most likely to be employed at age 22, as we saw in Table 8 (overleaf)

Figure 3: Chart showing the average earnings of the 2013 Key Stage 4 cohort at age 22 by disadvantage. Earnings are from both employment and self-employment. The average is taken over individuals who have earnings > 0, ignoring the top and bottom 0.5% of earners due to implausible values.

We see some relationship between disadvantage and earnings. Long-term disadvantaged pupils went on to earn £1,700 less at age 22, on average, than those who had never been eligible for FSM. This information is of limited use due to the lack of data on hours worked, and because long-term disadvantaged pupils were less likely to be included in the earnings calculation (59% had earnings data compared with 78% of those who had never been eligible for FSM).

Table 9: Percentage of individuals in the 2013 Key Stage 4 cohort for whom we have earnings data at age 22 by disadvantage

	Cohort size (000s)	% with earnings data at age 22
Overall	**599**	**74%**
Never FSM	400	77%
<= 25%	53	73%
25% to 50%	48	70%
50% to 80%	49	64%
80%+	49	59%

3.3. Educational attainment

Highest qualification level

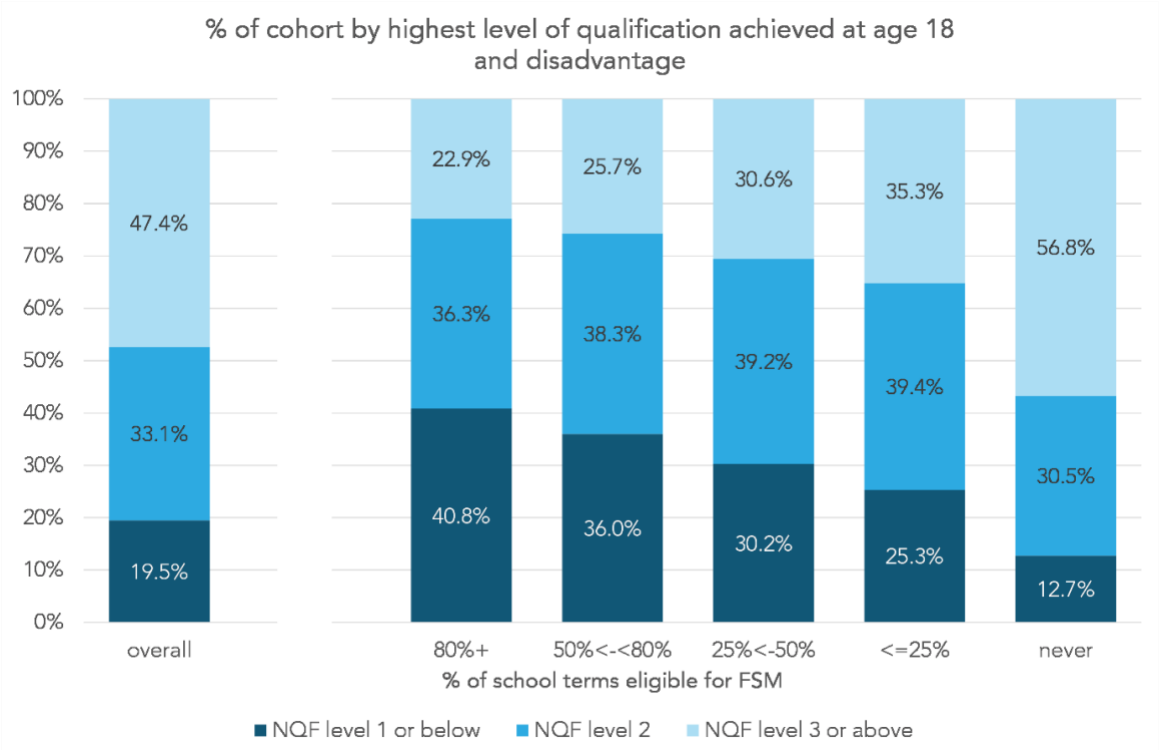

Figure 4: Chart showing the proportion of the 2013 Key Stage 4 cohort who achieved qualifications at NQF levels 1, 2 and 3 by the age of 18. The results are split by disadvantage. NQF level 1 is equivalent to achieving 5 GCSEs at grade 9-1 (A-G), level 2 to 5 GCSEs at grade 9-4 (A*-C), and level 3 to two A-levels.*

Figure 4 shows the highest level of qualification achieved by members of the 2013 cohort by the end of the year they turn 18. Long-term disadvantaged pupils were the most likely to have only achieved qualifications at level 1[vi] or below - around three times more likely than those who were never eligible for FSM (41% vs 13%).

They were also the least likely to have achieved qualifications at level 3 and above – less than half as likely as those who were never eligible for FSM (23% vs 57%). This gap in qualification rates did not narrow in as the individuals aged. Figure 5 shows the proportion of the cohort who had achieved qualifications at NQF level 3 or greater by ages 18 – 22. The highest qualification level achieved by age 22 is shown in full in Figure 6.

