



Social Mobility
Commission

Ethnicity, Gender and Social Mobility

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About the Commission

The Social Mobility Commission is an advisory, non-departmental public body established under the Life Chances Act 2010 as modified by the Welfare Reform and Work Act 2016. It has a duty to assess progress in improving social mobility in the United Kingdom and to promote social mobility in England. It currently consists of four commissioners and is supported by a small secretariat.

The commission board currently comprises:

- Alan Milburn (Chair)
- Baroness Gillian Shephard (Deputy Chair)
- Paul Gregg, Professor of Economic and Social Policy, University of Bath
- David Johnston, Chief Executive of the Social Mobility Foundation

The functions of the commission include:

- monitoring progress on improving social mobility
- providing published advice to ministers on matters relating to social mobility
- undertaking social mobility advocacy

Contents

Glossary	1
Executive Summary	2
Section 1: Ethnicity, gender and poverty - an analysis of educational performance.....	5
1.1 Gender	5
1.2 Gender and socio-economic status (SES)	8
1.3 Ethnicity	12
1.4 Gender and ethnicity	17
1.5 Ethnicity and socio-economic background.....	20
Section 2: Understanding differences in social mobility	28
2.1 The Family	28
2.1.1 Family effects on attainment	28
2.1.2 Explanations.....	28
2.1.3 Summary	32
2.2 Pre-School	33
2.2.1 Pre-school influences on early years outcomes.....	33
2.2.2 Explanations.....	33
2.2.3 Summary	35
2.3 School	36
2.3.1 Explanations.....	36
2.4 Higher education	40
2.4.1 Participation and achievement in Higher Education.....	40
2.4.2 Explanations.....	41
2.4.3 Summary	44
2.5 The Labour Market.....	45
2.5.1 Patterns of employment and earnings	45
2.5.2 Explanations.....	46
2.5.3 Summary	48
Conclusion	49
Appendix 1: Technical notes on Section 1 data	58
Foundation Stage to Key Stage 5	58
Foundation Stage Profile (FSP)	58
Key Stage 1 and 2.....	59
At key stage two, data is used as follows:.....	59
Key stage 4	59
Key Stage two to four value added	59
Key Stage five data	60
Higher Education Data	60



Glossary

Average Points Score (APS): A numerical value representing the overall achievement of a pupil at a particular key stage.

English as an Additional Language (EAL): A term used to denote a pupil from a household where English is not the primary language used.

Early Years Foundation Stage Profile (EYFSP): An assessment administered to all pupils in English schools at age 5.

Free School Meals (FSM): Eligibility for FSM is a widely used proxy for low socio-economic status in English schools. It is criticised for not taking into account a broad range of household circumstances, both among those eligible and non-eligible for FSM.

Higher Education (HE): A term used in the UK to refer to education for young people, usually aged 18 or over, at universities and colleges, and awarding academic degrees or professional certifications.

Home Learning Environment (HLE): A term used to encompass a range of factors in the home shown to be conducive to a child's learning, for example the presence of books, or parent/child reading activities.

Key Stage One (KS1): Education in English schools for children aged 5-7 years.

Key Stage Two (KS2): Education in English schools for children aged 7-11 years.

Key Stage Three (KS3): Education in English schools for children aged 11-14 years.

Key Stage Four (KS4): Education in English schools for children aged 14-16 years and which incorporates GCSEs and equivalents.

Key Stage Five (KS5): Education in English schools for children aged 16-18 years and which incorporates A Levels and equivalent "level 3" qualifications.

National Pupil Database (NPD): A record for every pupil in England held by the Department for Education (DfE).

Special Educational Needs and Disabilities (SEND): A term used in England which refers to children who have additional learning needs or physical disabilities.

Socio-Economic Status (SES): A term referring to the combination of education, income and occupation of an individual.

Science, Technology, Engineering and Maths (STEM): A group of subjects, qualifications in which are shown to be of relative high value in the labour market.

Executive Summary

British families are told that if their children go to school and work hard, they will be rewarded with good jobs and opportunities. But for many groups this promise is being broken. In recent months, the low educational attainment of White British boys has gained significant attention. However, when it comes to the transition from education to employment, this group is less likely to be unemployed and to face social immobility than their female counterparts, black students and young Asian Muslims. Why is this the case?

This report explores the complexities of adding ethnicity and gender to an analysis of socio-economic Status (SES) gaps. It considers some of the ways in which gender, ethnicity and SES interact with education to produce or reduce social mobility. It then explores a vast body of research into how young people's longer term social mobility depends on how educational outcomes at schools translate into participation and achievement in Higher Education and the labour market. For each of our key findings, we recommend questions for future research and areas in urgent need of policy interventions.

In **Section One**, we summarise trends in attainment according to gender, SES and ethnicity and how these factors interact. We do this through new quantitative analysis of the National Pupil Database as well as by using recent research for the Department for Business, Innovation and Skills (BIS), and the Equality Challenge Unit (ECU). The literature review in **Section Two** then draws on quantitative and qualitative sources to explore causal factors for such gaps as well as how educational attainment translates into the labour market. Each section examines students' trajectories as they progress through the early years, primary and secondary school, through to sixth form and on to university.

Our unique research aims to inform the understanding of intersectionality between ethnicity, gender and SES and further the debate by providing new insights and conclusions. It sets out recommendations to Government, universities, schools and early years providers. Our analysis concludes that urgent action is needed beyond education across all sectors of the labour market and society to address the barriers young people face upon entry to the labour market. It is striking that many of the groups that either attain highest, or are improving their achievement fastest at school, are not yet able to translate educational success into labour market outcomes. This is a particular issue for some ethnic groups and women.

Achievement of a good degree has a profound impact on long-term social mobility and there are huge differences in attainment between ethnic groups and men and women. This is particularly evident when examining the socio-economic attainment gap, which is evident from the early years. Despite recent progress, disadvantaged children fall further behind at secondary school rather than catching up. These differences impact on life chances in the labour market, particularly for people from Black or Asian Muslim communities. A range of factors give rise to these differences and some require further research to understand specific issues. However, with regards to participation in the labour market, key factors include cultural, family and individual expectations, geography and direct/indirect discrimination. Meanwhile in education, differences arise from access to schools, teacher's perceptions of behaviour, parental expectations and support, and practices such as tiering and setting.

Our key findings include:

- 1. A White British vulnerability to school underperformance.** Although in every ethnic group, those eligible for Free School Meals, (FSM, a key indicator of SES), underperform compared to their

more affluent peers, White British and White Other children from low income homes are the lowest performing groups at primary school. White British pupils also make the least progress throughout secondary school resulting in a worsening in their performance by key stage four. The socio-economic attainment gap is largest amongst White British pupils at all Key Stages and this trend may reflect particularly wide disparities in household incomes amongst non-FSM pupils from this ethnic group.

- In the early years the socio-economic gap is larger for 'White British' and 'White Other' groups than other minority ethnic groups.
- Disadvantaged 'White British' and 'White Other' pupils are the lowest performing groups at primary and secondary school. During secondary school, disadvantaged White British pupils make slower progress and therefore fall further behind.
- At all key stages, these groups perform least highly of all ethnic groups in English. Until Key Stage 4 it is 'Other White' eligible pupils who perform most poorly however at Key Stage 4 these pupils do better than their eligible White British peers.
- In Maths, as in English, the same trend applies, with the exception of Early Years Foundation Stage Profile (EYFSP) where FSM eligible Pakistani/Bangladeshi pupils also perform poorly.
- Disadvantaged young people from White British backgrounds are the least likely to access Higher Education, with only 1 in 10 of the poorest attending university, compared to 3 in 10 for Black Caribbean children, 5 in 10 for Bangladeshis and nearly 7 in 10 amongst lowest income Chinese students.
- Despite this, ethnic minority groups experience higher unemployment rates compared to White British groups.

2. A Black penalty in secondary and higher education. Despite starting school ahead with performance largely in line with national averages, Black children fail to show this advantage higher up the age range. They are the ethnic group most likely to fail their Maths GCSE, most likely to be excluded from school and one of the least likely groups to achieve a good degree at university. Black boys do substantially less well than their female peers particularly at Key Stage 4. Furthermore, granular analysis of different Black sub-groups (for example Black African cf. Black Caribbean) has also shown distinctive patterns in achievement.

- Black children now enter school with levels of literacy and numeracy that are largely in line with the average child in the UK – 67 and 75 per cent achieving a good level at age 5 in literacy and numeracy respectively, compared to the national average of 69 and 76 per cent.
- Yet by the end of primary school, Black pupils are beginning to fall behind the national average in maths, particularly boys. While 77 per cent of pupils achieve expected levels nationally, for Black pupils this is 74 per cent and for Black boys, only 73 per cent.
- Secondary school is where Black pupils' attainment falls behind substantially and by age of 16, Black students are the ethnic group least likely to achieve a C in their Maths GCSE – only 63 per cent attaining this level, compared to a national average of 68 per cent. For Black boys this is worse, at 60 per cent.
- At Key Stage 5, Black pupils are the ethnic group with the lowest outcomes. The low GCSE attainment translates into strikingly low attainment in Science Technology Engineering and Maths (STEM) A-levels at Key Stage 5.
- At university Black students are particularly vulnerable to dropping out and attaining poorly. They are also less than half as likely to get a First as their white counterparts and more than 1 in 10 Black university students drop out of their HE course in their first year.

Black children are the ethnic group most likely to grow up in poverty, with a quarter of students eligible for FSM. The literature on their underachievement points to conscious and unconscious bias

in the treatment of Black pupils, particularly boys. Recent statistics bear this out: 21.7 per cent of Black Caribbean pupils are identified as having SEND compared to 15.2 per cent of all pupils, and Black Caribbean boys were three times more likely to receive a fixed period exclusion in 2013-14 than the average pupil (12 per cent of the school population for the former group compared to 3.95 per cent for all pupils).

3. A broken mobility promise for Asian Muslims, particularly women. Young people from Pakistani and Bangladeshi backgrounds are more likely than ever to succeed in education and go on to university, girls even more so than boys. Yet these outcomes are not yet being translated into labour market returns – with unemployment particularly prevalent amongst Bangladeshi women, and both Pakistani men and women are relatively unlikely to secure managerial or professional occupations.

- There has been an increase in educational attainment for Pakistani/Bangladeshi pupils and their performance has improved at a more rapid rate than other ethnic groups in recent years at almost every key stage of education. Almost half of Bangladeshi and over a third of Pakistani young people from the poorest quintile go to university.
- However, this is not yet reflected in labour market outcomes, particularly for women, where British Bangladeshi and Pakistani women earn less than their counterparts from other ethnic minority groups
- Despite achieving higher qualifications at school than their male counterparts, female Bangladeshi graduates are less likely to gain managerial and professional roles than male Bangladeshi graduates.
- Discrimination in the workplace puts some groups, in particular Muslim women, at a disadvantage preventing them from translating educational attainment into labour market returns.
- A range of factors give rise to these differences including cultural norms, family and individual expectations, as well as geography and discrimination.

4. Female underperformance in STEM subjects. In recent years girls' outperformance of boys in examinations has frequently been highlighted with girls more likely to participate in Higher Education and more likely to achieve higher grades. However, our analysis shows that this pattern is broken when it comes to Maths attainment and in STEM subjects. In these areas, both genders perform more similarly and in some cases (such as Key Stage 2 Maths), boys outperform girls. This trend may contribute towards highly gendered post-16 subject choices and careers, with females for example much less likely to take STEM A-levels. Whilst males' subject choices are also gendered, low uptake of STEM subjects by females may constrain their social mobility. We found:

- In Maths and English, girls outperform boys throughout primary and secondary school apart from in Maths at Key Stage 2, where poorer girls in particular lag behind boys.
- Females and males now perform similarly in STEM subjects with boys increasing their performance over recent years. However, girls are less likely to take these subjects.
- At all Key Stages in Maths and English, attainment has increased the most amongst FSM pupils, particularly amongst FSM girls in Maths.

Section 1: Ethnicity, gender and poverty - an analysis of educational performance

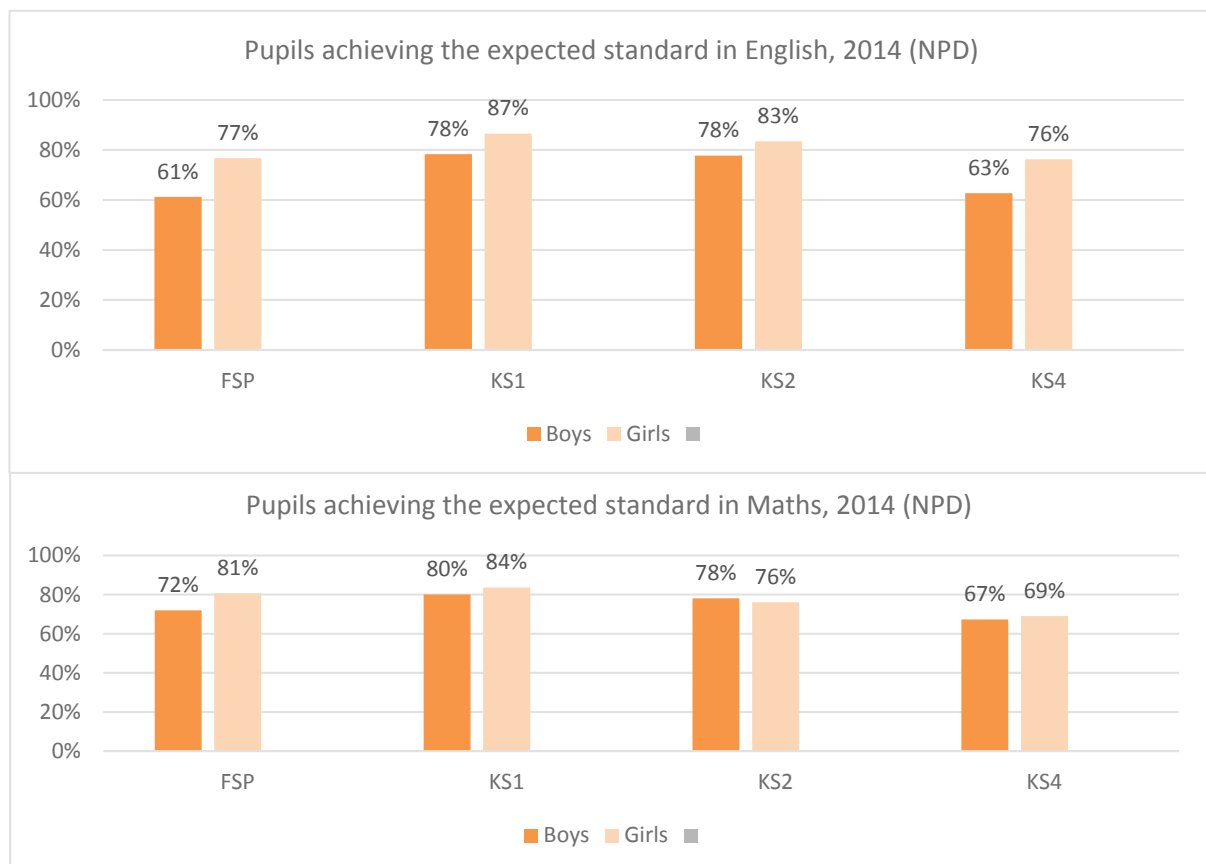
Philip Nye, Loic Menzies and Rebecca Allen

There is substantial variation in the academic performance of different ethnic, gender and socio-economic groups' and the intersections between these reveal distinct patterns of achievement. Patterns also vary between stages and phases of education, with some groups performing well at primary school for example but less so at secondary school. In this section we explore these patterns, in each case setting out the main trends and then illustrating them in more detail.

1.1 Gender

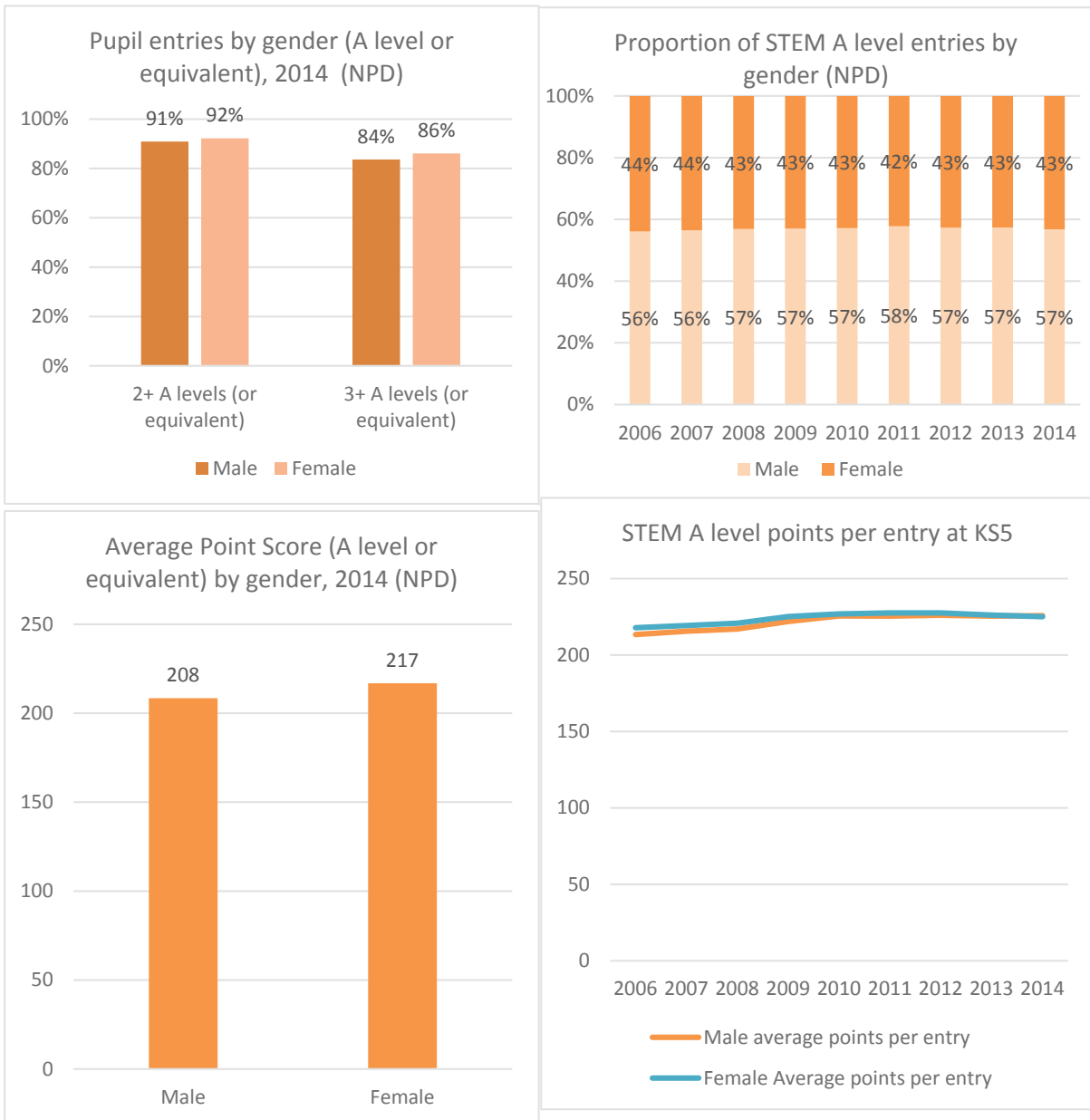
It is a long-noted trend that girls consistently outperform boys in examinations, from Foundation Stage to undergraduate degree level. However, our analysis shows that this trend is weaker when it comes to Maths and STEM subjects. Boys slightly outperform girls in Maths at the end of primary school but girls regain their advantage at Key Stage 4 (Fig. 1b). This has consistently been the case between 2006 and 2014. At Key Stage 5 girls and boys perform very similarly in STEM A-levels with boys now very slightly outperforming girls in these subjects (Fig 2b). However girls are still much less likely than boys to enter A-levels in these subjects (Fig 2c). Once pupils leave school, girls are more likely to participate in Higher Education and to achieve highly when they complete their degrees.