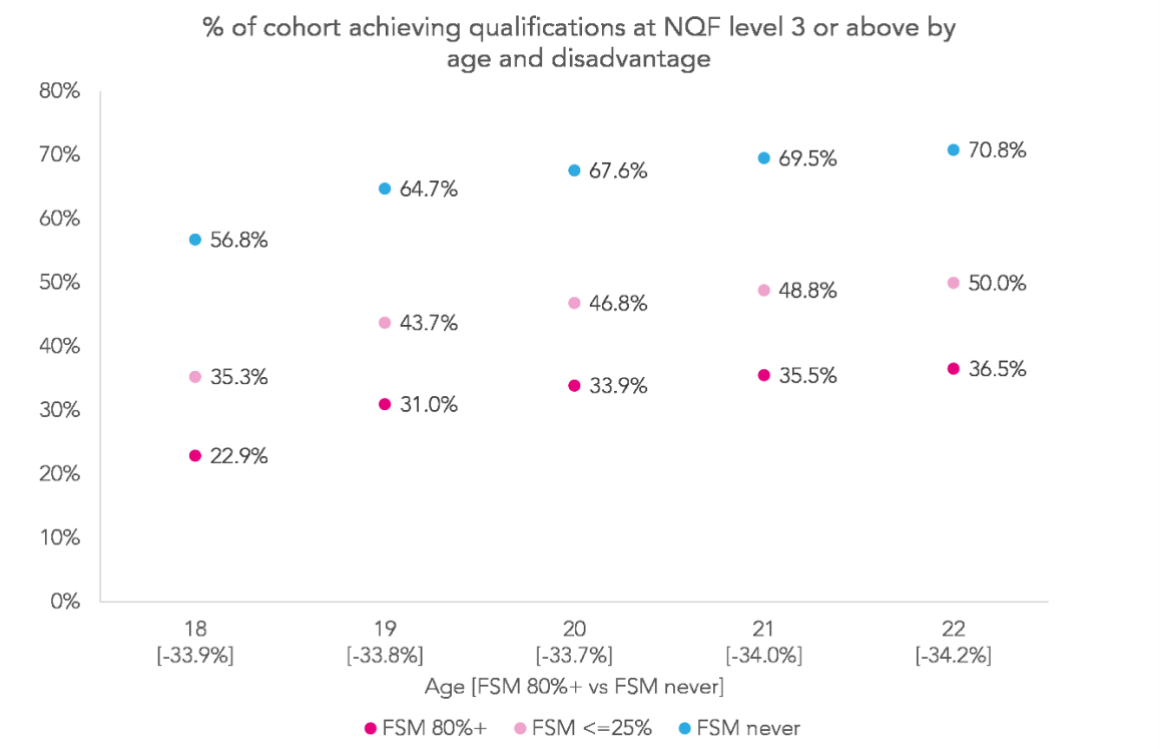

Figure 5: A chart showing the proportion of the 2013 Key Stage 4 cohort who achieved qualifications at NQF level 3 or above by different ages. Results are shown for those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and for those who were never eligible. NQF level 3 is the equivalent of two A-levels.

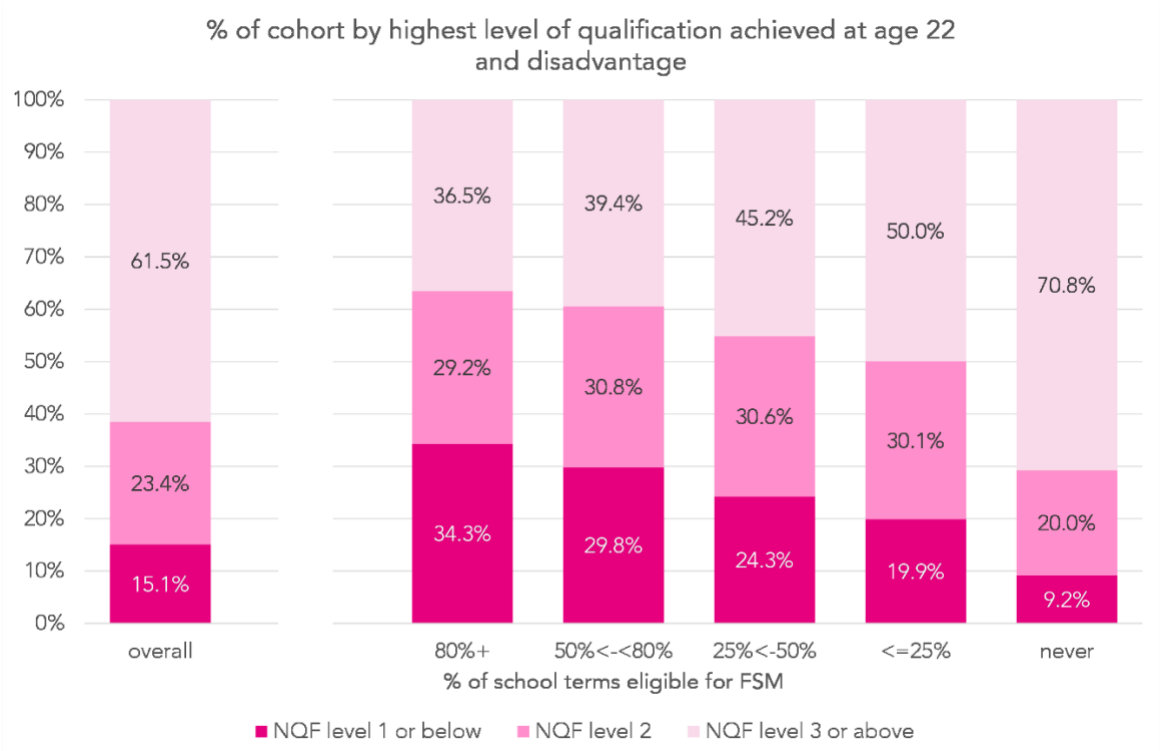

Figure 6: Chart showing the proportion of the 2013 Key Stage 4 cohort who achieved qualifications at NQF levels 1, 2 and 3 by the age of 22. The results are split by disadvantage. NQF level 1 is equivalent to achieving 5 GCSEs at grade 9-1 (A-G), level 2 to 5 GCSEs at grade 9-4 (A*-C), and level 3 to two A-levels.*

Although the proportion of those who were long-term disadvantaged achieving such qualifications increased (from 23% by age 18 to 37% by age 22) the gap between them and those who had never been eligible for FSM remained roughly the same.

Enrolment at a higher education institution at the age of 21

Perhaps unsurprisingly given the relationship between disadvantage and qualification rates, the percentage of individuals enrolled on a degree-level course at a higher education institution at the age of 21 decreased with increasing disadvantage, as shown in Figure 7.

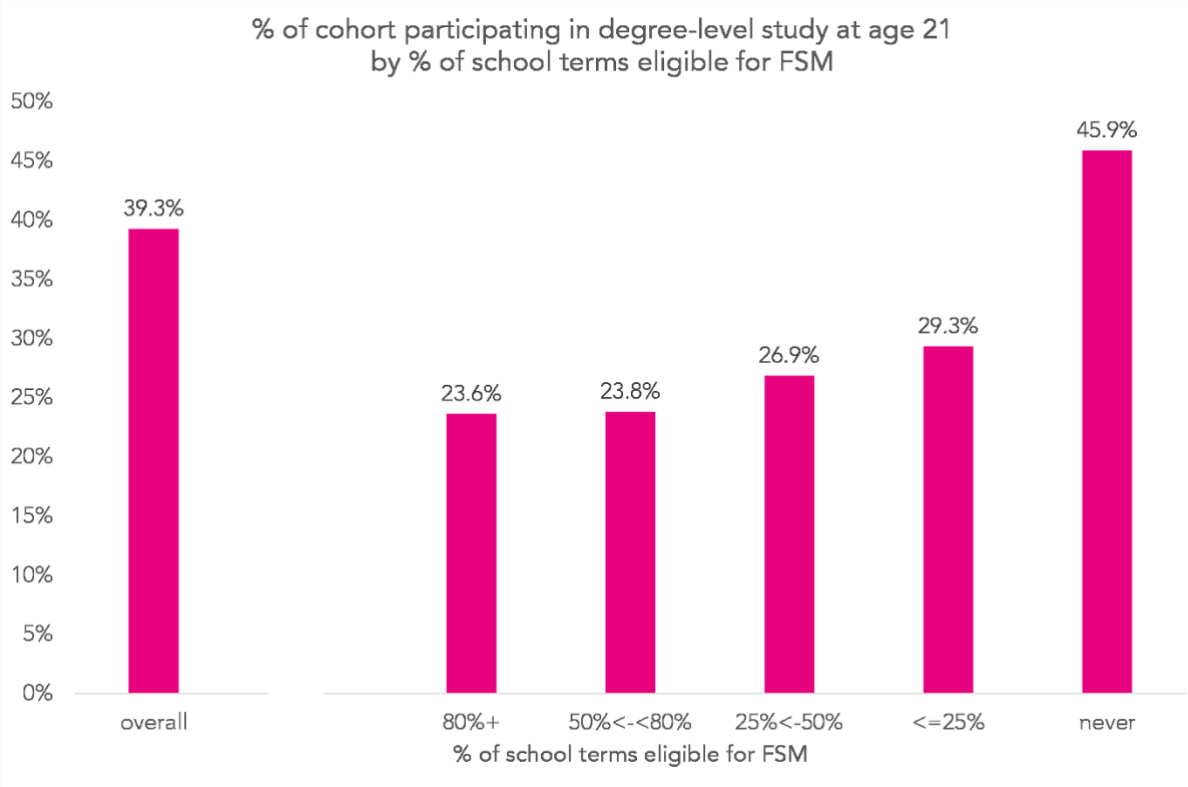

Figure 7: Chart showing the proportion of the 2013 Key Stage 4 cohort who were participating in degree-level study at age 21 by disadvantage. Degree-level study is defined as being enrolled on a qualification at NQF level 6 in a higher education institution.

Long-term disadvantaged pupils were around half as likely to be undertaking degree-level study as those who had never been eligible for FSM (24% vs 46%).

3.4. Outcomes and attainment by ethnicity

The likelihood of being in a sustained positive destination at age 22

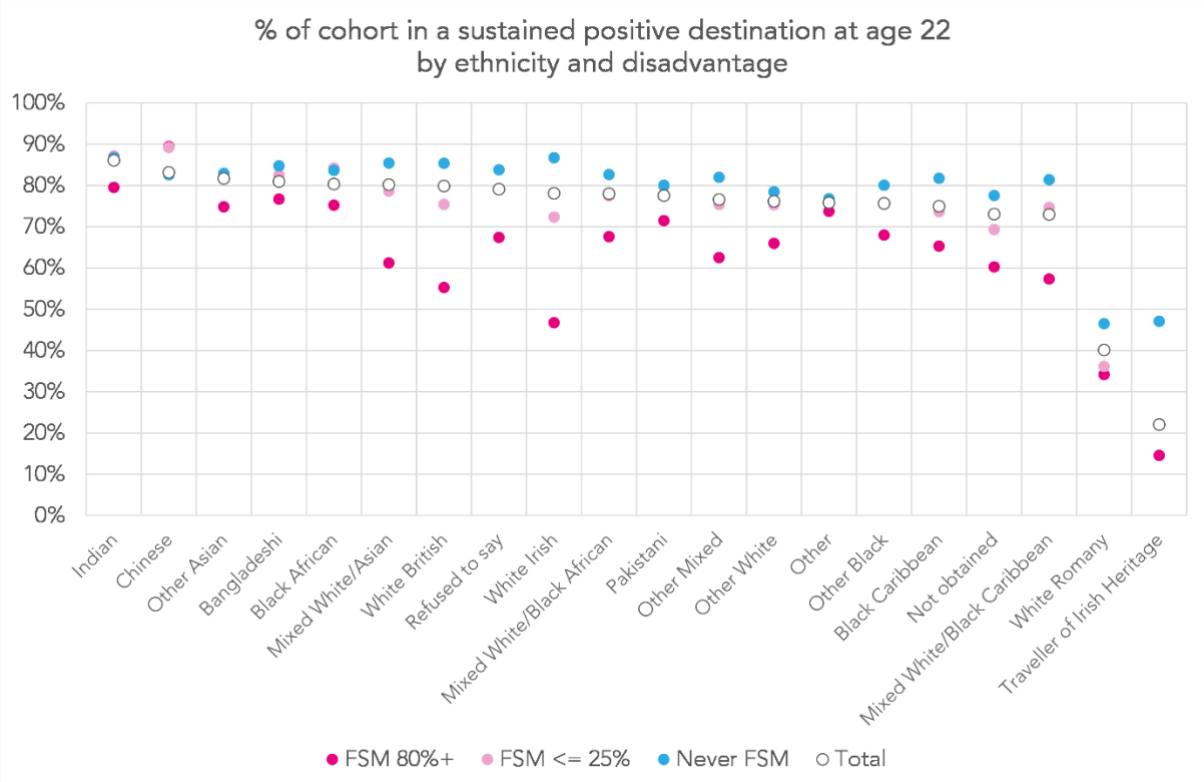

Figure 8: Chart showing the proportion of the 2013 Key Stage 4 cohort who were observed in a positive destination at age 22 by ethnicity and shown separately for the group total, those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and those who were never eligible. A positive destination is defined as being either in employment or enrolled at an education institution for at least 180 days.

Figure 8 shows the proportion of individuals in the 2013 cohort observed in a sustained positive destination at age 22 by ethnicity and disadvantage. We see that overall, those from an Indian or Chinese background were the most likely to be observed in a positive destination, while those from White Romany or Irish Traveller backgrounds were the least likely.

The relationship between disadvantage and outcomes varies by ethnicity. We see virtually no impact of disadvantage on the likelihood of going on to a positive destination for those from Chinese backgrounds, and only a small impact for those from Indian, Other Asian, Bangladeshi, Black African and Pakistani backgrounds. There also appears to be little impact for those from a White Romany background – very few were observed in a positive destination regardless of FSM eligibility.

In contrast, there is a big impact for those from White Irish, White British and Irish Traveller backgrounds and, to a lesser extent, those from Mixed White/Asian and Mixed White/Black Caribbean backgrounds.