Figures 1a and b: EYFSP to KS4 performance in English and Maths by gender



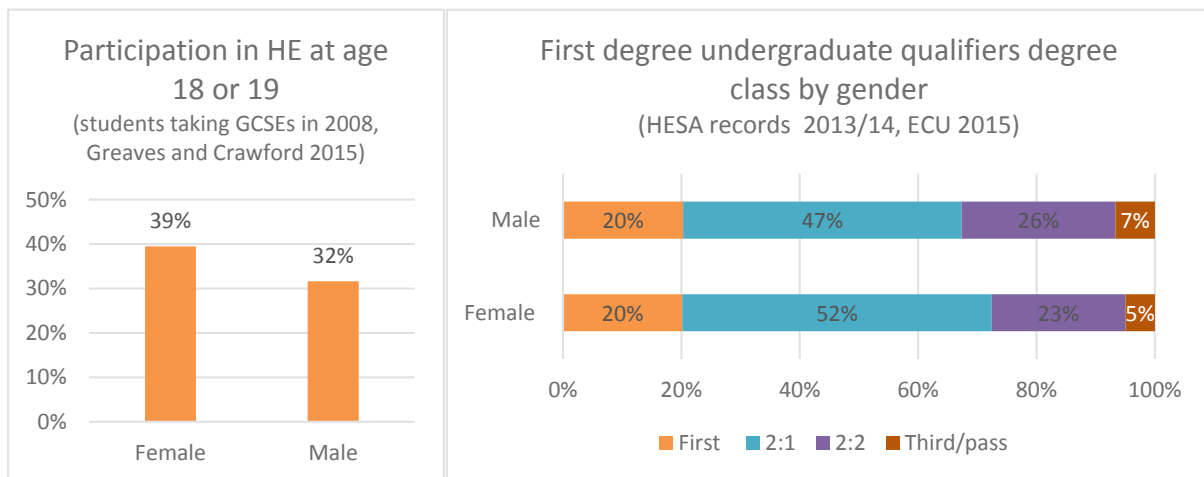
Figures 1a and b show that girls outperform boys throughout primary and secondary school apart from in Maths at Key Stage 2

Figures 2a, b and c: Performance at A level by gender



Figures 2a, b, c and d show that at Key Stage 5 females continue to slightly outperform males but not in STEM subjects which they also enter at a lower rate compared to Male students.

Figures 3a and b: Participation and achievement in HE by gender



Figures 3a and b show that females participate in HE at higher rates and achieve more highly than males

Recent trends in achievement by gender

Gender gaps in attainment have only reduced slightly over the last nine years.

Summary

- Girls outperform boys at most stages of education.
- The main exception is in Maths and STEM subjects, where the gap tends to be smaller or even reversed. Uptake of these subjects at Key Stage 5 is lower amongst girls than boys.

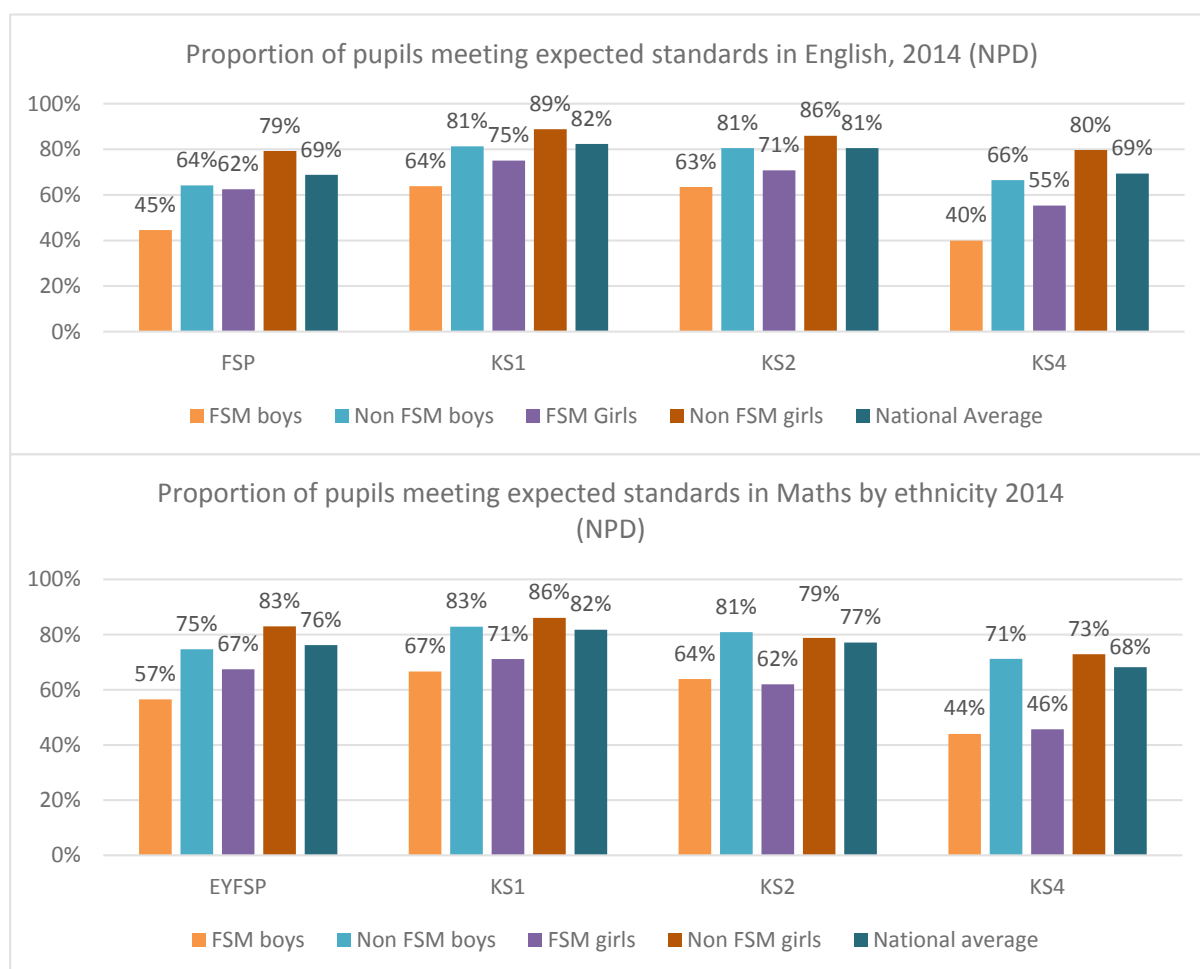
1.2 Gender and socio-economic status (SES)

Free School Meal eligibility is a measure of low income in schooling and we use this as a proxy for socio-economic disadvantage. The proportion of children recorded as FSM-eligible has fluctuated over the last decade and has been falling in recent years from a high point of around 18% in 2013.

Both disadvantaged and non-disadvantaged females outperform their male peers from similar socio-economic backgrounds but disadvantaged pupils of both genders underperform compared to their more advantaged peers (figs 4a and b). By Key Stage 4, girls who are not eligible for FSM are twice as likely to achieve expected standards in English compared to FSM boys.

The reverse gender gap for Maths at Key Stage 2 is also present amongst poorer children and recently, disadvantaged girls have had the lowest outcomes in STEM subjects at A level (figs 5a and b).

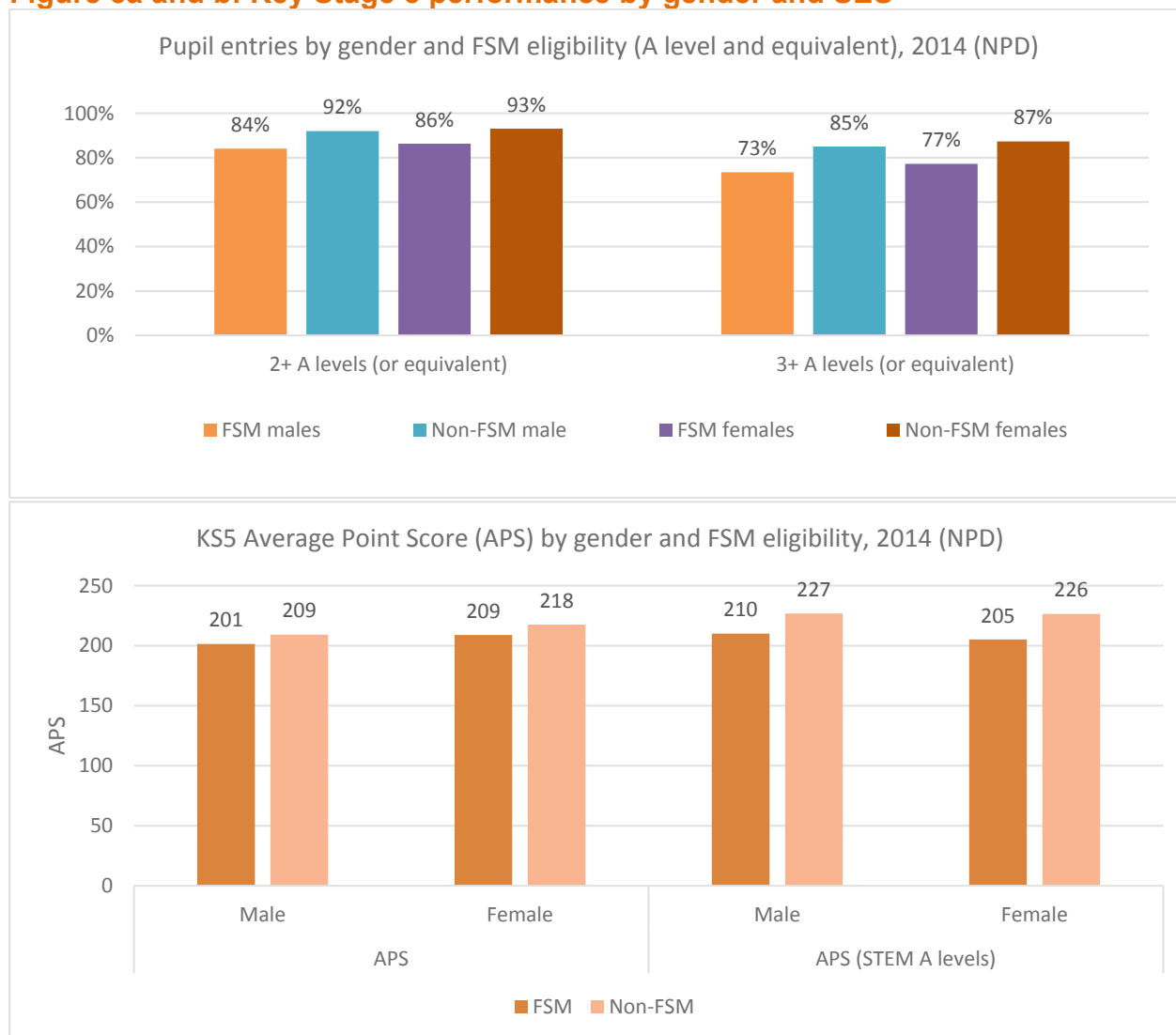
Figure 4a and b: EYFSP to KS4 performance in English and Maths by gender and SES



Figures 4a and b show that at both primary and secondary school, FSM boys tend to perform the least highly but that the socio-economic attainment gap is a concern amongst both boys and girls^{1,2}.

¹ 2+ and 3+ A-levels includes all level 3 qualifications (A-level or equivalent) whereas the analysis of STEM and subjects relates to A-levels only.

Figure 5a and b: Key Stage 5 performance by gender and SES



Figures 5a and b show that FSM males and FSM females are less likely to enter A-level and equivalent qualifications and perform lower than non-FSM males and females. FSM females continue to perform more highly than FSM males at KS5 apart from in STEM A-levels.

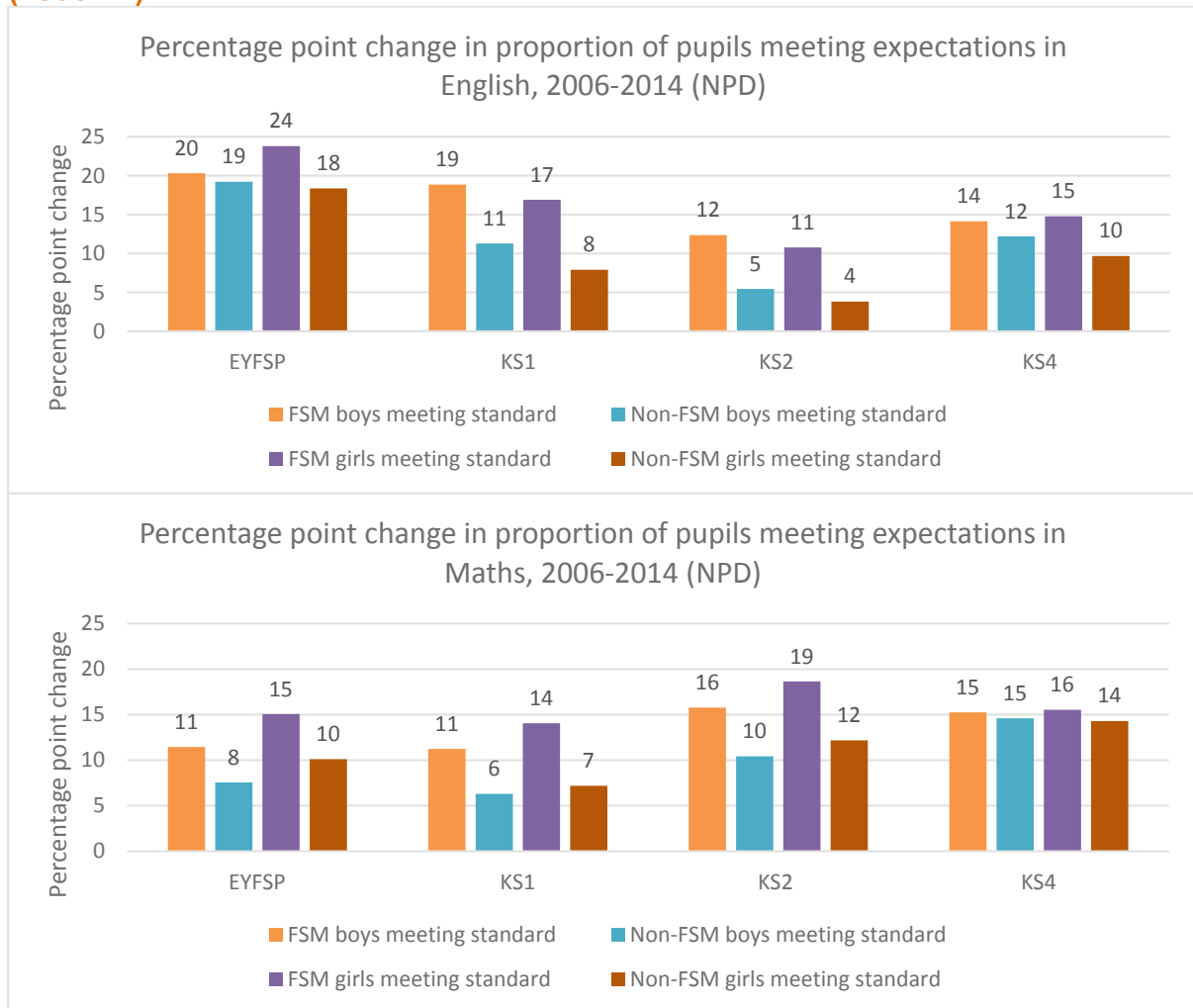
Recent trends in achievement by gender and SES

The proportion of pupils achieving expectations in English and Maths has increased since 2006 amongst all groups, however increases have been larger for both girls and boys eligible for FSM compared to those not eligible. In English at Key Stage 1 and 2 the largest increases have been amongst FSM boys whilst at EYFSP and Key Stage 4, FSM girls have made the greatest gains. In Maths, at all key stages it is FSM girls who have most increased their attainment.

At Key Stage 5, increases in APS have been particularly large amongst FSM pupils (both male and female), whilst in STEM A-levels increases have been largest amongst males.

² The population included is all pupils completing at least one level 3 qualification (A-Level or equivalent). It is worth noting that pupils who are not included (i.e. those who do not complete level 3 study post-16) are more likely to be from low SES backgrounds.

Figure 6a and b: Change in performance at EYFSP - KS4 by gender and SES (2006-14)



Figures 6a and b show that in Maths, at all key stages, attainment has increased most amongst FSM girls and, to a slightly lesser degree, amongst FSM boys. In English improvements for FSM girls at EYFSP particularly stand out.

Figure 7: Change in KS5 performance by gender and SES (2006-14)

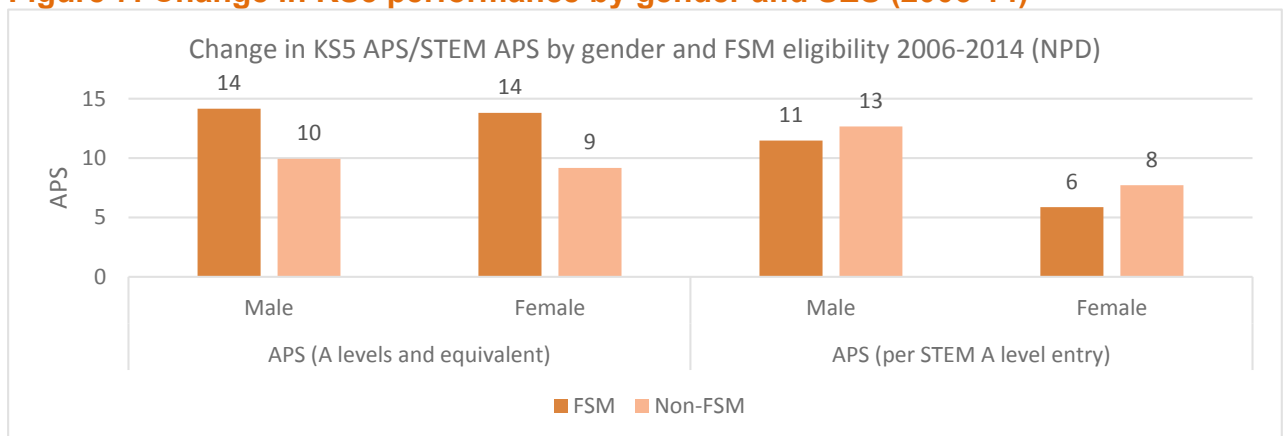


Figure 7 shows increases in both overall APS and STEM APS at Key Stage 5 for both male and female FSM pupils apart from in STEM subjects.

Summary

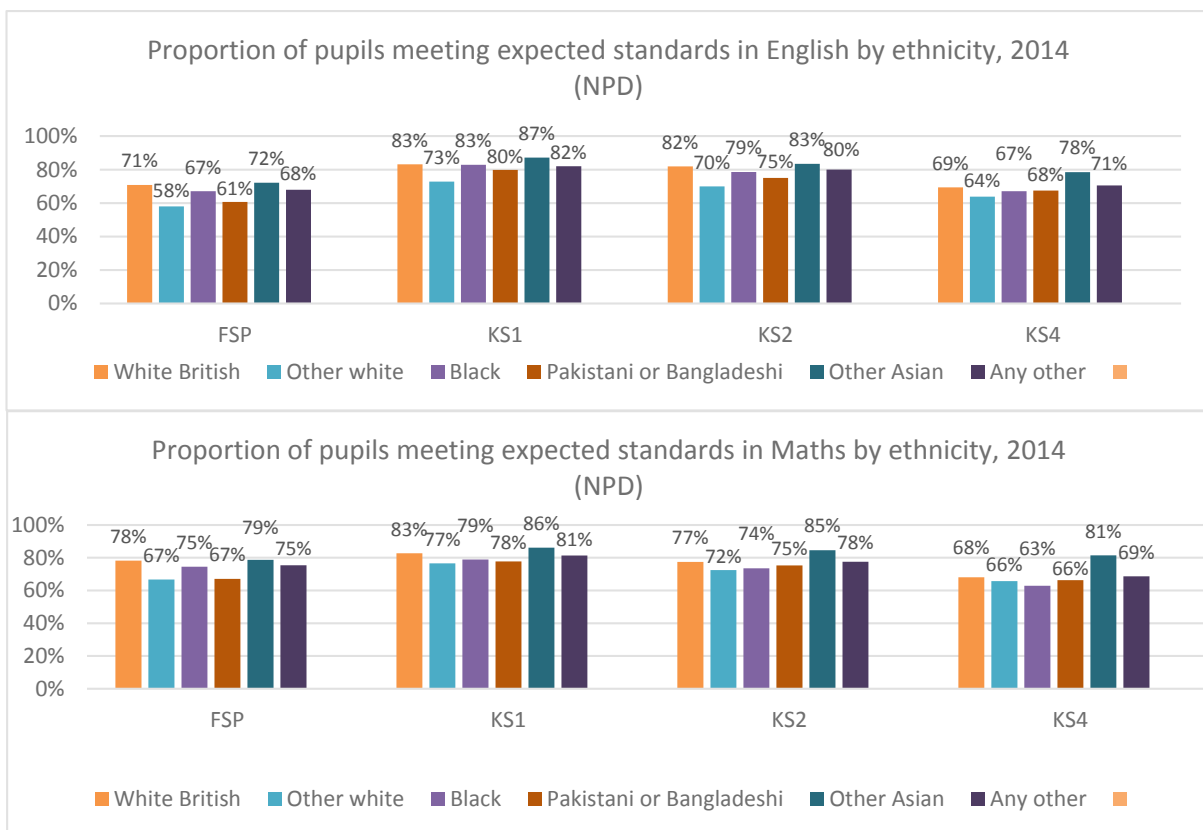
- Socio-economic attainment gaps are evident early on for both genders.
- FSM boys tend to be the lowest performing group, particularly in English.
- Attainment at 18 has increased slightly faster amongst disadvantaged pupils than their less disadvantaged peers.
- In STEM subjects, disadvantaged female students are the lowest performers.