The likelihood of achieving qualifications at Level 3 or above by 22

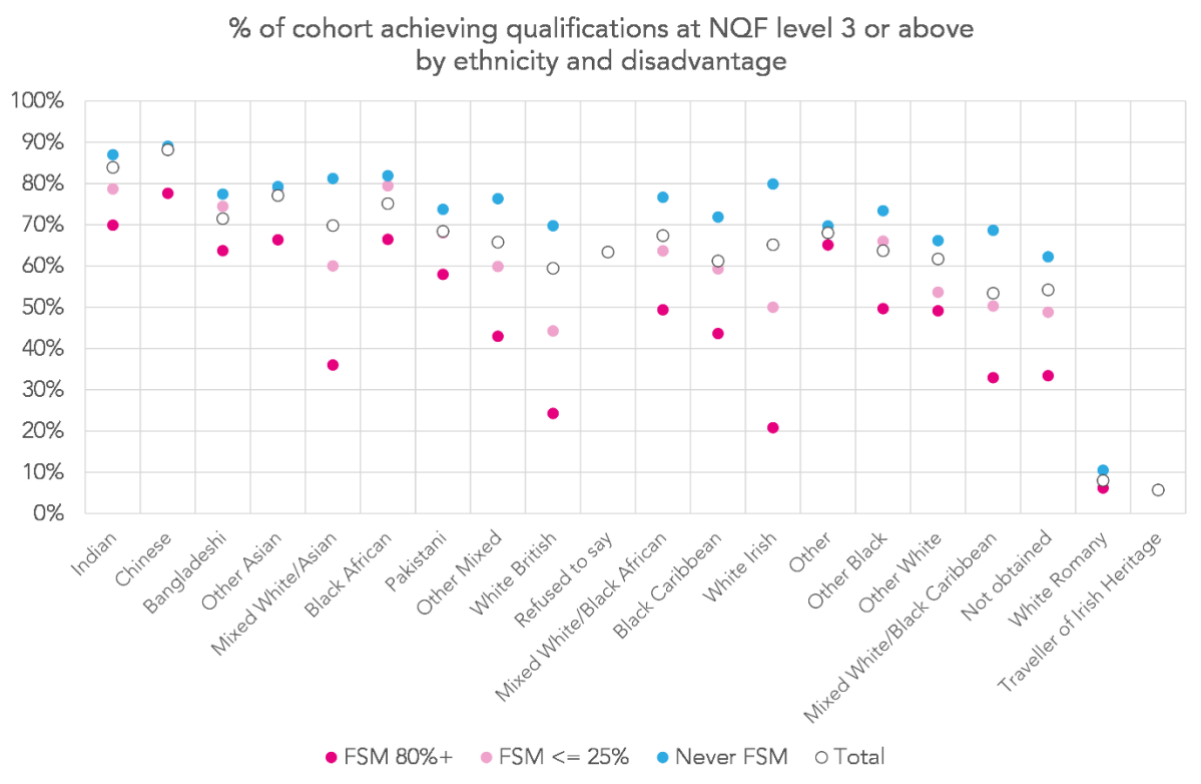

Figure 9: A chart showing the proportion of the 2013 Key Stage 4 cohort who achieved qualifications at NQF level 3 or above by age 22. Results are split by ethnicity and shown separately for the group total, those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and those who were never eligible. NQF level 3 is the equivalent of two A-levels. Values which relate to small numbers of individuals are suppressed.

In Figure 9, we see a similar pattern for level 3 qualification rates. There was little difference between the most and least disadvantaged individuals from Chinese, Indian, Black African, Pakistani and White Romany backgrounds, while there were big differences for those from Mixed White/Asian, White Irish, White British and Mixed White/Black Caribbean backgrounds.

There were bigger differences in qualification rates than likelihood of going on to a positive destination for those from Mixed White/Black African and Black Caribbean backgrounds.
Figure 10 shows an almost identical pattern for the likelihood of participating in degree-level study at age 21.

Participating in degree-level study at age 21

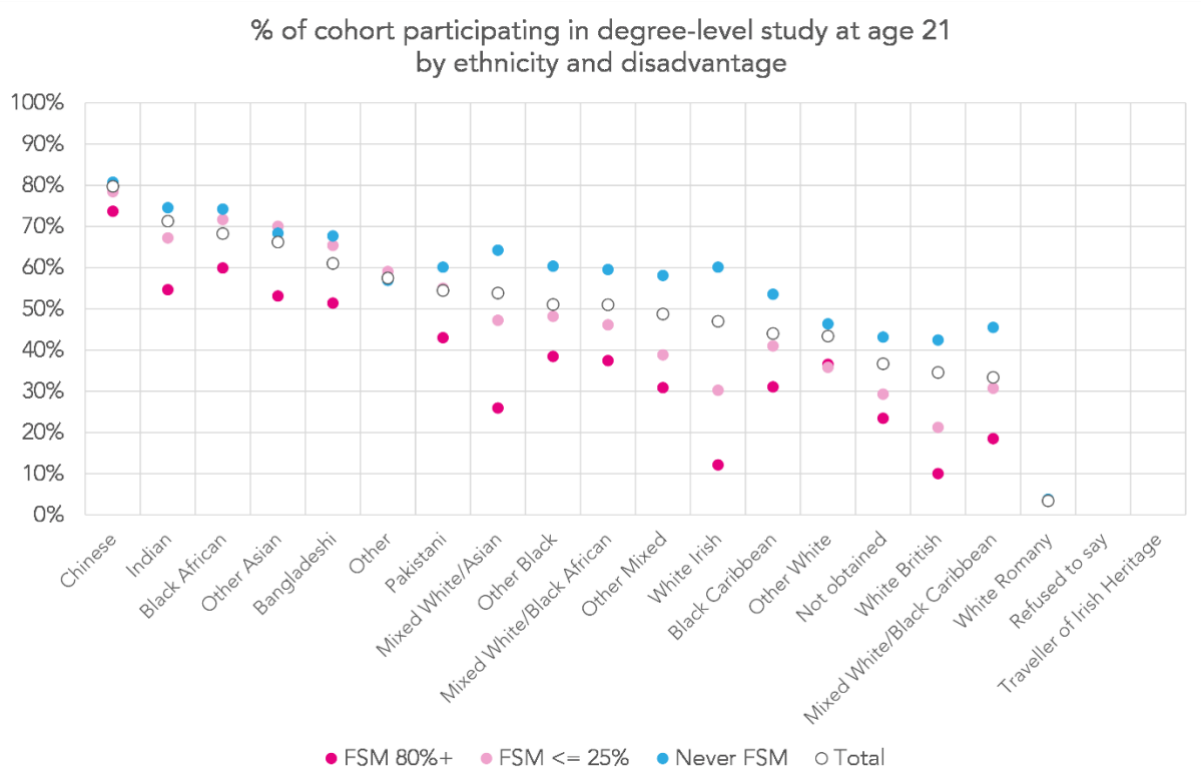

Figure 10: Chart showing the proportion of the 2013 Key Stage 4 cohort who were participating in degree-level study at age 21. Results are split by ethnicity and shown separately for the group total, those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and those who were never eligible. Degree-level study is defined as being enrolled on a qualification at NQF level 6 in a higher education institution.

3.5. Outcomes and attainment by region

The likelihood of being in a sustained positive destination at age 22

To finish, we investigate how outcomes vary by region and disadvantage. The proportions of individuals observed in a sustained positive destination at age 22 are shown in Figure 11.

Overall there is less variation in the likelihood of being observed in a positive destination between individuals from different regions than between those from different ethnic backgrounds. In the region with the lowest likelihood, the North East, 77% of individuals were in a positive destination, and in the region with the highest, the South West, this figure stood at 81% - a range of 4pp. The range between the ethnicities with the highest and lowest likelihoods was 64pp (or 13pp, excluding Travellers of Irish heritage and those from a Romany background – both negative outliers).

Within regions, there is considerable variation by disadvantage, mirroring the national picture. In almost every region, those who were long-term disadvantaged were around 30% less likely to be observed in a sustained positive destination than those who had never been eligible for FSM. The exception is London, where they were 16% less likely.

Those who were long-term disadvantaged were most likely to go on to a sustained positive destination of they lived in London (69%) and least likely if they lived in the North East (54%).

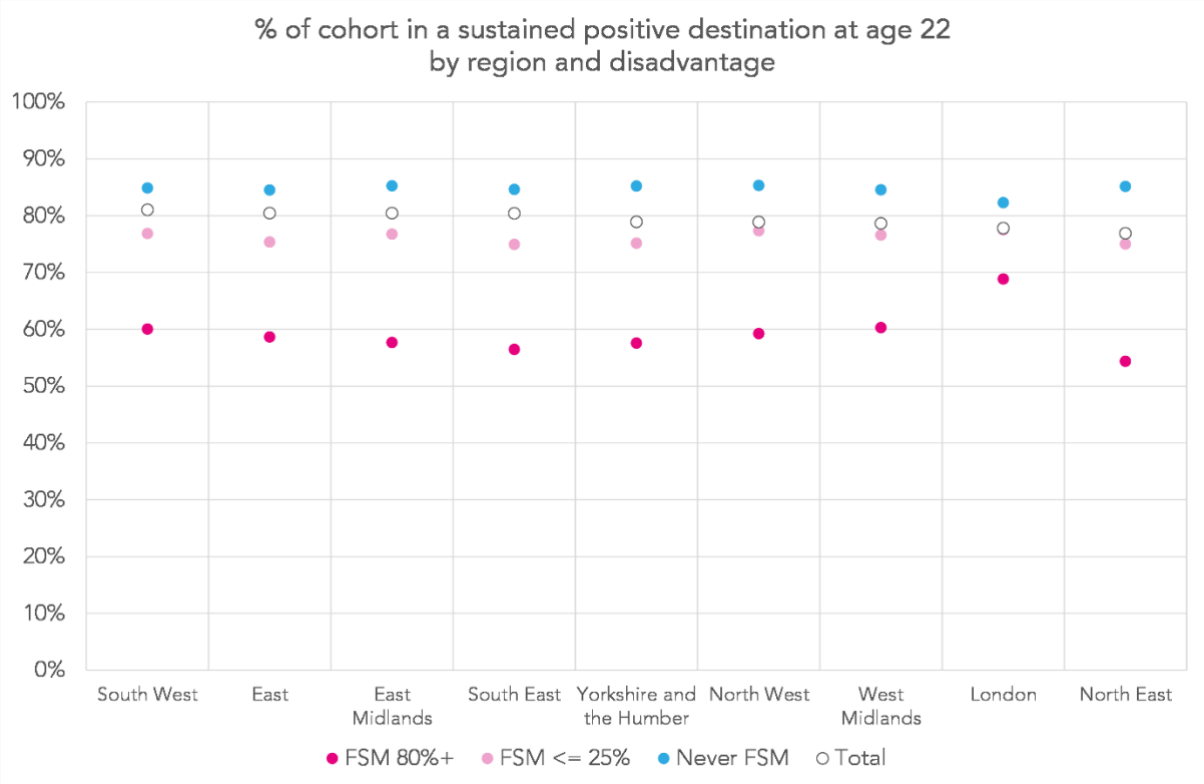

Figure 11: Chart showing the proportion of the 2013 Key Stage 4 cohort who were observed in a positive destination at age 22 by region and shown separately for the group total, those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and those who were never eligible. A positive destination is defined as being either in employment or enrolled at an education institution for at least 180 days. Region is based on school attended at age 16.

The likelihood of achieving qualifications at Level 3 or above by 22

Figure 12 shows the proportion of individuals who achieve qualifications at NQF Level 3 (the equivalent of at least 2 A-Levels) by the age of 22 by region and disadvantage.

Again, there isn't too much variation between regions, overall, though qualification rates for those in London were slightly higher than in the rest of the country (67% in London vs around 60% elsewhere).

Differences within regions broadly mirror the national picture, with those who were long-term disadvantaged being between 50 and 65% less likely to achieve Level 3 qualifications than those who had never been eligible for FSM. In London, they were around 30% less likely.

Qualification rates for those who were long-term disadvantaged were substantially better in London than elsewhere – 54% achieved Level 3 qualifications compared with 36% in the West Midlands, the second best region

on this measure. Rates were lowest in the South West (24%), South East (25%) and East Midlands (26%).