1.3 Ethnicity

‘Other Asian’ pupils are the highest performing ethnic group at almost all stages of education (figs 8 and 9). Meanwhile black students perform relatively well in the early key stages but do less well in later stages, particularly in Maths at Key Stage 4 and in STEM subjects at Key Stage 5 (fig. 9). They then go on to perform far less highly at university compared to other ethnic groups, with only half achieving a 2:1 or higher, compared to 75% of White students (fig. 7b). Black students are also particularly likely to drop out of HE after a year (fig. 9). We explore these trends and the extent to which they are linked to prior attainment in Section 2. In contrast, Pakistani/Bangladeshi and ‘White Other³’ pupils perform relatively poorly at Early Years Foundation Stage but go on to make up much of the gap in the later Key Stages particularly in STEM subjects (fig. 4 and 5).

‘White other’ and Bangladeshi/Pakistani pupil’s higher attainment in later key stages could either be due to changing composition of the group (with longer-term residents forming a larger proportion of the older cohort), or due to pupils from these ethnic groups making rapid progress over the course of schooling as they acquire language. We explore these questions further in Section 2 but comparing Key Stage 2 to 4 value added scores (fig 6) suggests the latter explanation plays at least some role since both groups do well on this measure.

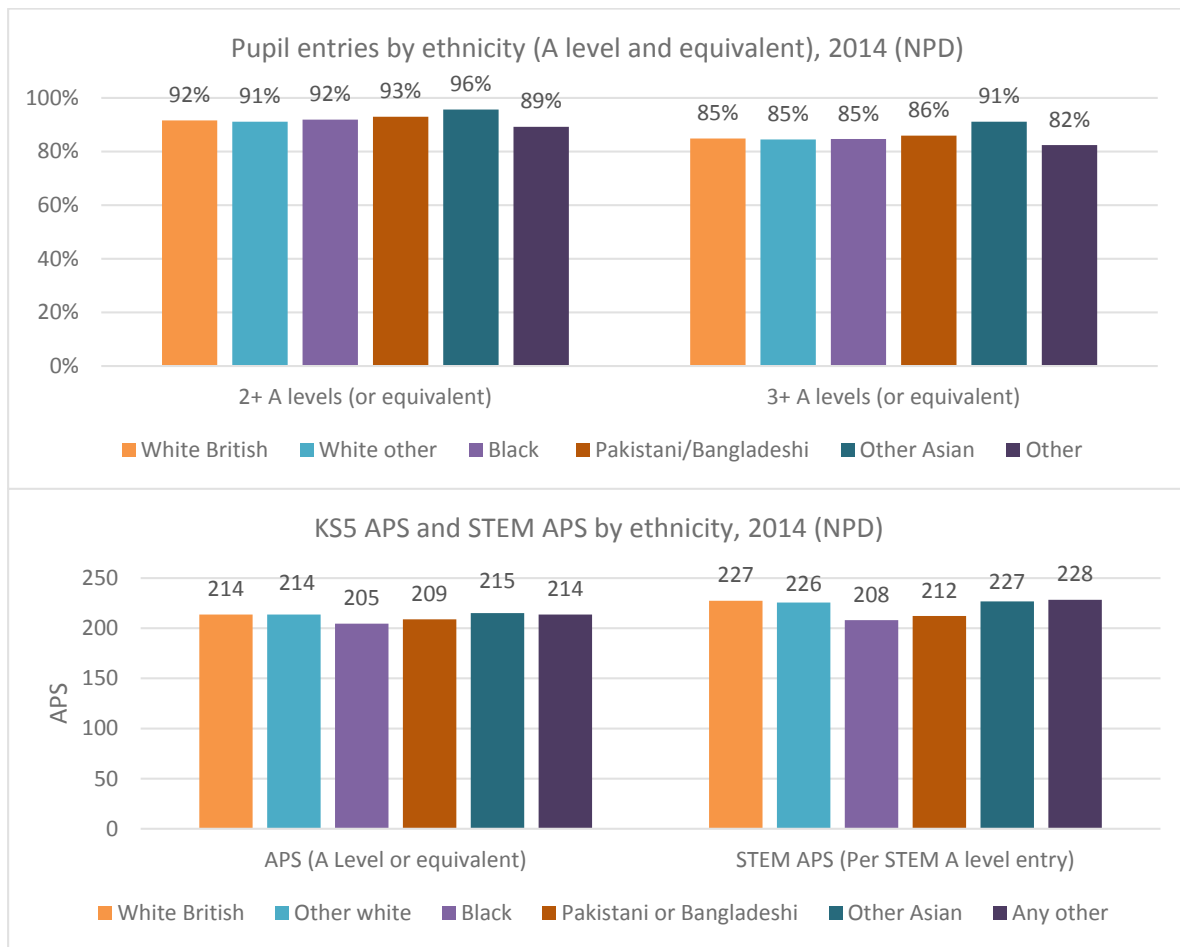
Figures 8a and b: EYFSP to KS4 performance in English and Maths by ethnicity



Figures 8a and 8b show that ‘Other Asian’ pupils achieve particularly highly at all stages and that gaps between other groups tend to even out as pupils move through school.

³ The ‘White other’ group includes a range of groups including European migrants and Gypsy Roma Traveller pupils.

Figures 9a and b: Performance at A-level by ethnicity



Figures 9a and b show that different ethnic groups have similar patterns of KS5 entries. There is more variation when it comes to achievement in STEM subjects STEM where the highest performing group ('any other' students) achieving an APS almost 10% higher than the lowest performing group (Black students).

Figure 10: KS2-4 Value added

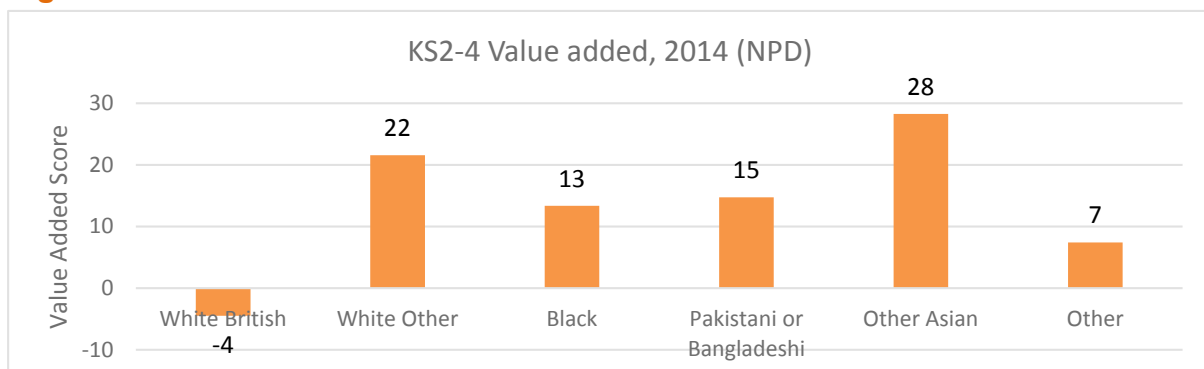
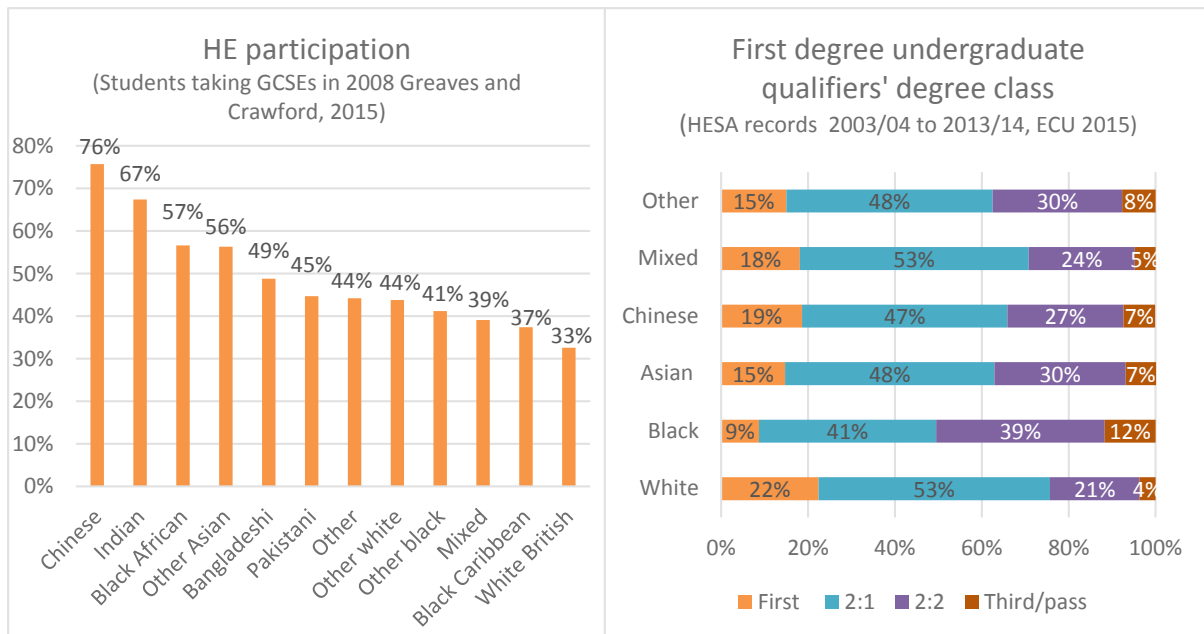


Figure 10 shows that White British pupils achieve a negative value added score – i.e. they make less progress between key stages than would be expected based on national trends, whilst 'Other Asian' and 'White Other' pupils make particularly good progress between Key stage 2 and 4.

Figures 11a and b: Participation and achievement at HE by ethnicity



Figures 11a and b show that young people from ethnic minorities groups participate in HE at higher rates than those from the White British group, but that White Pupils who do participate achieve very highly.

Figure 12: HE withdrawal rates by ethnicity

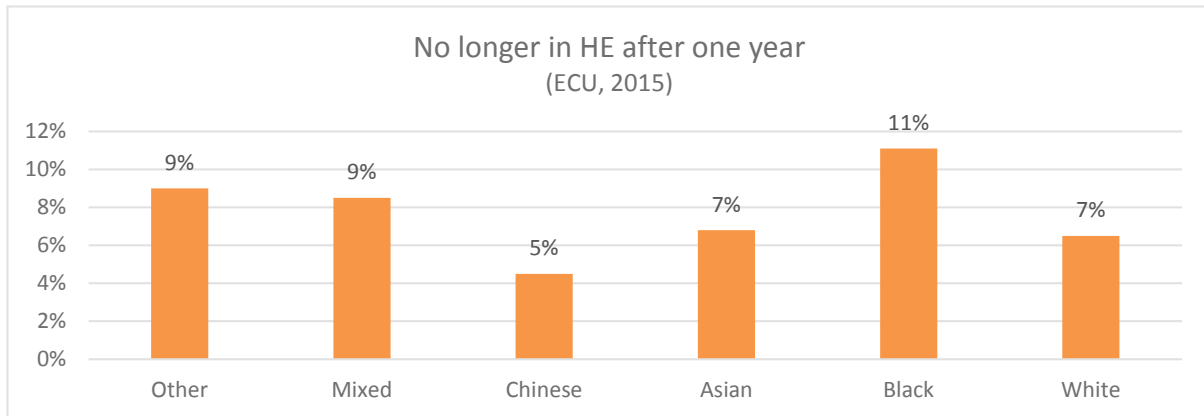


Figure 12 shows that Black pupils withdraw from HE at a particularly high rate.

Recent trends in achievement by ethnicity

The ethnic make-up of student populations has changed over time. As figure 13 shows, since 2006, when our longitudinal data analysis begins, there has been an increase in the proportion of pupils coming from ethnic minority backgrounds – most significantly the ‘White Other’ group, which has doubled in size.

Across key stages and in both English and Maths over the 2006-14 period, Black and Pakistani/Bangladeshi pupils tended to improve their performance more quickly than other groups (fig 14). Some of this trend may be explained by changes in these populations, with more ‘second generation’ children, who face fewer language barriers than their counterparts.

Although ‘Other White’ pupils’ attainment has tended to increase less than many other ethnic groups, figure 15 shows that their value added scores have been increasing particularly rapidly. This may be because of a change of composition due to migration, with a larger proportion of this ethnic group now made up recently arrived Eastern European children for whom English is an Additional Language resulting in lower attainment but rapid progress. Figure 15 also suggests that Pakistani/Bangladeshi’s improving performance at Key Stage four is likely to be a consequence of their better performance at Key Stage two, rather than because of particularly rapid progress at secondary school.

Figure 13: Ethnic composition

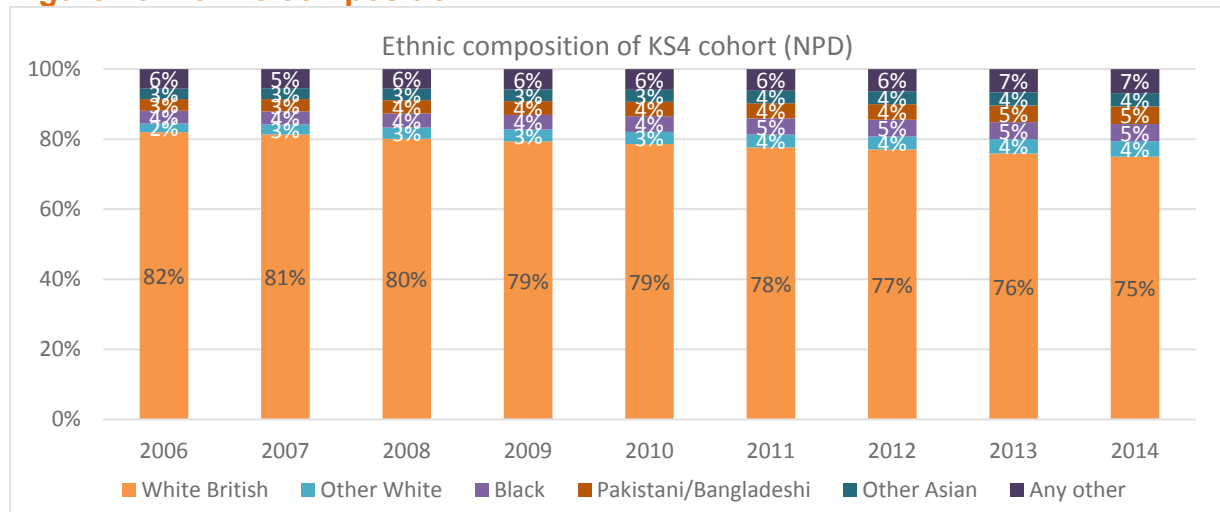


Figure 13 shows that ethnic minorities have made up an increasing proportion of the KS4 cohort, with the proportion of pupils from ‘other white’ backgrounds doubling.

Figure 14: Change in performance by ethnicity

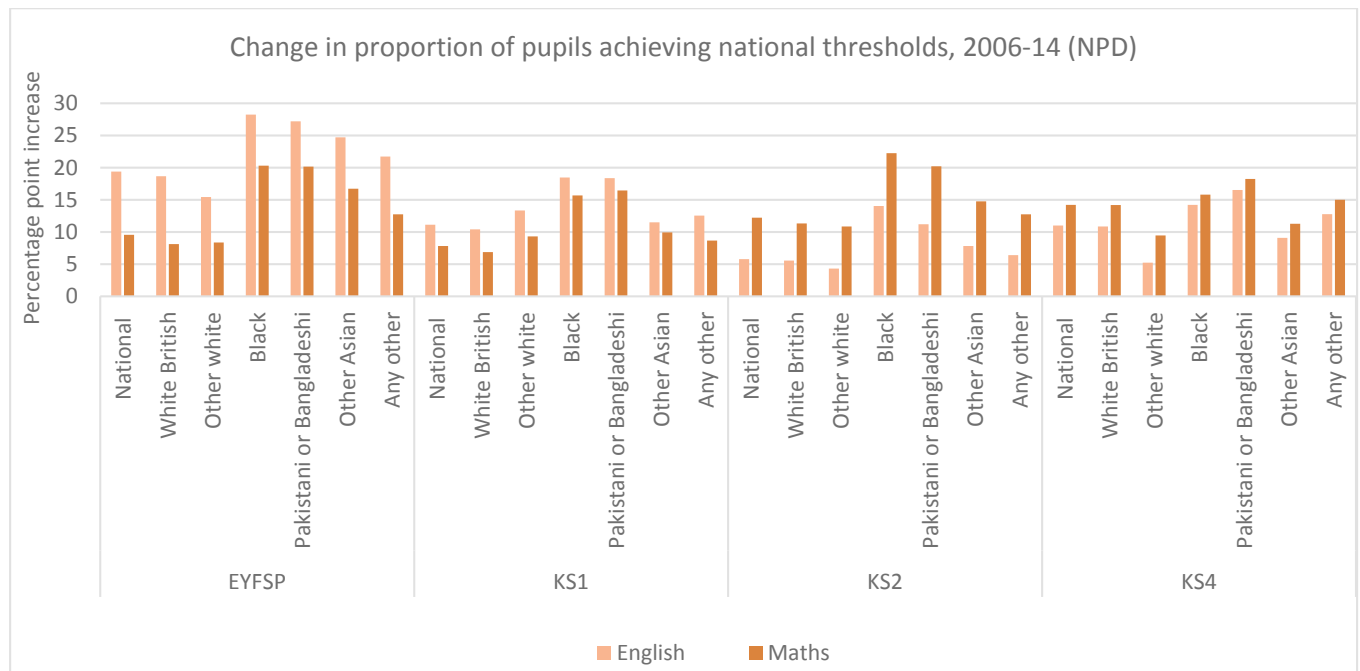


Figure 14 shows that the largest increases in attainment have tended to be amongst Black and Pakistani/Bangladeshi pupils.

Figure 15: Key Stage 2-4 value added 2006-14 by ethnicity

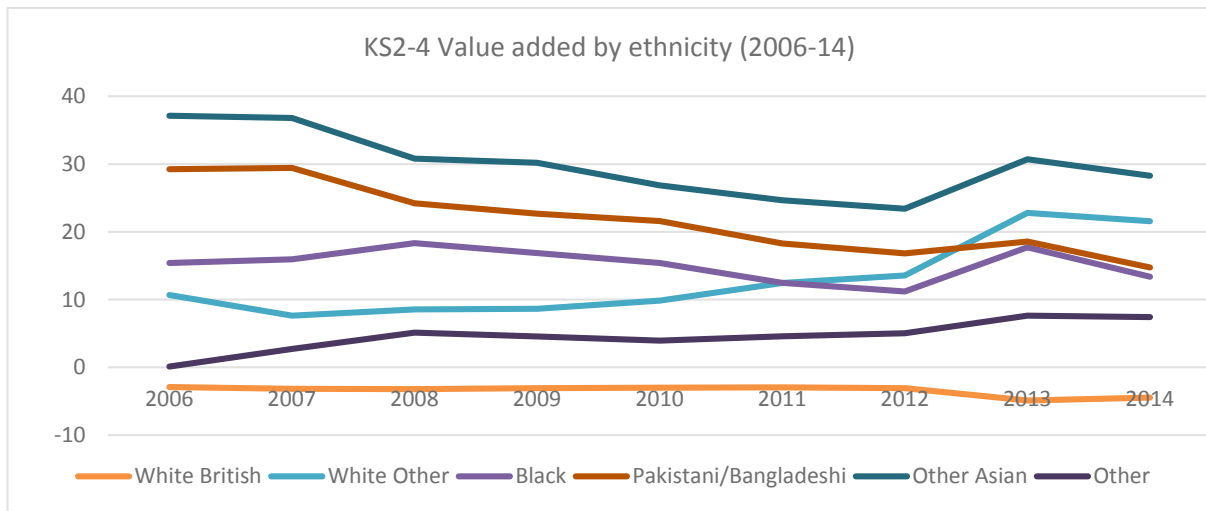


Figure 15 shows that ethnic minority groups make above average progress between key stage 2 and 4 and that White Other pupils have made increasing levels of progress whereas Pakistani/Bangladeshi pupils have done the opposite.

Summary

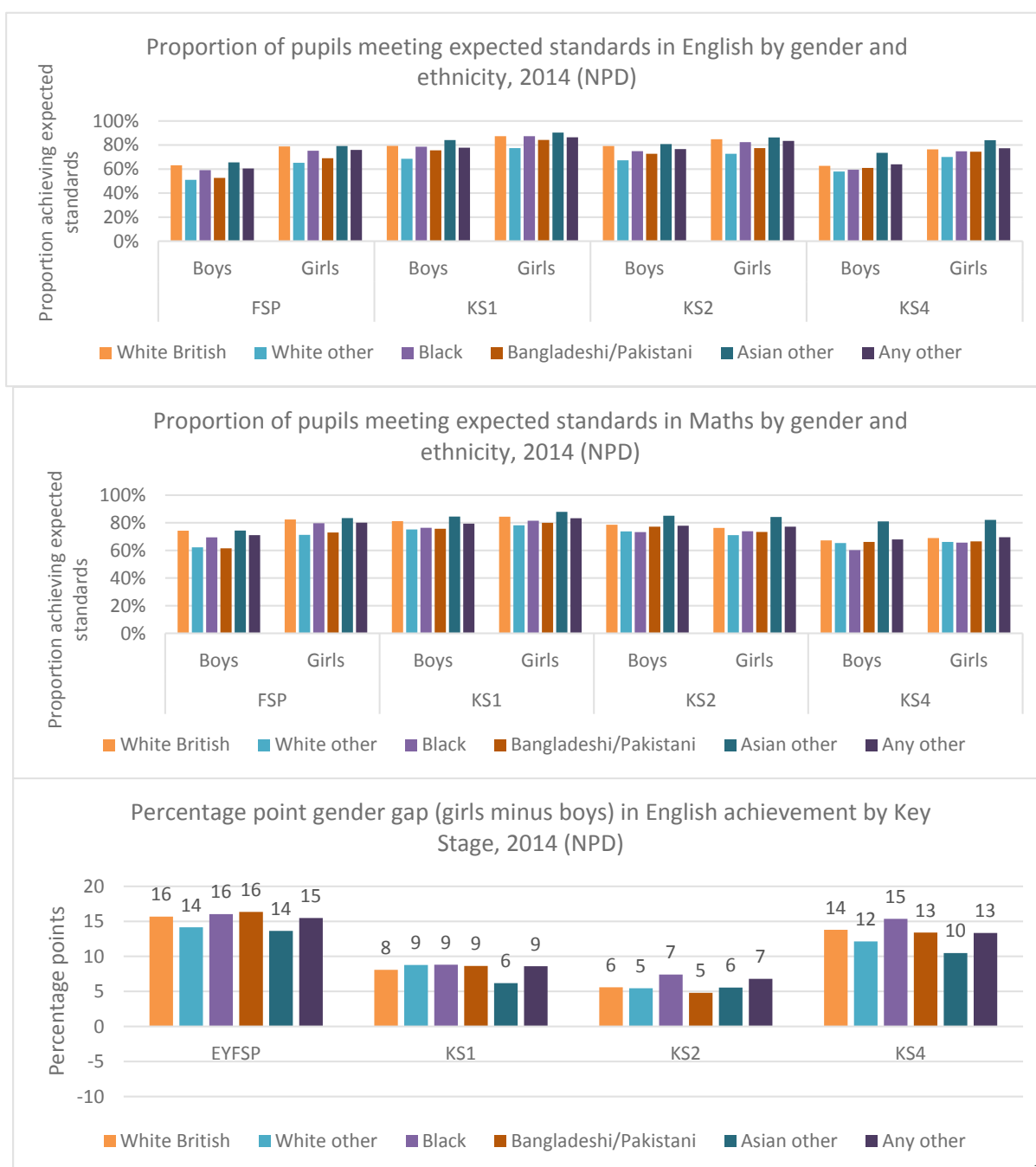
- Black students seem to achieve less highly compared to other ethnic groups higher up the age range and achieve particularly poorly in Maths at Key Stage 4, in STEM subjects at Key Stage 5 and in their degrees; which they drop out of at a higher rate compared to other ethnic groups. It remains to be seen whether this changes as the rapid improvements seen lower down the age range in recent years feed through to the upper key stages and Higher Education as these pupils progress through education.
- 'Other Asian' students perform particularly well at all stages of education and this high relative performance has become particularly striking over the last decade.
- Results have increased particularly rapidly amongst 'Pakistani/Bangladeshi' and black pupils and more slowly amongst 'White Other' students, though the latter have begun to achieve impressive value added scores whereas improvement amongst Pakistani/Bangladeshi pupils' appears to be driven by their increasingly impressive primary school achievement.

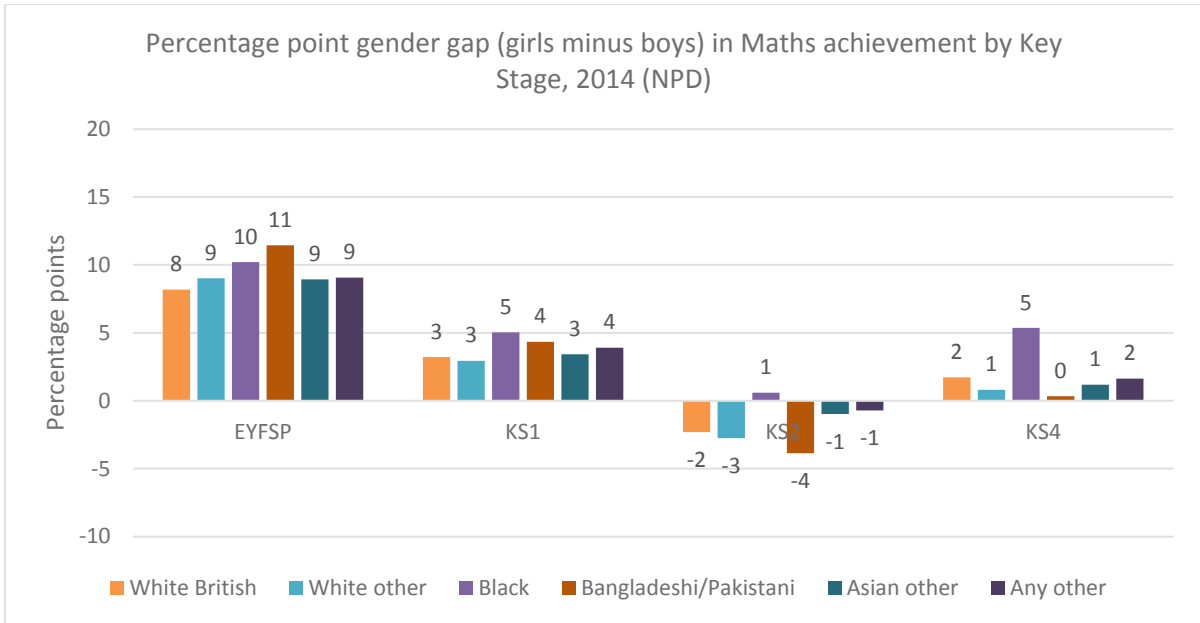
1.4 Gender and ethnicity

All ethnic groups demonstrate similar gender-gaps in attainment with girls tending to outperform boys from EYFSP all the way through to HE. However, gender-gaps are generally larger amongst black pupils, particularly higher up the age range and in Maths in particular (figs 16 and 17).

At Key Stage 5, female students from all ethnic groups outperform males from the same group at both the 2+ and 3+ A-level (or equivalent) thresholds but to varying degrees. In STEM subjects, this gap is much narrower and has even recently been reversed slightly as was noted in section 1.1, however, taking into account ethnicity reveals that this is not the case for White British and White Other students where females continue to match or outperform their male peers' performance.

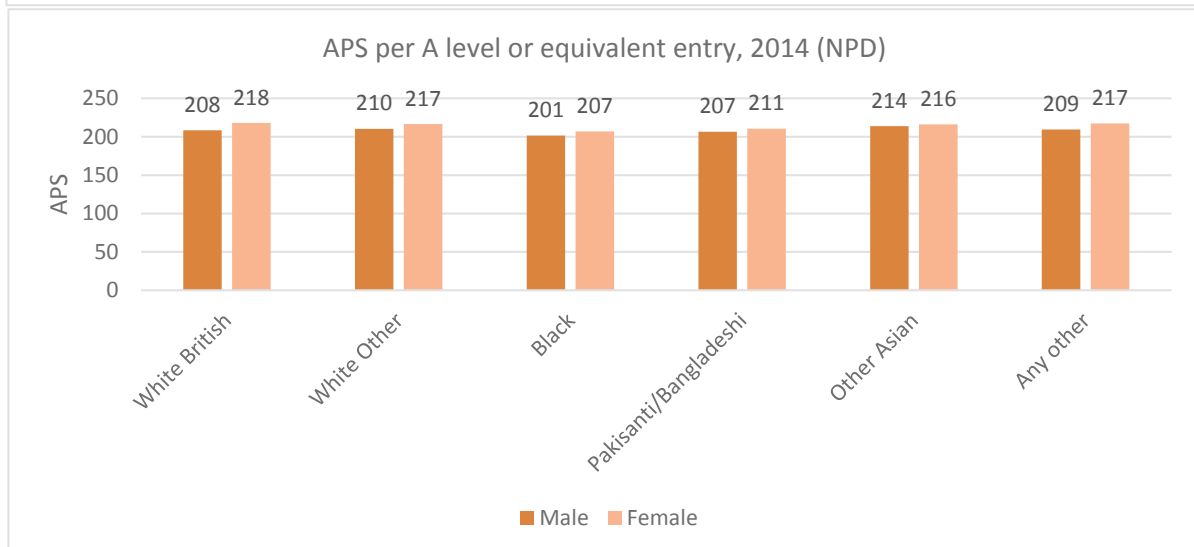
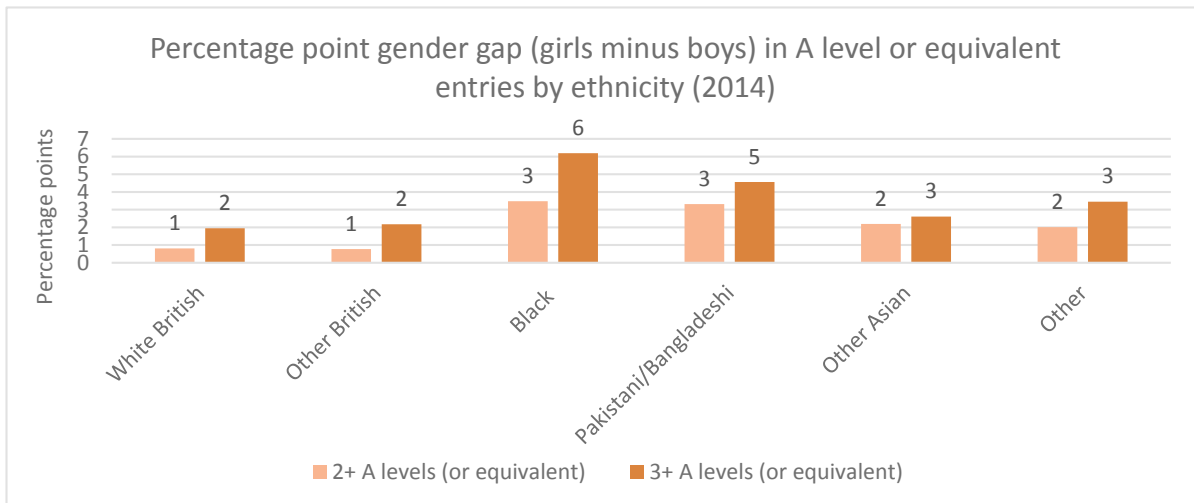
Figure 16a, b, c and d: Gender and ethnicity (EYFSP-KS4)

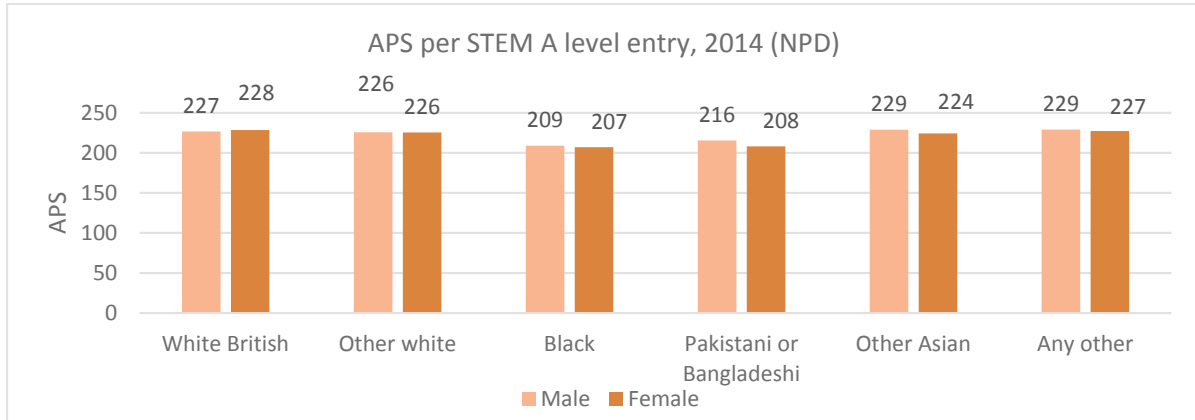




Figures 16a, b, c and d show that gender gaps are largely consistent across ethnic groups at primary and secondary level although gaps are slightly larger amongst older black pupils.

Figure 17a, b and c: Key Stage 5 gender gaps by ethnicity





Figures 17 a, b and c show that whereas girls of all ethnicities enter A level and equivalent qualifications at higher rates and outperform boys, boys from several ethnic groups achieve slightly higher APS in STEM subjects.

Figure 17: Achievement in HE by gender and ethnicity

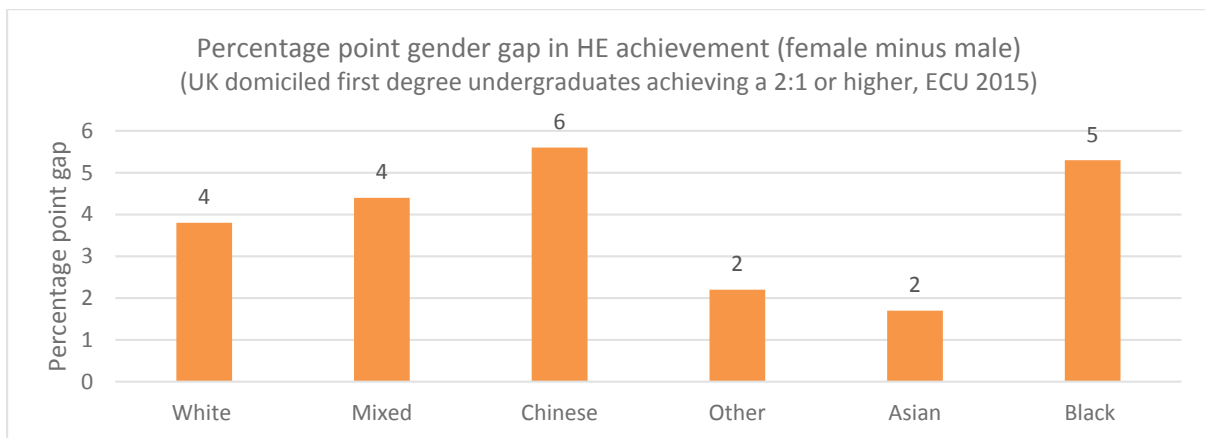


Figure 18 shows that the gender gap persists amongst all ethnic groups at HE level

Recent trends in achievement by ethnicity and gender

Gender gaps have closed slightly over time for all ethnic groups in English and Maths at Key Stage 2 and 4 (and at Key Stage 1 in English). However gaps have tended to widen at EYFSP, particularly amongst Pakistani/Bangladeshi students.

Summary

- Amongst black pupils, the gender gap becomes more prominent as children get older.
- Gender gaps are larger for all ethnic groups in English than in Maths where gaps are reversed for most ethnic groups at Key Stage 2, a situation that is also reflected in patterns of Key Stage 5 attainment in STEM subjects for some ethnic groups.

1.5 Ethnicity and socio-economic background

In general non-white ethnic groups are disproportionately likely to be disadvantaged; whereas slightly more than 1 in 10 White British pupils are eligible for FSM at Key Stage 4, this is around 1 in 4 for Black and Pakistani/Bangladeshi ethnic groups.

Table 1: Percentage of ethnic cohort who are identified as FSM

	White British	White other	Black	Pakistani/Bangladeshi	Other Asian
FSP	15%	9%	26%	15%	7%
KS1	16%	12%	29%	19%	9%
KS2	15%	14%	28%	22%	9%
KS4	12%	14%	25%	27%	10%

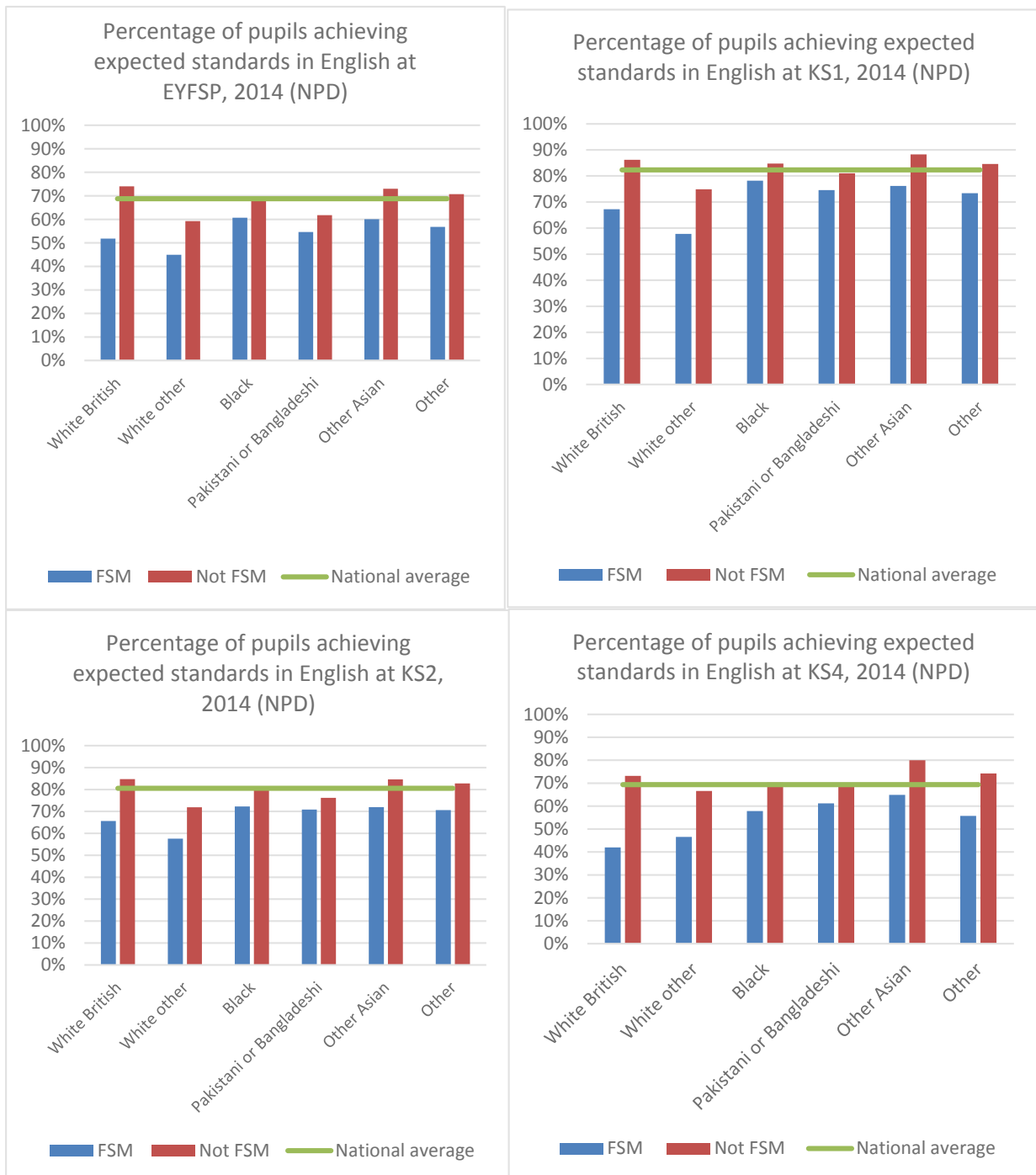
The ‘non-FSM group’ extends from many families earning just above the Income Support threshold to those earning in the top 10 per cent of incomes. However, there are proportionally fewer families in the highest income brackets amongst ethnic minority groups. This means that particularly wide disparities in household income fall under the ‘non-FSM’ label amongst White British pupils whereas ‘non-FSM’ ethnic minority pupils will more often come from relatively lower income families.