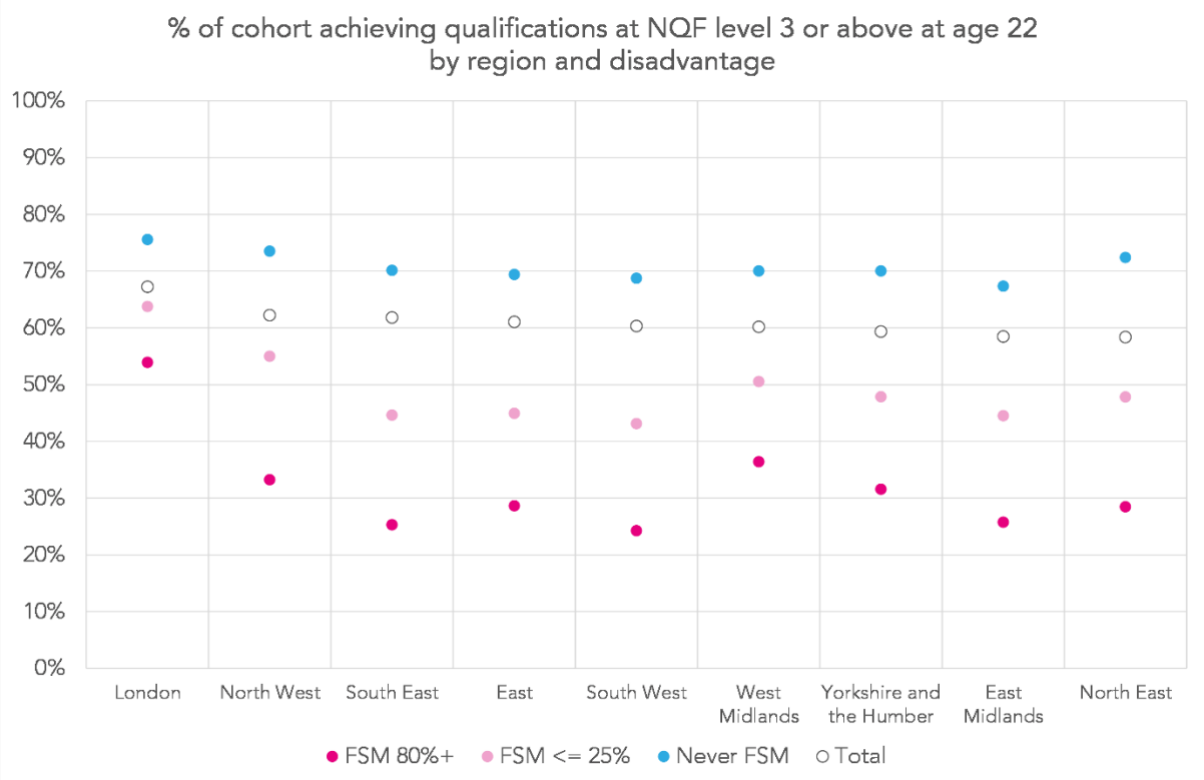

Figure 12: A chart showing the proportion of the 2013 Key Stage 4 cohort who achieved qualifications at NQF level 3 or above by age 22. Results are split by ethnicity and shown separately for the group total, those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and those who were never eligible. NQF level 3 is the equivalent of two A-levels. Region is based on school attended at age 16.

Participating in degree-level study at age 21

There are similar patterns in rates of degree-level study, though London is even more of an outlier on this measure, as shown in *Figure 13*.

In London, 44% of those who were long-term disadvantaged were observed undertaking degree-level study at age 21 – a similar proportion of those who had never been eligible for FSM in the rest of the country (which ranges from 41% in the South West to 47% in the North West).

In general, apart from in London, those who were long-term disadvantaged were between 60 and 70% less likely to be participating in degree-level study than those who had never been eligible for FSM. In London, they were around 25% less likely.

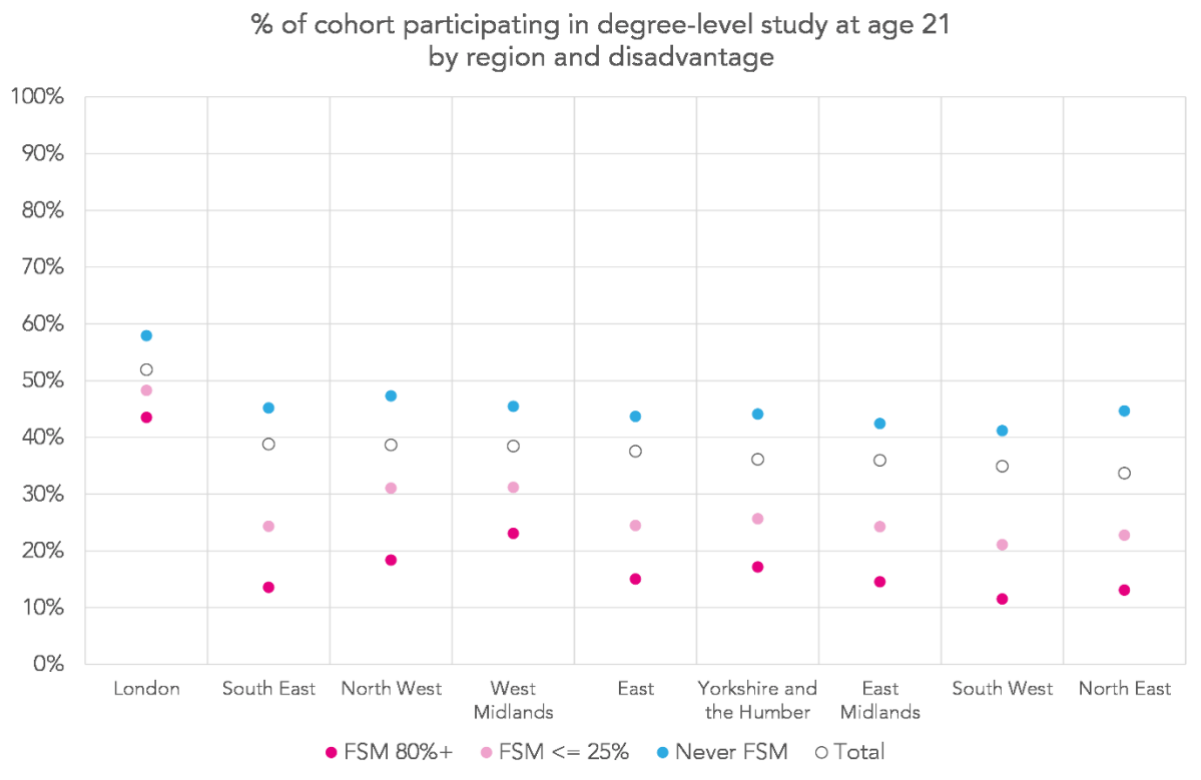

Figure 13: Chart showing the proportion of the 2013 Key Stage 4 cohort who were participating in degree-level study at age 21. Results are split by region and shown separately for the group total, those who were eligible for free school meals (FSM) for at least 80% of school terms, those who were eligible for 25% of terms or less, and those who were never eligible. Degree-level study is defined as being enrolled on a qualification at NQF level 6 in a higher education institution. Region is based on school attended at age 16.

3.6. Outcomes and attainment for long-term disadvantaged individuals by region and ethnicity

Ethnic composition of the long-term disadvantaged group by region

Figure 12 shows the proportion of individuals who achieve qualifications at NQF Level 3 (the equivalent of at least 2 A-Levels) by the age of 22 by region and disadvantage.

Again, there isn't too much variation between regions, overall, though qualification rates for those in London were slightly higher than in the rest of the country (67% in London vs around 60% elsewhere).

Some of the variation in outcomes by region can be explained by different ethnic compositions of the underlying populations. To explore this, we divide individuals into two groups based on their ethnic backgrounds (based on previous work[viii] which largely mirrors results in section **Error! Reference source not found.**):

1. Where disadvantage has a high impact on outcomes – those from White British, White Irish, Irish Traveller, Roma, Black Caribbean, and Mixed White and Black Caribbean backgrounds, as well as those whose ethnic background is unknown.

2. Where disadvantage has a low impact on outcomes – those from any other ethnic background.

Error! Reference source not found. shows the proportion of the cohort in each region by the two ethnicity groupings above.

There is considerable variation between regions. In the North East 94% of the cohort belong to a high-impact ethnic group, compared with 79% in the West Midlands. London is a particular outlier, with a greater of the cohort belonging to a low-impact ethnic group (54%) than high-impact.

There is a similar pattern among long-term disadvantaged individuals. The North East has the greatest proportion of individuals belonging to a high-impact ethnic group (94%) and London the lowest (33%). London is, again, an outlier.