Given this, it is unsurprising that the socio-economic attainment gap is largest amongst White British pupils at all Key Stages (fig. 21) however ‘Other White’ pupils eligible for FSM also perform poorly (until Key Stage 5), particularly at primary school (figs. 19-20). At primary school, Black FSM eligible pupils perform relatively well compared to FSM pupils from other ethnic groups but this is not yet the case at secondary level (figs. 19-20).

It is worth noting that gaps in attainment between FSM eligible and non-eligible pupils are consistently larger at secondary than primary level for all ethnic groups (fig. 21). Correspondingly, Key Stage 2-4 value added scores are lower amongst FSM eligible pupils than their non-eligible peers. This means that disadvantaged children fall further behind at secondary school rather than catching up. Value added scores are particularly low amongst FSM eligible White British, ‘White Other’ and ‘Other’ pupils (fig. 22) suggesting these groups fall behind the most at secondary school.

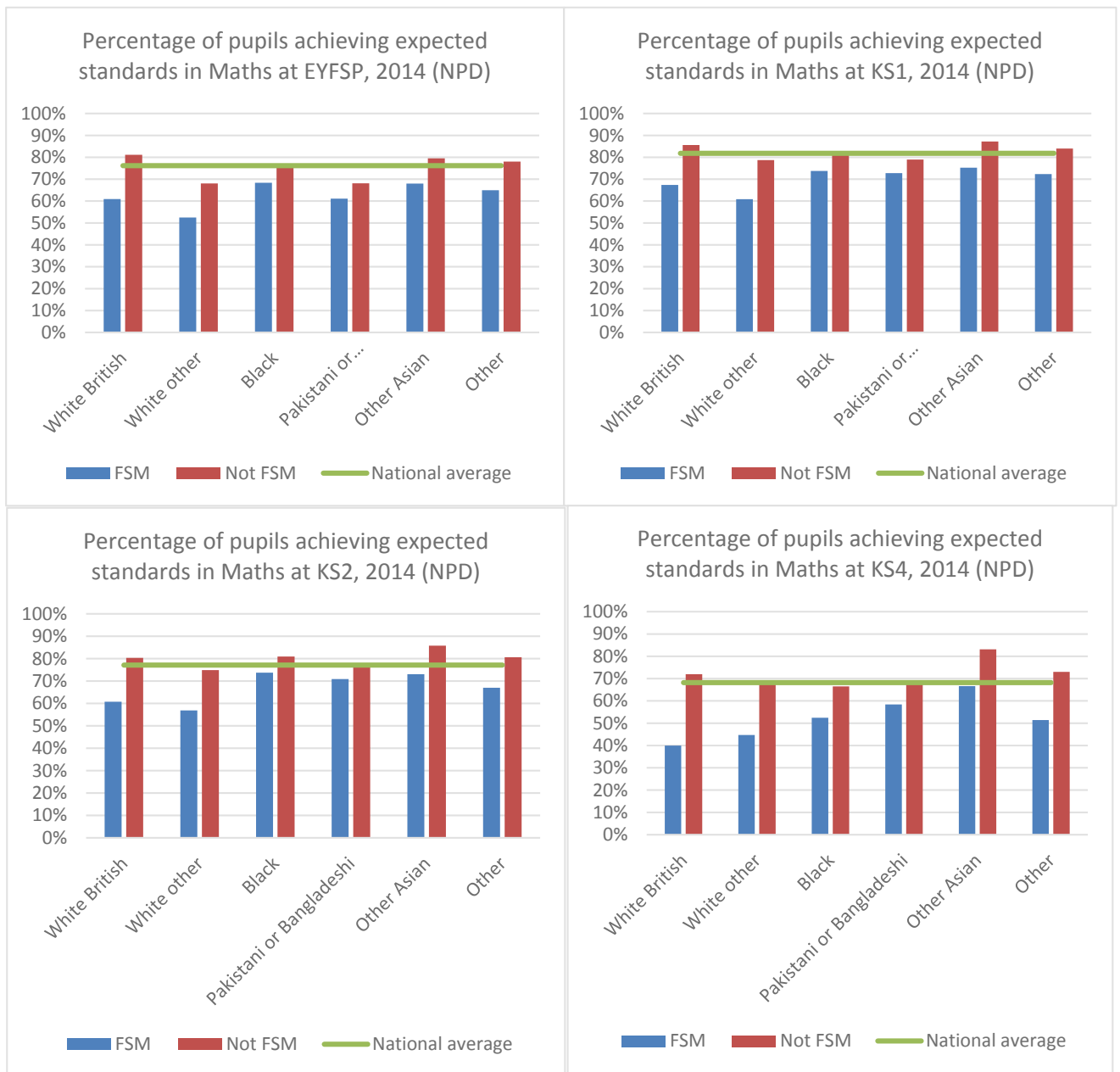
‘Other Asian’ pupils demonstrate high achievement in Maths and STEM subjects at Key Stage 4 and 5, whether or not they are eligible for FSM (fig. 23). There are also gaps in STEM APS between ethnic groups (both amongst eligible and non-eligible pupils), to the extent that eligible ‘Other Asian’, ‘Other White’ and ‘Any other’ pupils achieve an APS that compares favourably or exceeds that of non-eligible Black and Pakistani/Bangladeshi pupils (fig. 23).

Figures 19 a-d: EYFSP-KS4 attainment in English by FSM and ethnicity



Figures 19 a-d show that at all Key Stages, White British and 'White other' pupils who are eligible for FSM perform least highly of all groups in English. Until KS4 it is 'Other white' eligible pupils who perform most poorly however at Key Stage 4 they overtake their eligible White British peers. Although FSM eligible 'other Asian' pupils are the highest performing FSM group at Key Stage four, this is not the case at primary school where FSM eligible Black students perform as highly, if not more highly, than them.

Figures 20 a-d: EYFSP-KS4 attainment in Maths by FSM and ethnicity



Figures 20 a-d show that in Maths, as in English, disadvantaged White British and 'White other' pupils perform least highly of all ethnic groups at all Key Stages, with the exception of EYFSP where FSM eligible Pakistani/Bangladeshi pupils also perform poorly. The same trend of White other pupils performing least highly until Key Stage four where, they overtake White British pupil is also evident. FSM eligible Black students also perform relatively well in Maths at Primary school and are the highest performing FSM group at Key Stage two, however, at Key Stage four, FSM eligible 'Other Asian' pupils go on to outperform even non-eligible Black pupils.

Figure 21: EYFSP-KS5 attainment gaps by FSM and ethnicity

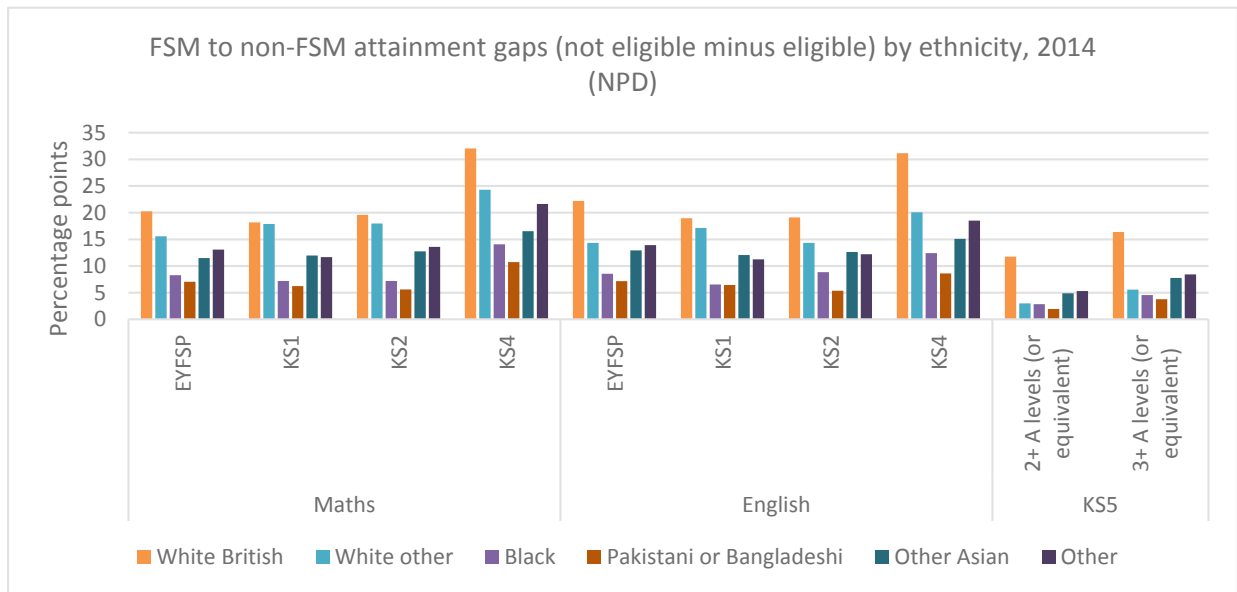


Figure 21 shows that from EYFSP to KS4, the socio-economic attainment gap is largest amongst White British pupils. This is then reflected in uptake of qualifications at KS5.

Figure 18: Key Stage 2-4 Value added by FSM and ethnicity

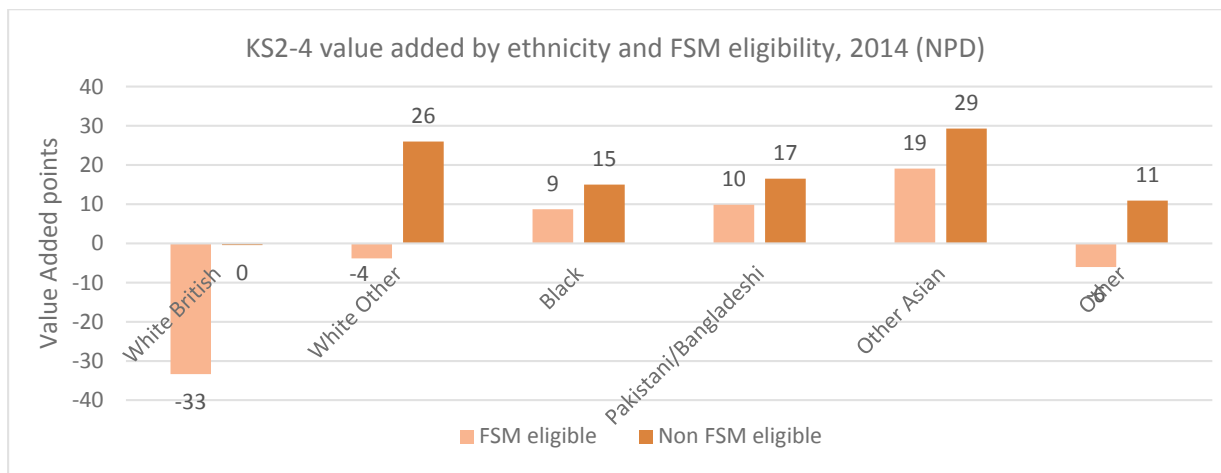


Figure 22 shows that non-FSM eligible pupils of all ethnicities make more progress at secondary school than their eligible peers and that White British, 'White other' and 'other' pupils who are eligible for FSM make particularly poor progress. This results in a widening, rather than narrowing socio economic gap for all ethnicities over the course of secondary school

Figure 19a and b: Key Stage 5 attainment by FSM and ethnicity



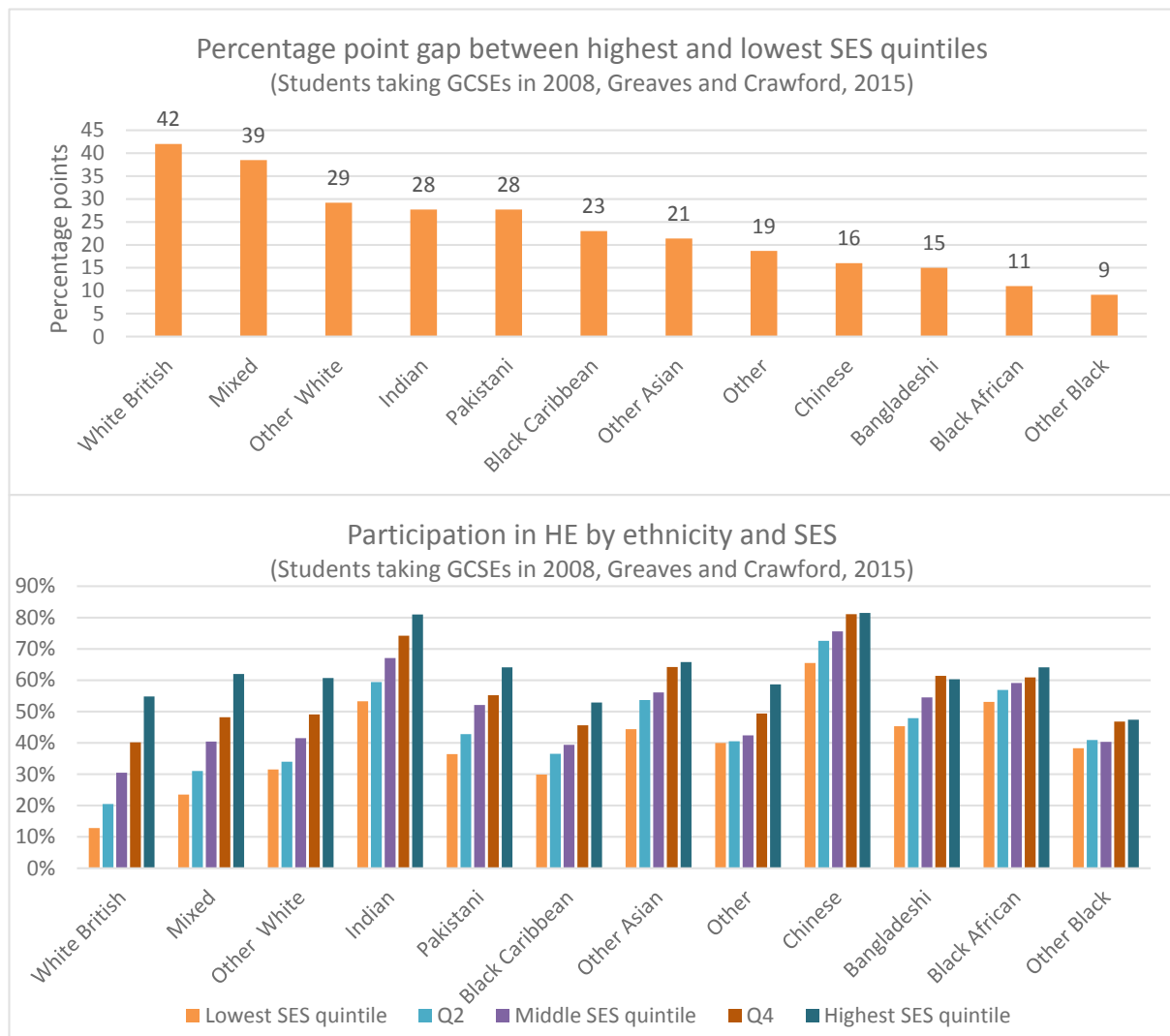
Figures 23a, b and c show that White British FSM pupils' poor performance persists at KS5 though Black and Pakistani/Bangladeshi pupils achieve particularly low APS in STEM subjects. In contrast, disadvantaged 'Other Asian' and 'Other' pupils do better, approaching or matching the performance of non-eligible black and Pakistani/Bangladeshi pupils in these subjects.

HE participation by ethnicity and socio-economic status

The gap in university participation between the highest and lowest socio-economic quintiles is widest amongst Mixed and White British young people (fig. 24a) but all ethnic groups show a socio-economic gradient in HE participation levels (fig. 24b). The gap in participation is smallest amongst Black African and Black other students (fig. 24a).

Chinese young people from the lowest SES quintile participate in Higher Education at a higher rate than even the highest quintile of almost all other ethnic groups and five times more young people in this quintile participate in HE compared to White British young people in the same quintile (fig. 22b). In section 2 we explore the extent to which gaps in HE participation are driven by prior attainment.

Figures 20a and b: Participation in HE by SES and ethnicity

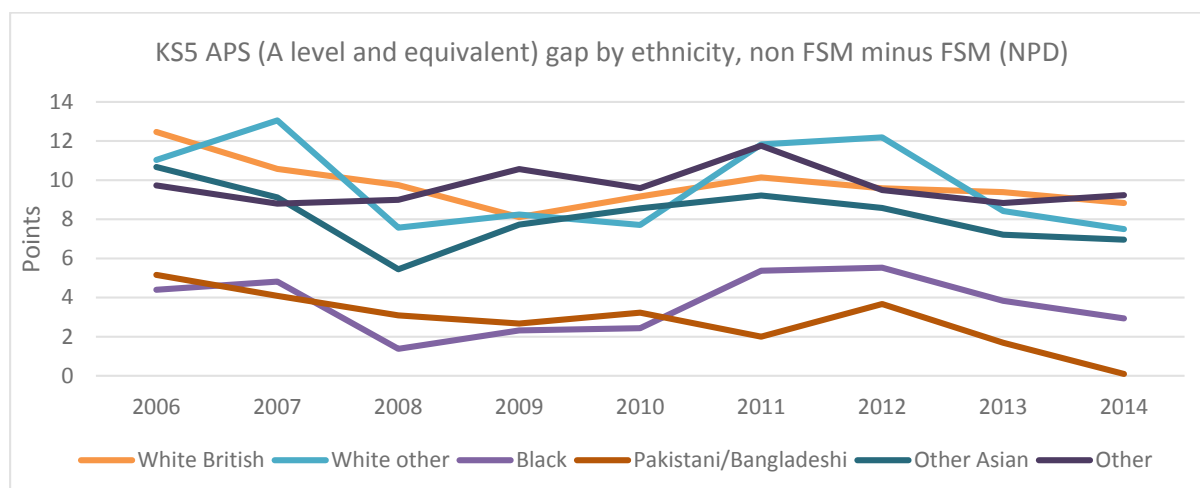


Recent trends in achievement by ethnicity and socio-economic status

Since 2006 socio-economic attainment gaps have tended to close to some extent at KS1-4 for most ethnic groups though there has been a small recent increase in the gap at EYFSP for 'Bangladeshi/Pakistani' pupils (since around 2010) as well as some increase in the gap amongst 'White other' pupils.

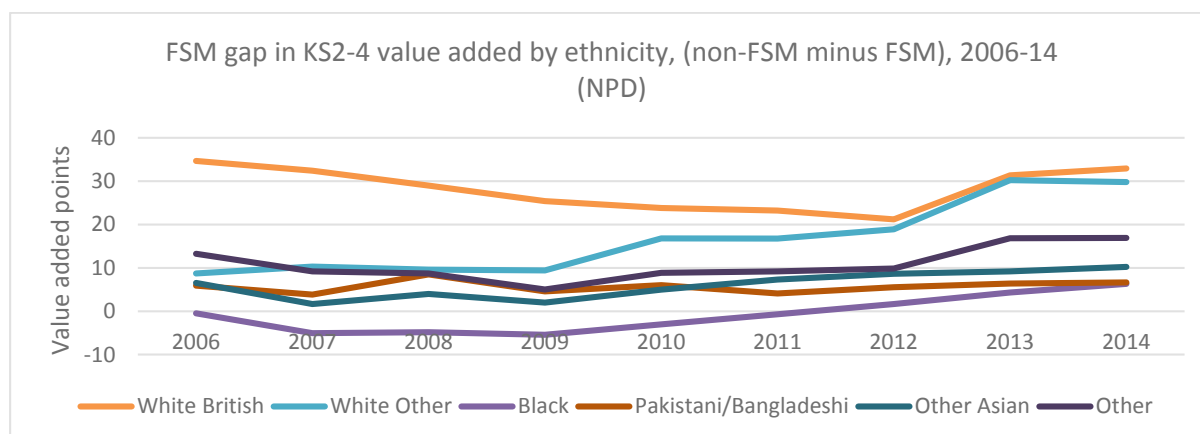
At Key Stage 5 there have been small fluctuations in socio economic gaps for all ethnic groups and for Pakistani/Bangladeshi pupils these have resulted in the gap in KS5 APS being largely eliminated in 2014 (fig. 25).

Figure 21: Changes in KS5 attainment gaps by FSM and ethnicity (2006-14)



The gap in Key Stage 2-4 value added scores (KS2-4) has been rising for most ethnic groups since 2009 (though less so for Pakistani/Bangladeshi pupils). Thus non-eligible pupils are making increasingly good progress at secondary school compared to their FSM eligible peers (fig. 26). This suggests that reductions in the attainment gap at Key Stage 4 are largely being driven by disadvantaged pupils' increasing attainment at primary level, rather than because they are making accelerated progress at secondary level. For most ethnic groups, the widening of the progress gap began in 2009 although amongst White British pupils the widening began in 2012. It is notable that until 2011, disadvantaged Black pupils in fact made more progress than their less disadvantaged peers.

Figure 22: Changes in the KS2-4 value added gap by FSM and ethnicity (2006-14)



Summary

- Poorer children tend to fall behind during secondary school but this situation is particularly marked amongst White British pupils.
- Disadvantaged 'White British' and 'White Other' pupils are the lowest performing groups at Primary and Secondary school. During secondary school, these groups make less progress and therefore fall further behind.
- Disadvantaged Black pupils do relatively well at primary school but this is not yet the case higher up the age range.
- Young people from different ethnic groups but comparable socio-economic backgrounds, participate in Higher Education at very different rates. The socio-economic gradient in HE access

is also steeper for White British students. Of White British children in the poorest quintile, only 1 in 10 will go to university. This is compared to 3 in 10 for Black Caribbean children, almost 5 in 10 children from Bangladeshi, Pakistani and Black African ethnic groups and nearly 7 in 10 for Chinese ethnic students.

Section 2: Understanding differences in social mobility

Bart Shaw, Eleanor Bernardes and Loic Menzies

Section One highlighted the important differences in educational performance including large gaps between low SES children and the rest, which are accentuated by gender (with boys doing worse in general). We also explored how ethnicity affects these trends in different ways, at different stages of education. In this section, we explore research to date on what drives this variation, exploring the literature to identify explanations for differences in attainment. First, we examine the extent to which family factors influence attainment gaps and future social mobility. We then explore how education in the early years and at school contributes towards patterns of achievement before considering young people's transitions into employment.

2.1 The Family

Pupils achieve very differently depending on their parents' occupation, education level and on the Home Learning Environment (HLE) that they experience (Chevalier et al 2005). Although all three of these factors are linked to socio-economic status as measured by income, they also vary between families with similar income levels and between different ethnic groups. Family effects therefore go further in shaping a child's potential social mobility than simply the availability of material resources.

In this section we examine how parental education, as well as parents' expectations of and engagement with their children's schooling interacts with SES, gender and ethnicity to impact on attainment. We consider how far these factors explain the patterns of attainment highlighted in section one.

We find that:

- Family effects play an important role in explaining the high attainment of some ethnic minority groups
- This is likely to be the case for higher SES groups and those whose parents are migrants who had a higher SES in their home country than that recorded in the UK
- Parental expectations contribute to some of the differences in ethnic groups' attainment levels, and while these expectations are linked to SES, they may be relatively high amongst low SES parents from certain ethnic groups
- The evidence is unclear as to whether parental expectations and engagement with education have different impacts on boys or girls, but they may give rise to "gendered" career choices and thus have an impact on social mobility.

2.1.1 Family effects on attainment

Parental education levels have a powerful effect on pupil attainment and potential social mobility. Sullivan et al (2013), for example find that parents' educational qualifications were "consistently the strongest predictors of children's test scores" (p13). Others suggest that parental education is important only because it enables parents to provide an effective HLE as highlighted in section 2.1 (Johnson & Kossykh 2008).

2.1.2 Explanations

When assessing the impact of different family backgrounds on young people it is important to note the "highly complex and often problematic nature of making judgements on the 'level' or 'quality' of

parenting offered by a particular ethnic group, particularly in comparison to a white 'norm'" (Brind et al 2008 p.48)

Different groups are affected by parental SES to differing degrees

The literature draws different conclusions as to whether boys or girls' attainment is more sensitive to parental education and occupation. Mensah and Kiernan (2010) analyse survey data from the cohort in the Millennium Cohort study that started primary school in 2005. They find that boys in families where mothers are young or lacking in qualifications achieve lower outcomes compared to girls in similar circumstances. The authors suggest this is because boys' learning is more sensitive to factors such as parents' mental wellbeing and time spent reading to the child. On the other hand, Rothon (2007) draws on older Youth Cohort Survey data from 1991-2000 and finds that "for all occupational background categories, the size of the effect of social class is slightly bigger for female attainment" (2007, p.312).

The evidence is clearer on the effects of parental socio economic status, (and education in particular) on pupil attainment and potential social mobility for different ethnic groups. Different ethnic groups appear to respond differently to parental education. Strand's statistical analysis of data from the Longitudinal Study of Young People in England (LSYPE), for example, notes that "Indian and Bangladeshi pupils achieve more highly than would be expected given their maternal educational qualifications" (Strand 2011 p.214).

Rothon (2007) suggests that this may be due to migration factors, whereby pupil attainment in families of recently arrived migrants is influenced by parents' social class in their country of origin, something which is not picked up in educational attainment data. Similarly, Platt's analysis of Office of National Statistics longitudinal data (2005), describes a "recovery" of SES, in which parents' cultural and social capital in their home country, rather than their financial capital in the UK can create opportunities and expectations more in line with higher SES children. A mixed methods study of Chinese families in the East Midlands by Gates and Guo (2014) also suggests that migration factors partly account for the relative over-performance of Chinese pupils, regardless of class. A number of studies also refer to the higher "aspirations and expectations" of migrant parents for their children (Platt 2005; Connor et al. 2004; Blanden et al. 2015).

Parents from different groups differ in the extent to which they engage with their child's education

The degree to which parents engage with their children's schooling plays a role in transmitting parental SES and parental education levels and thus in constraining social mobility. Parental engagement can include involvement with school, support with homework and investment in private tuition (Stokes et al. 2015; Ireson & Rushforth 2014).

Longitudinal studies have shown that ethnic minority parents are more engaged in their children's education than their white British peers (CoDE (Centre on Dynamics of Ethnicity) 2014a; Stokes et al. 2015). Gates and Guo's East Midlands study found uniformly high degrees of involvement in children's education among Chinese parents that could be seen in their approach to navigating school admissions, setting rules about homework and giving precedence to school over social life. Each of these may play a role in explaining trends in university participation amongst Chinese young people noted in section 1.5.

Strand also finds that Indian students are much more likely to complete homework five evenings a week compared to those from White British backgrounds and Indian parents are particularly likely to have a home computer or pay for private lessons. Indian parents were also most likely to say they always knew where their child was when they were out. Both findings applied for families across SES levels (Strand 2011). Likewise, Pakistani, Bangladeshi, Indian and mixed ethnic groups are more likely

than White British groups to have parents with higher levels of engagement with their education, and who report important HLE characteristics such as a lack of quarrelling (Strand 2011; Stokes et al. 2015). On the other hand, occupational factors such as irregular and anti-social work hours may limit parents' ability to attend school functions or help with homework (Collins et al. 2015). Different ethnic groups' contrasting positions in the labour market may therefore result in unequal access to educationally enriching activities, and this may in turn impact on long term outcomes.

However these effects may not apply to all ethnic groups. Strand (2011) found that Black Caribbean children did not benefit in the same way from parental engagement in their education, and called for further research in this area. However Strand also notes that differences may be attributed to school effects outlined in Section 2.2 such as lower teacher expectations and discrimination.

Parental expectations and aspirations vary between groups and may shape outcomes

According to Brind et al. (2008), parental aspirations play an important role in determining children's educational attainment and in shaping their career decisions. They go on to suggest that parental values and aspirations have the largest positive effect of all factors within the home. However it has also been argued that the role of aspirations in determining attainment is often overstated (Baker et al. 2014; Khattab 2012; Menzies 2013).

SES can shape parental expectations, limiting the social mobility of children in low SES groups. Moulton et al. argue that higher SES groups are able to "foster familiarity with higher status occupations via their own jobs and social milieu" (2015 p927) and cite longitudinal data from the Millennium Cohort Study showing that parental social class significantly predicts parental aspirations for adolescents' education. Moulton et al. (2015) go on to suggest that this may be why children frequently aspire to the same career as their parents, particularly when they are young.

On the other hand, the effect of SES on parental expectations varies between ethnic groups. In a wide ranging review of literature from across Europe, Brind et al., describe an 'Asian trajectory' that is characterised by parents who emphasise the value of social mobility through education and progression into the professions and which is achieved by "obeying teachers and sacrificing leisure pursuits" (2008, p.38).

In contrast, Hutchinson et al. (2011) use a range of UK data sources including MCS and LYPSE to highlight low educational aspirations amongst Gypsy Roma Traveller communities that reflect the greater value attributed to vocational skills amongst this group. Literature on GRT groups' attitudes to education finds that these values are linked to GRT parents' preference for their children to leave school early and participate in family business activities (Wilkin et al. 2010).

On the other hand, ethnic minority parents' high aspirations do not always translate into achievement. Strand (2011) argues that higher aspirations and motivations among Black Caribbean and Black African sub-groups do not seem to return the gains in attainment that might be expected. However, as was noted in section 1, attainment amongst these ethnic groups has improved over the last decade.

Parental aspirations also reflect differing expectations for male and female children; perhaps resulting in girls tending to endorse altruistic values, such as helping others, whereas boys are more likely to favour power and money (Moulton et al. 2015; Scott 2016).

The role of differential aspirations in shaping educational and occupational is highlighted by the fact that girls who reject traditional gender roles or who wish to delay motherhood are more likely to achieve highly at secondary school. In contrast, Scott (2016), using data from the British Household Panel Study 1994-1999 points out that amongst boys, attitudes to gender roles and aspirations for

parenthood had no association with attainment. However, it is very difficult to pin down the causal relationships here with such aspirations themselves potentially being shaped by SES.

Language acquisition may hinder or delay some group's early achievement

A number of studies suggest that the language spoken at home helps explain early differences in attainment for some ethnic groups because speaking English as an Additional Language (EAL) can bring initial disadvantages in terms of social integration and parents' ability to help with homework or to interact with the school (Greaves & Crawford 2015). Strand (2015) for example uses longitudinal data from the National Pupil Database and the Youth Cohort Study to argue that 'White other' and Pakistani FSM pupils perform poorly (compared to White British FSM pupils) at the age of 5. Meanwhile, by drawing on a range of national scale UK databases, Greaves and Crawford (2015), find that 91% of Pakistani pupils and 96% of Bangladeshi pupils were reported to have EAL whilst the number of 'Other White' pupils speaking English as an additional language has risen "from 33% amongst the cohort who sat their GCSEs in 2003 to 48% amongst those who sat them in 2008" (Greaves and Crawford 2015). This indicates a change in the group's composition which may explain the relative decline in achievement amongst this noted in section 1.3.

As migrants' children get older and acquire better English, some of the disadvantages created by language difficulties disappear and attainment rise. This may help explain why by the end of primary school Pakistani/Bangladeshi pupils eligible for FSM outperform their White British FSM peers (Strand 2015; Plewis et al. 2016).

There are also concerns over the language and literacy skills of low SES White British pupils, with some studies suggesting that focussing interventions aimed at improving these skills in the Early Years may help raise the attainment of this group at school (Stokes et al. 2015).

Family size

Platt (2006) and Johnson and Kossykh (2008) suggest that family size may impact on social mobility and educational attainment, particularly amongst girls. Platt (2006) uses ONS Longitudinal Survey data to note that there is some evidence to suggest number of siblings has a detrimental effect on social mobility whilst Johnson and Kossykh's review of UK academic literature suggests that Asian families tend to be larger and that this may have a negative effect on educational attainment, particularly for girls, as parents may have less time for each child (2008).

Asylum Seeker or refugee status can disrupt educational progress

Being an asylum seekers or refugee may hinder educational achievement for a number of reasons. Hawthorn and McGowan (2009) found that attainment for asylum seekers was negatively affected by:

- Disrupted or limited education in their country of origin;
- Emotional or psychological distress due to the conditions they are fleeing or the experiences they may have had which can impact on their ability to respond appropriately to their present situation
- Social exclusion in the UK;
- Financial hardship due to parents not being permitted to work;
- Repeated moves within the UK leading to frequent school moves and a lack of consistency in both curriculum and relationships with peers and teachers (Hawthorn and McGowan 2009).

These disadvantages may extend beyond school to pupils and young people's ability to plan for and access the labour market since language barriers may stop them accessing career advice services or jobs (Hawthorn and McGowan, 2009). Many also fear that their request for asylum ultimately being refused (ibid p65).

2.1.3 Summary

- Overall, family influences such as parental engagement with education and expectations have a strong effect on the educational attainment of children.
- The interaction of SES and ethnicity drives variation in parents' engagement and expectations of their children's schooling and this has a particularly important influence on attainment and future social mobility.
- Chinese and Indian boys and girls across all SES groups may be protected from the effects of disadvantage through higher parental expectations and engagement in their education.
- Gypsy, Roma Traveller parents may, for a number of reasons, be disengaged from formal education and this has a profound impact on their children's education.
- Lower SES Pakistani and Bangladeshi groups increased attainment in recent years may in part be explained by family factors such as changing levels of engagement with children's education.
- Low SES White British families tend to be less engaged in their children's education than other ethnic groups, and this may play a role in explaining attainment gaps.

2.2 Pre-School

What happens outside of the home in the early years plays a key role in determining young people's life chances (Nunn et al. 2007; Sammons et al. 2008; Sylva et al. 2012). A large scale statistical study by Cattan et al. (2014) calculated that, over the course of their working lives, children who attended pre-school would earn 7.9% more than those who did not, and that children who attended high quality pre-schools would earn 4.3% more than those who attend low-quality pre-schools. While HLE continues to play an important role in determining later educational attainment, high quality pre-school is likely to act as a buffer to the negative effects of a low quality HLE.

The impact of socio-economic status on early years attainment is also well documented (Sylva et al. 2012; Social Mobility Commission 2016). However the interplay of socio-economic status, gender and ethnicity leaves some groups at a relative disadvantage. This early years disadvantage becomes apparent at the start of school when children are assessed in the Early Years Foundation Stage Profile (EYFSP) and it is replicated and exacerbated as pupils' progress through education. As set out in Section One, the groups facing particular disadvantage at this stage can be summarised as follows:

- Boys perform less well than girls at EYFSP (fig 1);
- Across boys and girls who are both FSM eligible and non-eligible 'White other' and Pakistani/Bangladeshi pupils score relatively poorly compared to other ethnic groups (fig 8);
- Although children from lower socio-economic backgrounds attain less highly than children from all socio-economic backgrounds, the socio-economic gap is lower for minority ethnic groups than it is for 'White British' and 'White other' groups (fig. 21).

This section reviews the interplay of ethnicity, gender and socio-economic status in the early years, highlighting how different factors such as access to high quality pre-school education and a high quality Home Learning Environment impact on early years outcomes, and thus, on future social mobility.

2.2.1 Pre-school influences on early years outcomes

A growing body of research suggests that:

- High quality pre-school can improve educational outcomes (and hence social mobility) later in life for children from low SES backgrounds (Sylva et al. 2012);
- Early years outcomes (and thus future social mobility) is influenced by both access to, and the differing impact of pre-school for different ethnic groups (Sammons et al. 2008; Johnson & Kossykh 2008; Taggart et al. 2015).

2.2.2 Explanations

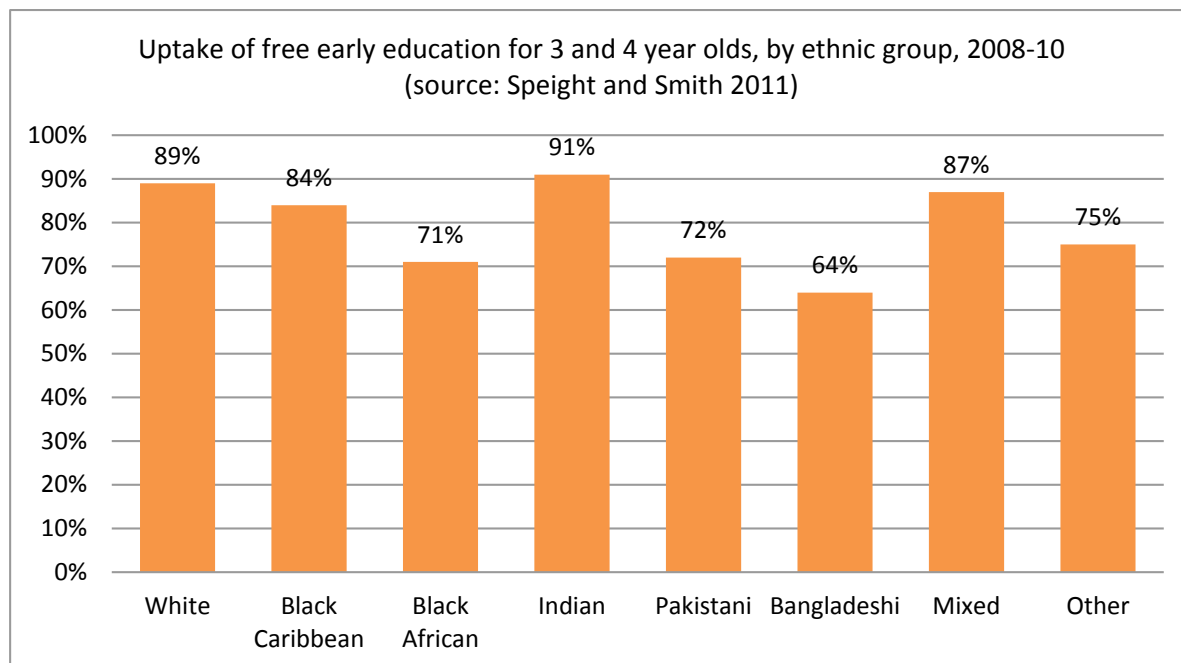
Uptake of quality pre-school varies by ethnic group

Different ethnic groups access quality pre-school at different rates and this may explain differing outcomes in the early years, especially for the Bangladeshi, Black African and Pakistani groups that access pre-school at the lowest rates (Daycare Trust 2012) and who therefore start school with an additional disadvantage.

Johnson and Kossykh (2008) note relatively strong positive effects of pre-school attendance for children from ethnic minorities when they do attend high quality pre-school, but point out that proportionally fewer children from ethnic minority groups participate in formal pre-school childcare. Fitzgerald et al, (2002), in a large scale quantitative study of pre-school education in the UK, found that in 2001, 90 per cent of children from ethnic minorities attended formal pre-school childcare compared to 97 per cent of white children. More granular analysis by ethnic group reveals

considerable variation between ethnic minority sub-groups with high rates of uptake amongst mixed and Indian families (Daycare Trust 2012).

Figure 27: Uptake of free early education for 3 and 4 year olds, by ethnic group, 2008-10



Cultural factors and childcare costs help explain differences in uptake of childcare. Aston et al (2007) conducted a small-scale qualitative study of Pakistani and Bangladeshi women which found a preference for mothers to stay at home and use family and community networks to meet childcare needs.

The quality of childcare settings accessed by parents also varies by SES. Sammons et al.'s (2008) large mixed-methods study as part of the Effective Pre-school and Primary Education (EPPE) project found that where parents of children at a setting were predominantly from low SES backgrounds, the pre-school was of lower quality than where the parents had uniformly high SES or where there was a mix. Given that ethnic minority families are more likely to be from a low SES groups, their children are more likely to be clustered in pre-schools with a high proportion of SES children. Their chances of accessing high quality pre-school are therefore reduced (ibid).

Teacher perception can be gender-biased

Gender bias in teachers' perceptions of children's ability may contribute to some of the gap between boys' and girls' EYFSP scores. Hansen and Jones (2011) used the Millennium Cohort Study to compare teacher-rated EYFSP scores and the externally rated British Ability Scale (BAS) scores to show that gender gaps were wider in the teacher rated scores than in the externally administered tests.