Table 10: A summary the 2013 Key Stage 4 cohort by high/low impact ethnicity grouping and region, shown separately for the cohort overall and for those who were eligible for free school meals (FSM) for at least 80% of their school careers. Region is defined by the school that individuals attended at age 16. The "high impact" ethnicity grouping includes those from White British, White Irish, Irish Traveller, Roma, Black Caribbean, and Mixed White and Black Caribbean backgrounds, as well as those whose ethnic background is unknown. The "low impact" grouping contains individuals from all other ethnic backgrounds.

	FSM 80%+			Overall		
Region	Cohort (000s)	% high impact	% low impact	Cohort (000s)	% high impact	% low impact
Overall	**49**	**67%**	**33%**	**599**	**80%**	**20%**
North East	4	94%	6%	30	94%	6%
South West	3	89%	11%	59	92%	8%
East	3	82%	18%	68	85%	15%
South East	4	82%	18%	94	85%	15%
North West	9	80%	20%	84	87%	13%
East Midlands	3	79%	21%	52	85%	15%
Yorkshire and the Humber	5	73%	27%	61	84%	16%
West Midlands	7	63%	37%	68	79%	21%
London	12	33%	67%	83	46%	54%

Outcomes for long-term disadvantaged individuals by region and ethnic group

Error! Reference source not found. shows key outcomes for long-term disadvantaged individuals broken down by region and high/low-impact ethnicity grouping. Overall, when we look at outcomes separately for those from high- and low-impact ethnic backgrounds, the regions are much more similar than when we look at outcomes for the long-term disadvantaged group as a whole.

Error! Reference source not found.b) shows that long-term disadvantaged individuals from London had the highest qualification rates, being around 50%

more likely to achieve qualifications at Level 3 or above compared with the second highest region (54%

in London vs 36% in the West Midlands). Those from high-impact ethnic backgrounds living in London had better qualification rates than those living elsewhere, but they were only 16% more likely to achieve level 3 qualifications than those in second highest region (32% in London vs 28% in the North West). Similarly, those from low-impact ethnic backgrounds living in London had better qualification rates than those living elsewhere, but only 14% better than the second highest region.

We see a similar pattern for higher education participation in **Error! Reference source not found.**c). However, those from high-impact ethnic backgrounds living in London were still around 50% more likely to be studying for a degree than in the second highest region (19% in London vs 12% in the North West). The corresponding figure for those from low-impact backgrounds was around 25% (56% in London vs 44% in the East) and for long-term disadvantaged individuals overall was 88% (44% in London vs 23% in the West Midlands).

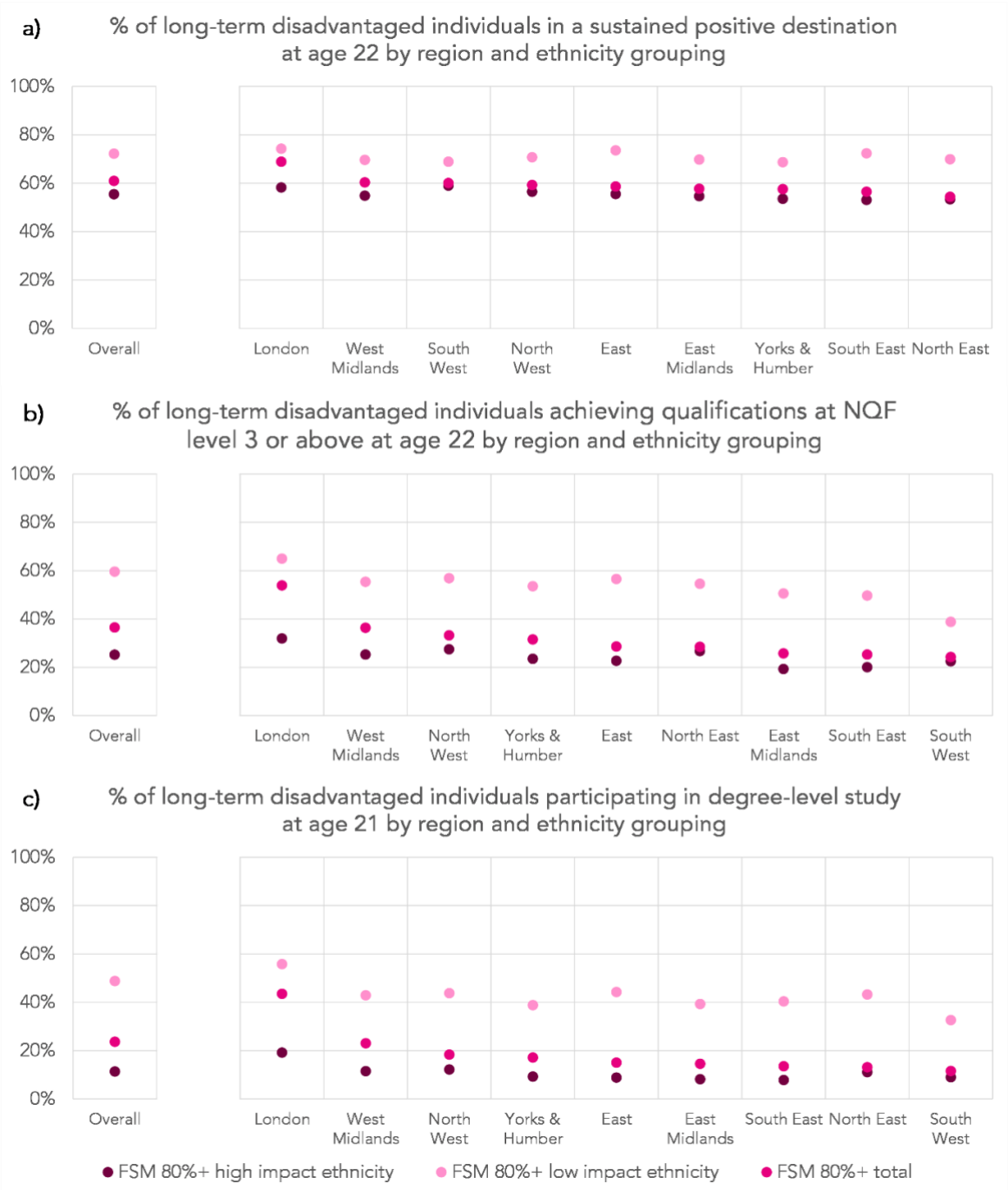

Figure 14: Charts showing, for individuals in the 2013 Key Stage 4 cohort who spent at least 80% of their school terms eligible for free school meals (FSM) a) the proportion observed in a positive destination at age 22, b) who achieved qualifications at NQF level 3 or above by age 22, and c) the proportion participating in degree-level study at age 21. Results are split by region and shown separately for the group total, and for those from a high- and low-impact ethnic group.