Pre-school may impact on boys and girls to varying degrees depending on ethnic group

Hansen and Jones (2011) found larger gender gaps in attainment amongst some ethnic groups than others, despite generally equal access to childcare settings across genders within ethnic groups. In particular, Hansen and Jones suggest that Black Caribbean and to a lesser extent Pakistani and Bangladeshi boys do worse between age 3 and 5 than girls from the same ethnic groups (Hansen & Jones 2011), a finding confirmed in Section 1.

The authors recognise a lack of research into the reasons that boys from these ethnic minority groups are disadvantaged in the Early Years, but suggest that a lack of male role models in the family may contribute for Black Caribbean boys (47% of whom live in single parent households between ages three and five), while boys from Black Caribbean, Pakistani and Bangladeshi groups may be aware of low teacher and societal expectations by the age of five (ibid).

Differences in the Home Learning Environment (HLE)

Home Learning Environment refers to a group of factors, mainly parent-child activities such as reading, that have been shown to support children's social, behavioural and cognitive development (Sylva et al. 2007). Differences in Home Learning Environment play a key role in explaining the differences in attainment at EYFSP. Sylva's large scale mixed methods study particularly emphasises the impact of the HLE on social and behavioural development including the ability to self-regulate (Sylva et al. 2007). Children who come from families with a high quality HLE may therefore be set up to succeed both on entry to school and later in life. This is especially important for minority ethnic groups since Sylva et al. (ibid) note that the quality of HLE has a greater impact on children from ethnic-minority groups than on White British children.

SES and the quality of the HLE in a child's early years are closely linked (Sylva et al. 2007; Sylva et al. 2012). Parents, (particularly mothers) with higher levels of education are more likely to provide a high quality HLE in the Early Years. Meanwhile, there is a tendency across all ethnic groups for cognitively enhancing activities (like parents reading to their child) to occur less in poorer households (Sylva et al. 2007).

Black African and Pakistani families have significantly lower HLE scores than White British groups (Sylva et al. 2007) but Sylva et al. emphasise that when comparing families from different ethnic groups from similar SES backgrounds, differences in the HLE are smaller. However within Sylva's low SES sample, Indian and Bangladeshi sub-groups showed an advantage in the HLE over the white UK sub-group. This may help counteract some of the negative effects of economic disadvantage amongst these ethnic groups and help explain why low SES children from minority ethnic groups do better than might be expected (ibid). The evidence is less clear on gender differences within ethnic and SES groups, although some studies suggest that boys are more sensitive to HLE effects than girls. Girls may therefore be slightly insulated from some of the negative effects of a poor quality HLE (Mensah & Kiernan 2010). This might help explain why, as section 1.2 showed, disadvantaged girls do better than disadvantaged boys.

2.2.3 Summary

- Gender bias in teacher perceptions may play some role in explaining boys' low attainment on teacher-assessed measures at EYFSP.
- Lack of access to high quality pre-school amongst Black Caribbean, Bangladeshi and Pakistani groups, may help explain boys' from these groups' relatively low foundation profile scores compared to girls' since they may be particularly sensitive to "pre-school effects".
- More advantageous HLE scores among low SES Indian and Bangladeshi families may help explain smaller SES gaps at EYFSP for these groups. Relatively high rates of access to pre-school may contribute to low SES Indian pupils' high EYFSP scores.
- The relative under-performance of higher SES Black Caribbean groups later on in school (discussed in Section 2.2) does not seem to result from differences in their experiences in the early years.
- The relative underperformance of White Other groups across all SES and gender groups in the early years is not adequately explained.

2.3 School

A number of studies point to the limited power of school factors in explaining the underlying causes of SES attainment gaps, however schools can play a role in helping to reduce or enlarge those gaps (Clifton & Cook 2012). As this section shows, this is particularly the case when ethnicity and gender are added to an analysis of SES gaps. School achievement therefore constrains or facilitates pupils' future social mobility (ibid) and achievement can be affected by access to good schools, teacher expectations and interactions with pupils as well as setting or streaming by ability.

Section 1 provides detailed analysis of patterns in school achievement, however the literature also highlights the following trends based on more granular analysis of ethnic groups' performance.

- White Gypsy or Irish Traveller group are by far the lowest performing sub-group (CoDE (Centre on Dynamics of Ethnicity) 2014a);
- Relative to other ethnic groups, Black Caribbean groups (especially boys) with middle and high SES attain lower than might be expected relative to pupils from similar SES backgrounds across other ethnicities (Strand 2010; Strand 2014).

2.3.1 Explanations

Different groups have unequal access to the best schools

Groups access different schools depending on where they live and on parents' ability to deploy financial and social capital to gain access to certain schools.

Higher SES parents are often able to access schools perceived as being 'higher quality' by moving home or paying for private education (Allen et al 2014). One small scale qualitative study of the Pakistani community in Slough for example found that parents in "middle class" professions or with a "middle class background or orientation" (i.e. those who had come from high SES backgrounds in Pakistan, prior to moving to the UK), were able to make more informed school choices - improving their children's' chance of admission to high quality schools, compared to children whose parents had a low SES background (Shah et al. 2010).

There is also evidence that ethnic segregation in schools (where pupils from ethnic minorities are clustered in a small number of schools in an area rather than being spread equally across all schools in that area) may lower attainment for many minority ethnic groups, especially at Key Stage 2 (Cline & Abreu 2005; Johnson & Kossykh 2008; Plewis et al. 2016). Segregation is not solely driven by geography since children from most ethnic groups are more segregated in school than in the neighbourhoods in which they live (Burgess et al. 2004; Johnson & Kossykh 2008).

Johnson and Kossykh (2008) found that ethnic segregation was particularly high for pupils of Indian, Pakistani or Bangladeshi origin and lower for pupils of Black Caribbean or Black African heritage. The fact that ethnic minorities are particularly concentrated in London schools may have a beneficial impact on minority ethnic pupils achievement given that schools in the capital perform particularly highly (Baars et al. 2014). However, Burgess (2014) uses analysis of pupil performance data in London to suggest that the concentration of ethnic minority pupils in London is more likely to be a cause than an effect of school quality.

A large body of evidence suggests that the effects of school segregation are to a large extent driven by peer effects whereby pupils surrounded by high achieving pupils make more progress than those surrounded by lower achieving peers. Catchment areas and unequal geographical distribution mean that low SES pupils are likely to be concentrated in certain schools and since these pupils are more likely to have low initial achievement, disadvantage becomes self-perpetuating. A review of international literature suggests that this is exacerbated by the fact that peer effects tend to have a

larger effect on low-attaining students than their high-attaining peers (Brind et al. 2008). The authors note that the positive impact of a greater ability-mix on low achieving pupils' achievement exceeds any negative impact on high-attaining students (ibid). Better off parents further contribute to peer effects by using their financial resources to actively seek out positive "peer effects".

Bias in teacher perceptions and expectations contributes to some groups' underperformance

Teachers' perceptions and expectations of different SES, gender and ethnic groups impact negatively on some group's attainment, including Black Caribbean pupils (and boys in particular) and GRT groups of both genders (Rothon 2007; Strand 2011; Wilkin et al. 2010). This is particularly pertinent at EYFSP, where scores are teacher assessment prevails, and for some KS1 and KS2 tests, specifically those in reading, writing and science. Researchers suggest four forms of bias that might shape achievement:

1. Low expectations of work and behaviour;
2. Ability grouping that is skewed by low expectations;
3. Exclusion;
4. Over-identification of SEND.

Low expectations of work and behaviour

A number of studies note that Black Caribbean boys attainment is adversely affected by teachers conscious or unconscious biases and their assumptions about behaviour and work ethic (Cassen & Kingdon 2007; Johnson & Kossykh 2008). Brind et al. (2008) highlight a small scale non-generalisable study which shows that Black Caribbean pupils interactions with teachers can be characterised by conflict (Stevens 2007) whilst a number of other qualitative studies highlight low expectations of Black Caribbean pupils on the part of teachers (Tikly et al., 2006; Ford et al. 2014). Such biases may play a role in these pupils' low performance relative to other minority ethnic groups and in particular, on middle and high SES Black Caribbean pupils low performance compared to students from other ethnic groups but with similar socio-economic backgrounds (Strand 2011).

Finally, Bhattacharyya et al. (2003) note that only seven per cent of trainee teachers are from minority ethnic groups and Rothon (2007) argues that a lack of co-ethnic role models may explain poor performance amongst Black Caribbean boys.

Tiering and setting

An extensive body of literature explores within-school ability grouping and stretches back over a century (Hallam & Parsons 2013). This evidence suggests that, while those in the top sets benefit from a positive peer-group effect, the practice widens gaps between those in top sets and those in middle or bottom sets and does not raise average attainment (ibid). Furthermore, a number of quantitative studies show that such practices are likely to hinder future social mobility, as children from low SES backgrounds, ethnic minorities and boys are more likely to be placed in low ability groups (Hallam & Parsons 2013; Parsons & Hallam 2014). Early setting, (for example at primary school) is shown to reduce progress by pupils who begin primary school in lower ability groups' at all key stages. It also negatively impacts on children and their parents' aspirations, partly by reducing the positive peer effects noted above (Parsons & Hallam 2014). Setting can therefore have a profound negative impact on pupils' future social mobility. Furthermore, the same authors raise questions over the reliability of teacher judgements of ability at KS1 suggesting that they sometimes reflect a lack of awareness of SEND or of children who are younger than their peer group as in the case of 'summer-born' pupils (Hallam & Parsons 2013).

Meanwhile tiering of exam papers can not only cap attainment but make teacher expectations explicit causing pupils to become demotivated (Strand 2007). Strand (ibid) uses LYPSE data to note that tiering can reflect teacher perception of behaviour, rather than academic potential and goes on to suggest that Black Caribbean pupils are most affected by this tendency:

“If the behaviour of Black Caribbean pupils is more challenging, or even if it is simply that teachers perceive their behaviour as more problematic, there may be a tendency to underestimate their academic ability. Black Caribbean pupils may be disproportionately allocated to lower test tiers, not as a result of direct or conscious discrimination, but because teachers’ judgements of their academic potential are distorted by affective factors such as perceptions of their behaviour.”

Ibid, p.95

Exclusion

Socio-economically disadvantaged pupils, and Black Caribbean boys and pupils from Gypsy Roma Traveller (GRT) from all SES backgrounds are more often excluded from school⁴ compared to other groups (Wilkin et al. 2010; Strand 2011; Hutchinson et al. 2011; Strand 2014). Meanwhile Indian pupils are least likely to be excluded (Strand 2011). This severely curtails some pupils’ ability to make academic progress and secure the qualifications needed to achieve social mobility (Menziez and Baars, 2015). In addition to the educational impact of exclusion, the experience can also result in alienation and resentment with society, creating long-term conflict and adversely impacting on employment (UK National Audit Office, 2008).

Higher exclusion rates amongst some ethnic groups can partly be attributed to cultural norms around behaviour leading to high levels of conflict in relationships with teachers (Stevens 2007; Strand & Lindsay 2008; Strand 2011). Strand & Lindsay (2008) highlight this in relation to teacher identification of Black Caribbean boys with behavioural disorders in the UK and US, as discussed below.

SEND may be over (or under) identified amongst some groups

Pupils from disadvantaged backgrounds are more likely to be identified as having SEND and patterns of identification also vary between ethnic groups (Shaw et al. 2016). Pupils from GRT backgrounds for example are two and a half times more likely to have an identified SEND than those from White British backgrounds (Lindsay et al. 2006).

To some extent, differences in identification are due to the fact that some forms of disability, such as visual impairment, are genetically more prevalent amongst some ethnic groups, while low SES also increases the likelihood of a child being identified with SEND (Shaw et al. 2016). However, there is also some evidence to suggest that for some groups (notably Black Caribbean and GRT boys), teacher and school bias may lead to an over-identification of SEND. As noted above, Strand and Lindsay (2008) suggest that this problem is particularly acute in relation to the Behavioural Emotional and Social Disorder category (now replaced in part with Social, Emotional and Mental Health) amongst Black Caribbean boys.

Subject choice varies between groups and tracks students towards different long term outcomes

As was noted in section 1 in relation to STEM subjects, different ethnic and gender groups make different subject choices at school and this can have a profound impact on social mobility in relation to access to the labour market (Conlon & Patrignani 2011). Codioli for example (2015) uses Next Steps data to highlight increasing gender differences in uptake of STEM subjects. Codioli (ibid) also found differences in subject choice by ethnicity after accounting for prior attainment, with Black African students less likely than others to pick STEM subjects. Meanwhile take-up of Maths is

⁴ In 2013/2014 there were 2,690 fixed period exclusions for pupils of Gypsy/Roma heritage (14% of the total population in school for this group), and 60 permanent exclusions (0.34%). In the same period there were and 5,410 fixed period exclusions of Black Caribbean boys (12% of the total population in school for this group) and 170 permanent exclusions (0.24%). Overall there were 3900 permanent (0.07%) and 198,670 (3.96%) fixed period exclusions in 2013/14 (Department for Education 2015).

particularly low amongst White British students (ibid). In contrast, Indian, Pakistani, and other ethnic minority students are more likely to study STEM A-levels, possibly as a result of parental encouragement towards careers that require A Levels in those subjects (ibid). There also appears to be some interaction between gender and ethnicity. Codioli finds that female students of mixed ethnicity and Black Caribbean origin are more likely to study STEM A-levels than white female students. Some of these trends translate into differing patterns of achievement in these subjects, as noted in Section 1.

Gender based differences in subject choice may be driven by a combination of teachers steering pupils towards subjects where they have already demonstrated high attainment, and through gender bias – particularly in relation to STEM subjects. Codioli (2015) suggests that girls' higher prior attainment in subjects such as languages or humanities as well as STEM subjects may give them more choices than boys, reducing their likelihood of picking a STEM subject as their pool of "options" is wider. However Hutchinson et al. (2011)'s large scale mixed methods study points towards cultural, institutional or individual biases as factors which may lead girls to avoid STEM subjects. Similarly Johnson and Kossykh (2008) suggest that teachers may reinforce biases. As McInerney (2014) points out, bias similarly shapes boys' subject choices, steering them away from subjects like childcare. This too can shape future choices of occupation.

There is less evidence to explain differences in STEM uptake across ethnicities. Codioli (2015) suggests that the over-representation of Black Caribbean pupils in lower exam tiers noted above may put pupils off choosing STEM subjects at A Level, but concedes that this is only the case for boys. There is therefore a clear need to deepen the evidence base on these differences.

2.3.2 Summary

- Variation in access to schools may explain SES gaps within ethnic groups, but does not explain why some ethnic groups do well despite being relatively more segregated (for example Indian groups). It also offers little explanation for any interaction between gender and SES or ethnicity;
- Perceived and actual discriminatory practices and attitudes may influence teacher expectations, tiering, setting and exclusion. This may help explain some ethnic and gender groups' underachievement, for example Black Caribbean boys and GRT groups;
- Subject choice, especially at A Level, may constrain future social mobility, in particular for low SES girls.

2.4 Higher education

Sections 2.1 to 2.3 primarily focused on the relationship between ethnicity, gender, socio economic status and school attainment as an enabler of social mobility. However, young people’s longer-term social mobility depends to an important extent on how the educational outcomes at schools translate into participation and achievement in Higher Education (Conlon & Patrignani 2011).

2.4.1 Participation and achievement in Higher Education

Conlon and Patrignani (2011) show that participation in Higher Education and achievement of a good degree have a long term impact on earning potential, contributing an earnings return of 27.4% compared to the achievement of 2 or more A Levels, with a return of 32.7% for a first class degree and up to 82.8% for a degree in Medicine (ibid). Variations in different SES, ethnic and gender groups’ participation in HE and achievement of good degrees therefore have a profound impact on long term social mobility.

As was shown in Section 1 there are large SES, gender and ethnicity-based gaps in participation and achievement in Higher Education. Females from all ethnic groups are more likely to achieve a 2:1 or higher compared to males from the same ethnic group. Ethnic groups also vary in how likely they are to withdraw from HE with black students dropping out at more than twice the rate of their Chinese peers.

The SES-gap in HE participation exists amongst all ethnic groups but to varying degrees, thus, as Table 2 shows, disadvantaged young people from certain ethnic groups are far more likely to achieve a key enabler of social mobility – a good degree.

Table 2: Disadvantaged young people's participation in HE by ethnicity:

	Participation in HE amongst lowest SES quintile, (Greaves & Crawford 2015)
White British	13%
Mixed	24%
Black Caribbean	30%
Other White	32%
Pakistani	36%
Other Black	38%
Other	40%
Other Asian	44%
Bangladeshi	45%
Black African	53%
Indian	53%
Chinese	66%

There are substantial differences in graduate earnings between different universities, and so unequal access to higher tariff universities can act as a further barrier to social mobility (Britton et al. 2016). Applicants from low SES backgrounds are less likely to gain access to more prestigious “high tariff” higher education institutions, even when prior academic performance is taken into account (Jerrim 2013). Similarly, young people from ethnic minority groups are more likely to attend “low tariff” post-1992 institutions than “high tariff” institutions (Greaves & Crawford 2015). Rather than this simply being a reflection of prior attainment, research by Boliver (2016) based on analysis of university applications and admissions data suggests that the proportion of students from minority

ethnic groups who receive an offer of a place at Russell Group Universities is lower than would be expected given prior academic performance. The authors argue that this is especially the case for Bangladeshi, Pakistani and Black students. We explore the role of prior attainment in more detail in Section 2.4.2.

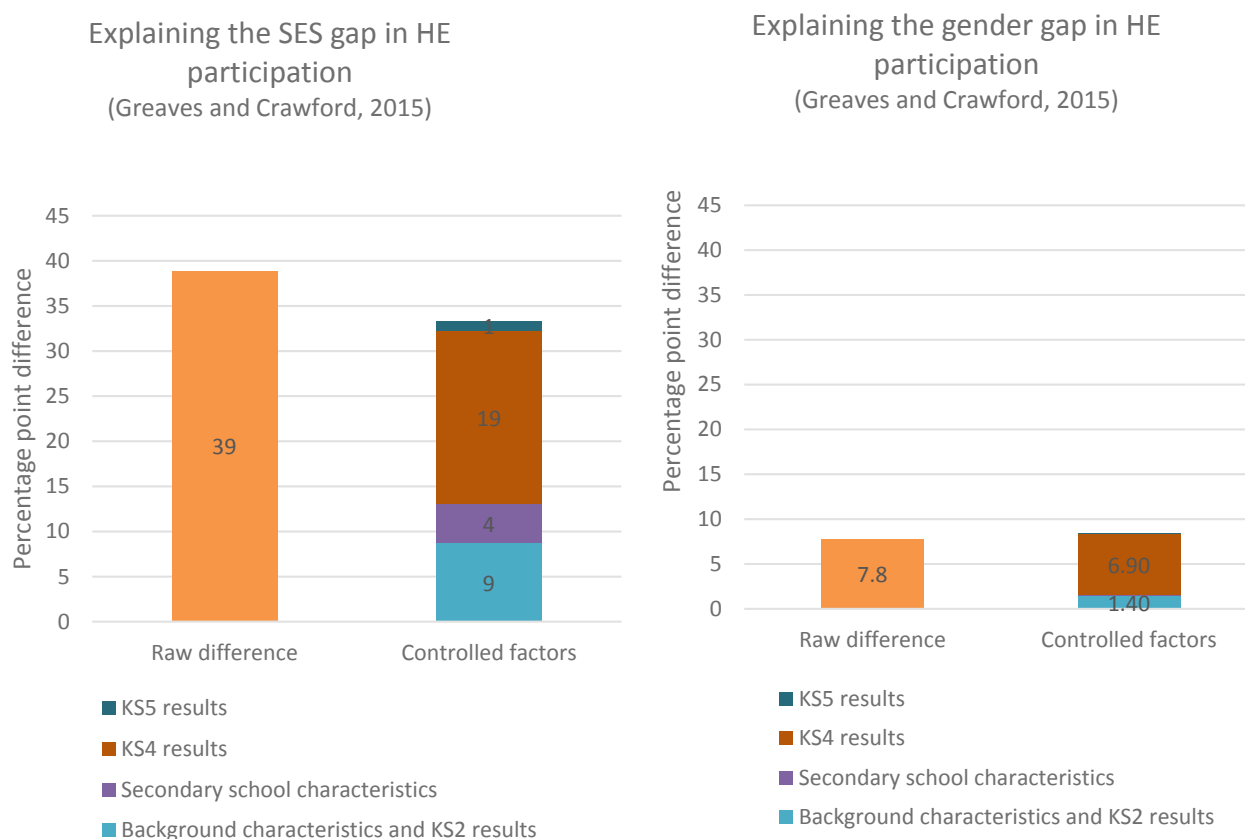
Subject choice has a considerable impact on future social mobility as noted by Conlon and Patrignani (2011) in their analysis of different earnings returns by subject. As noted in Section 1, girls are less likely to take STEM subjects and this trend continues at university (Codioli 2015). This has implications for social mobility given that current skills gaps in these areas provide more plentiful labour market opportunities for graduates in these subjects.