A positive destination is defined as being either in employment or enrolled at an education institution for at least 180 days. NQF level 3 is the equivalent of two A-levels. Degree-level study is defined as being enrolled on a qualification at NQF level 6 in a higher education institution. The "high impact" ethnicity grouping includes those from White British, White Irish, Irish Traveller, Roma, Black Caribbean, and Mixed White and Black Caribbean backgrounds, as well as those whose ethnic background is unknown. The "low impact" grouping contains individuals from all other ethnic backgrounds. Region is based on school attended at age 16.

On the broader measure of outcomes – the proportion of individuals observed in a sustained positive destination at age 22 – we see the biggest shift. For the long-term disadvantaged group as a whole, there is a difference of around 14pp between the regions with the best and worst outcomes (69% in London vs 54% in the North East). When the group is divided into low- and high- impact ethnic backgrounds, the difference is around 5-6% (for low-impact backgrounds, 74% in London vs 69% in the South West, for high-impact backgrounds, 59% in the South West vs 53% in the South East).

3. Conclusions

Disadvantage is associated with negative long-term outcomes. Those who spent time eligible for FSM whilst at school were less likely than their peers to be observed in education or employment at age 22, and were more likely to be receiving workless benefits. Lower qualification rates at the end of compulsory schooling persisted into early adulthood, with lower rates of degree-level study also observed. Crucially, outcomes worsened with severity of disadvantage – those who spent the longest proportion of their school careers eligible for FSM had the worst outcomes.

The relationship between disadvantage and outcomes varied by ethnicity. For those from some ethnic backgrounds, outcomes were similar regardless of time spent eligible for FSM at school, for example, those from Chinese, Indian, Bangladeshi, Pakistani, Other Asian, and Black African backgrounds. For others, time eligible for FSM had a big impact on outcomes, particularly those from White Irish, White British and Irish Traveller backgrounds.

There was little variation by region in the relationship between disadvantage and outcomes, apart from in London where outcomes among the most disadvantaged individuals tended to be better than elsewhere. Much of this can be explained by the different ethnic composition of the long-term disadvantaged group in London compared with other regions.

Case Studies

While long-term disadvantage is a huge problem for social mobility across the country, we spoke to a number of Northern organisations which are committed to helping young people from these backgrounds access opportunity.

EyUp

Technology entrepreneur David Richards launched EyUp in 2021 to change people's lives and plug the digital skills gap. The co-founder and CEO of data software company WANdisco plc believes that equipping people with tech skills can help them to fulfil their potential and regenerate local economies across the North of England.

EyUp introduces recruits to the most in-demand methods used in software development and teaches them everything they need to know to win a well-paid job as a software developer. Most recruits have received an offer of employment by the time they graduate from the 16-week train-ing programme.

The UK tech sector had more than two million advertised vacancies for tech roles last year, including nearly 10,000 in EyUp's home city of Sheffield, according to industry group Tech Nation. The average UK tech role attracted a salary of £62,000.

EyUp welcomes recruits from a diverse range of different backgrounds and operates an inclusive bursary scheme for people from disadvantaged backgrounds or who are underrepresented in the tech sector. The company evaluates applicants on aptitude rather than experience as part of the assessment process.

Recruits have joined from all walks of life, including building sites, bartending, the police force and the Royal Navy. EyUp has signed up refugees from oppressive regimes who want to establish successful new lives in the UK. EyUp is also helping to bring greater balance to a traditionally male-dominated sector with more than four of out 10 gradates identifying as female.

EyUp has partnered with fair student finance provider EdAid to help recruits defer the cost of tuition fees with interest-free payment plan. In the unlikely event that graduates haven't found a tech job within six months, the company will refund the cost of the course.

David Richards said: "We believe that half of the population has the natural ability to code, which is great news for our fast-growing sector. We are proud to be producing graduates with the skills that tech employers need to grow their companies and create new wealth and prosperity. Talent is everywhere in the North of England and we are doing our best to connect untapped potential with opportunities for people to enjoy rewarding careers."

UA92

University Academy 92 (UA92) is a groundbreaking higher education institution co-founded by the Class of '92 and Lancaster University.

Based in Old Trafford, Manchester, UA92 is committed to making higher education accessible to all no matter the background, through its founding principles of accessibility, social mobility and inclusivity.

UA92 offers a portfolio of degree and higher education courses across business, sport, media and digital disciplines, preparing students for the world of work by offering industry-led courses. At all courses at UA92 the students study just one subject module at a time, with no traditional end of year exams and a fixed AM or PM timetable throughout their studies.

As an institution UA92 deliberately seeks to target those who think Higher Education isn't for them with too often the Postcode a young person grows up in determines their future success.

- Across the Higher Education sector just 8% of those entering HE at 18 have previously been in receipt of FSM, thanks to "Make It For Real" over 15% of UA92's young entrants came from FSM backgrounds.
- Just 31% of UA92's applications come from potential students whose parents have experience of HE.
- In 2022 UA92 recruited more students from the areas with lowest progression to Higher Education than it did from areas with the highest participation rates (POLAR4 Quintile 1 compared to POLAR 4 Quintile 5).

Sara Prowse, CEO of University Academy 92. "With increasing levels of young people in Greater Manchester and the North growing up on Free School Meals the time for action to address this issue is now.

"We know that just 26% of those on FSM progress onto HE, compared to 45% of those not in receipt and this report shows that the disadvantage continues into later life.

"At UA92 we are committed to addressing this gap by providing our £5000 package (Including a laptop, free lunch, free travel to campus and free data) onto students who come from FSM backgrounds."

[i] Treadaway, M. (2014), "Pupil Premium and the invisible group". FFT Research Paper No 5, June 2014. [PDF]
[ii] Long-term disadvantage, part three: Ethnicity, EAL and long-term disadvantage – Mike Treadaway
[iii] Education Inequalities – IFS review
[iv] Education, social mobility and outcomes for students receiving free school meals in England: initial findings on earnings outcomes by demographic and regional factors – ONS article
[v] Why free school meal recipients earn less than their peers – ONS article

[vi] National Qualifications Framework (NQF) levels: Level 1 is equivalent to 5 or more GCSEs at grades 9-1 (A*-G), Level 2 is equivalent to 5 or more GCSEs at grades 9-4 (A*-C); Level 3 is equivalent to 2 or more A levels; Level 6 is equivalent to a first degree.
[vii] Jobseekers Allowance (JSA), Jobseekers Training Allowance (JTA), Employment and Support Allowance (ESA), Incapacity Benefit (IB), Income Support (IS), Passported IB (PIB), Severe Disablement Allowance (SDA), Pension Credit (PC), State (Retirement) Pension (RP), Carers Allowance (Invalid Carers Allowance – ICA), Attendance Allowance (AA), Universal Credit – Searching for Work (UAA), Universal Credit – No Work requirements (UBC), Universal Credit – Preparing for work (UCE), Universal

[viii] The impact of being long-term disadvantaged at KS2 and KS4 - FFT Education Datalab blog