2.4.2 Explanations

Prior school achievement shapes university participation

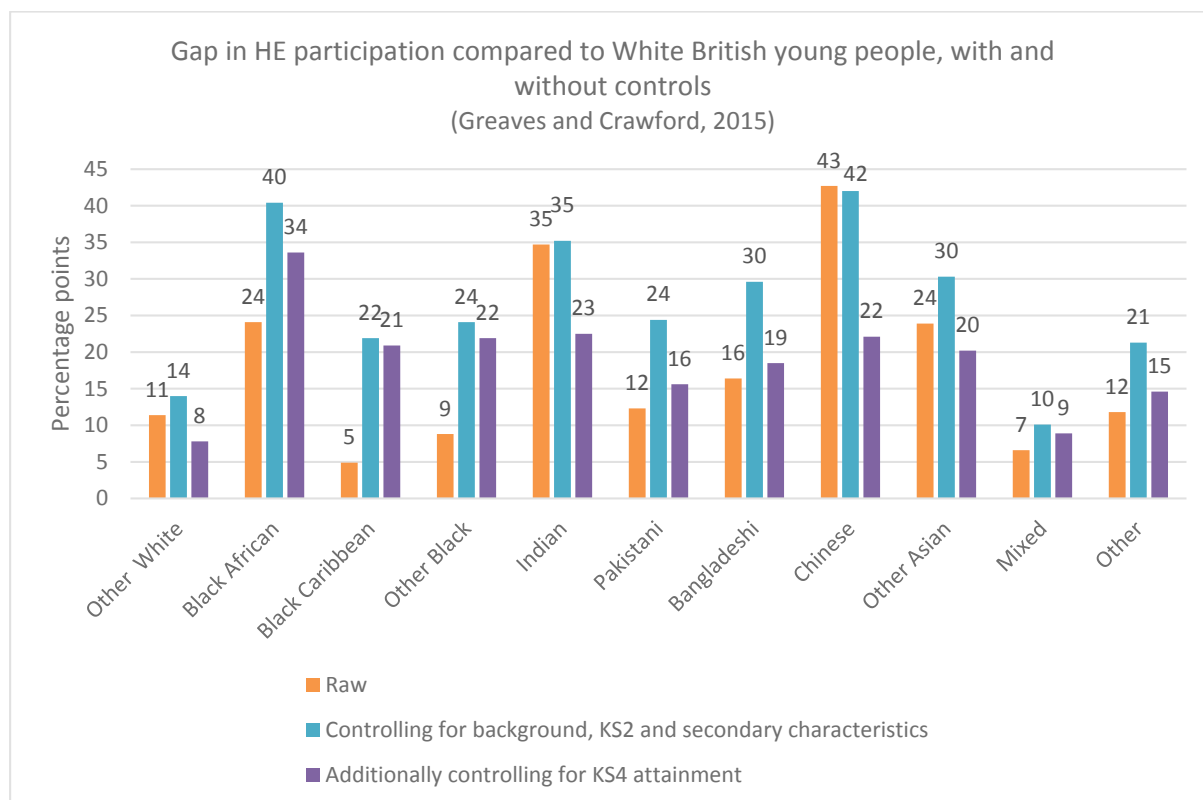
Key Stage 4 results appear to explain a large part of gender and SES gaps in HE participation, although some of the SES gap (between the highest and lowest SES quintile) is still unexplained by prior attainment, background and school characteristics (Greaves & Crawford 2015).

Figure 28 HE Participation by SES and Gender with controls for background and prior attainment



Meanwhile all minority ethnic groups participate in HE at a higher rate than White British students even controlling for educational attainment, pupil background and school characteristics. This suggests that there are other influences on HE participation.

Figure 29: HE Participation by ethnicity with and without controls



Background, school characteristics and prior attainment explain some of the over-representation of Chinese, Indian, ‘Other White’ and ‘Other Asian’ young people’s participation in HE (i.e. the gap with controls is smaller than without). However, Black, Pakistani, Bangladeshi, Other and Mixed groups in fact participate in higher education at an even higher rate than expected when one takes these factors into account, with Black African young people’s participation rates being particularly striking (Greaves & Crawford 2015).

Different background factors explain differences in participation to varying degrees. Controlling solely for background, Key Stage 2 attainment and secondary school characteristics increases the size of the gap - suggesting that minority groups participate at a particularly high rate given these factors. However, Key Stage 4 attainment⁵ explains some of the difference in participation, particularly amongst Chinese, Bangladeshi, Pakistani and Indian groups.

Different ethnic groups have differing expectations around HE participation

(Johnson & Kossykh 2008) argue that ethnic minority parents encourage their children to participate in HE partly to counteract the negative effects of the economic disadvantage that they face. Greaves and Crawford (2015) also suggest that family expectations are an important factor in explaining differences in participation, and tentatively suggest that these are particularly important for those for whom English is an additional language, and whose parents are likely therefore to be recent migrants and for those who live in London, for whom the potential returns on HE participation are more obvious. However they call for further research to identify the precise natures of these causal links. Meanwhile, (Shah et al. 2010) coin the phrase ‘ethnic capital’ to describe British-Pakistani parents’ emphasis on higher education and high career aspirations and argue that a culture of

⁵ Key stage 4 and 5 controls have been combined for clarity but Key Stage 5 attainment has very little impact on the gap (between zero and two percentage points).

aspiring to HE has formed in response to migrants encountering the wider accessibility of education in the UK and a seeing this as a potential route to social mobility (ibid).

Differing and changing gender norms may drive some variation and change in patterns of University Participation

The literature relating to the interactions between ethnicity and gender in university participation largely focuses on British-Asian women and Bangladeshi groups in particular. This is perhaps unsurprising given that HE participation rates amongst these communities have changed dramatically in recent years. Niven (2013) draws on a number of studies that highlight the substantial increase in the proportion of Bangladeshi women attending university since the early 1990s. Studies particularly highlight more liberal attitudes towards women's education within the British – Bangladeshi community (Niven et al. 2013) as well as heightened awareness of “ethnic penalties” of lower potential earnings in the labour market, that HE participation may help alleviate; Niven argues that awareness that British-Bangladeshi women are disadvantaged in the labour market may have driven a desire to gain higher level qualifications to compensate. Niven also posits that Government initiatives such as Aiming High⁶ may have played a role.

Gender norms, particularly in schools and families when influencing A Level choices, may also play a role in the lower uptake of STEM subjects in HE among female students, particularly for those with low SES (Codioli 2015). Black African and Caribbean women seem less affected by this trend. Codioli suggests that further research is required to understand why students with different gender and SES, but similar attainment, pick different degree subjects in HE (ibid).

University's behaviour and admissions may influence patterns of University participation

Shiner and Modood (2002)'s large scale quantitative study of University admissions suggest that post-1992 universities may have a greater commitment to providing opportunities for ethnic minority students and this may contribute to these students' tendency to gravitate towards such universities. Meanwhile Zimdars et al (2009) draw on Oxford University's admissions dataset to suggest that access to some Russell Group Universities may in some cases depend on mainstream or dominant cultural capital, (particularly for Arts admissions) something which young people from ethnic minority backgrounds are more likely to lack. This may therefore hinder these young people's ability to access such institutions. The same authors however found that, having measured levels of cultural knowledge and participation, admissions for South Asian and female candidates in the sciences are lower than expected, and may be affected by unconscious bias amongst admissions teams (ibid).

There are a number of possible explanations for different ethnic groups' varying levels of attainment in HE

Ethnic minority groups lower attainment in HE noted in section 1 may be explained by their lower qualifications on entry compared to their peers (Leslie 2005). Leslie's analysis of a large sample of University qualifications also suggests that subject choice may play a role since ethnic minority students more often pick subjects in which fewer good degrees are awarded compared to White British students. However, he concludes that neither factor fully explains underachievement.

Discriminatory teaching, assessment, or subtle exclusionary attitudes might also inhibit ethnic minority students' achievement (Leslie 2005; Equality Challenge Unit 2010) however the evidence on this is inconclusive (Richardson 2008). The Equality Challenge Unit (2010) also suggests that other factors, such as less effective support services for ethnic minority students may play a role. On the

⁶ Aiming high attempted to tackle ethnic minority disadvantage in the labour market by raising expectations of educational attainment

other hand, there is an overall lack of evidence on Black students' difficulties at university and why they drop out at higher rates and achieve less highly compared to their peers.

2.4.3 Summary

- Prior educational achievement plays an important role in explaining differences in HE participation.
- Young people from ethnic minority groups participate in HE at a higher rate than their White British peers and the trend is particularly marked when comparing young people from similar SES backgrounds.
- Parental expectations appear to play a key role. Research particularly highlights this factor in relation to candidates from ethnic minorities where prevalence of EAL is high (for example Pakistani and Bangladeshi groups, and those living in London).
- Other factors, such as Government drives to encourage young people from ethnic minorities into higher education as well as post 1992 universities' commitment to providing opportunities for ethnic minority students, may also play a role.
- Subject choice may constrain the future social mobility of female students, particularly those from low SES backgrounds.
- Ethnic minority under-achievement in terms of degree class relative to White British groups is not adequately explored in the existing literature.

2.5 The Labour Market

Although educational outcomes play an important role in young people's future social mobility, they are only part of the story. Once they leave education, different SES, ethnic and gender groups face a variety of barriers on entering the labour market that impact on their social mobility.

- Overall, ethnic minority groups experience higher unemployment rates compared to white British groups.
- Unemployment is higher among GRT, Bangladeshi and Pakistani women than it is among men, although gender differences are not uniform; Black Caribbean and Chinese men experience relatively high levels of unemployment compared to women.
- Returns on education in the form of earnings are relatively low for all ethnic minority groups, and especially so for British-Bangladeshi, Pakistani and Muslim Black African women. Given the relative success of Chinese men in education, it is also worth noting Chinese male graduates' relatively low earnings compared to their White British counterparts.

A range of factors give rise to these differences including cultural, family and individual expectations geography and discrimination.

2.5.1 Patterns of employment and earnings

Employment

Despite some improvement in recent decades, ethnic minorities continue to experience higher levels of working age unemployment (as recorded in the 2011 census) than White British groups even when educational qualifications are taken into account (UK National Audit Office 2008; Catney & Sabater 2015; Alexander et al. 2015; Bhattacharyya et al. 2003). Employment rates amongst Indian and Chinese communities are similar to those amongst the White British population but are lowest amongst the Gypsy, Roma Traveller population. Employment rates are also low amongst Black Caribbean, Pakistani and Bangladeshi groups (Catney & Sabater 2015) whilst ethnic minority asylum seekers and refugees have the lowest levels of employment of all groups (UK National Audit Office 2008).

In general, unemployment rates for men and women are similar. Rates of unemployment for all men aged 16-64 in February 2016 were 5.2% while for all women aged 16-64 rates were 5.0% (ONS 2016).

However, ethnic minority women are more likely to be unemployed, with the lowest employment rates found amongst Gypsy Roma Traveller, Bangladeshi, Arab and Pakistani women, and Black Caribbean men (Catney & Sabater 2015; UK National Audit Office 2008). Brown (2016) uses ONS data to show that unemployment rates are highest for Pakistani and Bangladeshi women (at 16%, double that of Pakistani and Bangladeshi men).

Earnings, gender and ethnicity

Across all ethnic groups in the UK, women's wages are, on average, 18.1% less than men's (ONS 2016), a gap that is even larger amongst ethnic minority women (NAO, 2008). This is often linked to the fact that fewer of these women hold senior roles (Catney 2015).

While there has been an increase in the proportion of people from ethnic minorities in professional and managerial roles between 2001 and 2011 (CoDE (Centre on Dynamics of Ethnicity) 2014a), ethnic minority groups continue to experience lower returns on their qualifications than White British groups, and are less likely to be promoted or developed (Rafferty 2012). Even after taking

into account relatively lower parental SES, Pakistanis for example have a substantially lower chance of ending up in a professional or managerial role compared to white British groups (Platt 2005).

“Levels of educational attainment have improved significantly for ethnic minorities, but these have not translated into improved outcomes in the labour market.”

CoDE (Centre on Dynamics of Ethnicity) 2014b p.1

Patterns of earnings vary between ethnic groups. For example:

- British Bangladeshi and Pakistani women earn less than their counterparts from other ethnic minority groups (Niven et al. 2013) and despite achieving higher qualifications at school than their male counterparts female Bangladeshi graduates are less likely to gain managerial and professional roles than male Bangladeshi graduates (ibid)
- Despite being one of the highest performing groups in school, Chinese male graduates earn on average 25% less than white male graduates (Runnymede, 2012)
- Some Muslim groups, in particular Indian and Bangladeshi Muslim men, are able to realise greater returns on their qualifications than Pakistani men, while Bangladeshi women with a level 1-3 qualification have higher chances of achieving a managerial or professional role compared to Pakistani women. Among Muslim groups, the lowest returns on educational qualifications are achieved by Muslim Black Africans, and women in particular (Runnymede, 2012)
- Ethnic minority graduates, and women in particular, from Russell Group Universities earn less and are more likely to be unemployed than White Graduates, with the exception of Indian and Black African groups (Runnymede 2014).

2.5.2 Explanations

Four main explanations have been put forward for the variations in labour market outcomes between and within ethnic and gender groups.

1. Labour market segregation;
2. The interaction between geographical mobility, local labour markets and social mobility;
3. Discrimination against gender and ethnic minority groups in the labour market;
4. Cultural norms around gender roles in the labour market.

Labour market segregation can result in a disparity in the opportunities accessed by different gender and ethnic groups

Labour market segregation takes place where certain demographic groups congregate in different sectors of the labour market. This can affect both gender and ethnic groups, and thus their earning potential, although Catney and Sabater (2015) point out that segregation is more pronounced by gender than by ethnic group.

Sectors including ICT, construction, engineering, skilled trades, architecture or mechanics sectors tend to be male dominated whilst women tend to be concentrated in the teaching, childcare, nursing, caring and hair and beauty sectors (Hutchinson et al. 2011). Gender segregation is associated with lower earnings for women since jobs with comparable educational requirements in male dominated sectors tend to attract higher pay than equivalent jobs in female dominated sectors. This has been calculated to cost the economy more than £15 billion each year (HM Government 2010).

Segregation by ethnicity affects some ethnic groups more than others, with the highest levels of occupational segregation found amongst African, Gypsy, Roma Traveller, Pakistani and Bangladeshi groups (Catney and Sabater 2015). Men from minority ethnic groups are particularly likely to work in the service sector whilst Bangladeshi and Chinese men are particularly concentrated in the distribution sector, including restaurants (UK National Audit Office 2008). Meanwhile Black

Caribbean women typically work in the health and social care sectors (Rafferty 2012) and British-Bangladeshi women are overrepresented in clerical and secretarial jobs (Niven et al. 2013).

Labour market segregation is also apparent in apprenticeships with young people from ethnic minorities less likely to obtain apprenticeships than White British young people (Hutchinson 2011). Furthermore, when young people from ethnic minorities do secure apprenticeships, they are concentrated in a small number of sectors. For example, Hutchinson notes that:

“97% of enrolments on construction courses from white young people and 99% from males. Construction apprenticeships are similarly segregated with 96 per cent of apprenticeships taken up by White young people and 98 per cent taken up by boys. By contrast, 10 per cent of children’s care and development courses are taken by Asian young people, and 10 per cent of business administration courses are taken by young people from Asian, Black and mixed ethnic groups”

Hutchinson et al. 2011 p.45

The geographical distribution of ethnic minority groups affects access to labour markets

The fact that ethnic minorities are concentrated in certain geographical areas impacts on social mobility because differences in local labour markets mean different job opportunities are available (Platt 2006; Catney & Sabater 2015).

Geographical effects are exacerbated by the fact that ethnic minority and low SES groups are less likely to move for work (Catney & Sabater 2015; Collins et al. 2015). Niven demonstrates this through a mixed methods study of Bangladeshi communities in two UK cities, which finds that Bangladeshi women migrate internally at the lowest rate of any group in the UK (2013). This may be linked to an expectation or preference for Bangladeshi and Pakistani women to live with their parents before marriage and stay in the same locality after marriage (Rafferty 2012).

‘Ethnic economies’ can also develop around geographical concentrations of minority groups. Such economies involve the provision of services for and within an ethnic minority community, or within specific sectors that are dominated by a particular ethnic minority group. Shah et al. (2010) for example point to taxi driving in Slough as one example whilst Gates and Guo (2014) suggest that the Chinese catering industry in Nottingham attracts a large proportion of both men and women from Chinese ethnic groups, regardless of education levels. On the other hand, ‘ethnic economies’ should not necessarily be seen as negative. Niven et al (2013) explain that for Bangladeshi women in particular, ethnic economies can offer protection and job opportunities through family or community recruitment channels. However, ethnic economies do play a role in segregation of the labour market and potentially reduce social mobility for some ethnic groups.

Discrimination can hinder female and ethnic minority access to and progression through the labour market

Numerous studies show that women face discrimination in the labour market and that this results in a pay gap between men and women (Cabinet Office 2007; HM Government 2010; Thane 2010; McKinsey 2016). Individual and institutional, as well as conscious and unconscious, discrimination also lead to differences in labour market outcomes across ethnic groups.

There is some evidence that discrimination relating to ethnicity disproportionately affects women (Fearfull & Kamenou 2006; Hutchinson et al. 2011; Niven et al. 2013) though research by the NAO suggests that this is often based on religion rather than ethnicity per se (2008). This is corroborated by a number of studies that highlight the greater degree of discrimination experienced by Muslim women, particularly those who display outward symbols of their religion, such as the hijab (Khattab, 2012). Fear of discrimination was also found to limit the career aspirations of girls from British Asian backgrounds (Bhavnani 2006, cited in Hutchinson 2011).

Cultural norms can hinder women and certain ethnic groups' labour market progression

Cultural expectations around gender roles, transmitted by society as a whole and by families can limit women's access to labour markets. Careers information, advice and guidance can also reinforce traditional choices by directing young people towards jobs that are stereotypically linked to their gender or ethnicity, limiting options and aspirations at an early age (Hutchinson et al. 2011).

Cassidy et al. (2006) report that ethnic minority women's engagement with the labour market is more affected by pressures around looking after family, or that women's families are particularly influential in transmitting gender norms amongst ethnic minority communities.

Cultural norms and expectations around gender vary between ethnic groups. Hutchinson cites a survey of 1,000 young people conducted by Bhavnani (2006) which found that parents of girls from Pakistani and Bangladeshi groups were more likely than White British parents to expect girls to marry and have children rather than to follow a career (Hutchinson et al. 2011). Niven (2013) suggests that many well-educated Bangladeshi women's traditional lifestyle choices are linked to their communities' origins in the rural and largely socially conservative Sylhet district of Bangladesh. Low uptake of childcare in the early years (noted in section 2.1) may be linked to these cultural norms, subsequently restricting parents' access to employment outside of the home (ibid). However, patterns may be changing with a small scale qualitative by Aston et al. (2007) finding that younger women and second and third generation Pakistani and Bangladeshi women hold less traditional views with regard to education and employment.

2.5.3 Summary

- A number of ethnic and gender groups face heightened barriers to social mobility on entry to the workplace.
- Across ethnic groups, women are likely to earn less than men, and in some ethnic groups, are more likely to be unemployed.
- Labour market opportunities for ethnic minorities are affected by their geographical distribution.
- Discrimination in the workplace puts some groups, in particular Muslim women, at a disadvantage.
- Parental expectations of their children's future career paths differ by ethnicity, SES and gender. This may limit some young people's potential social mobility, for example amongst Bangladeshi girls, although there is some evidence that this tendency has decreased in importance amongst second and third generation British Pakistani and Bangladeshi women.
- Cultural norms and family or individual expectations relating to work account, in part, for a lower return from education experienced by Pakistani and Bangladeshi women.

Conclusion

Young people encounter barriers to social mobility at each stage of education, from the early years through to Higher Education and then as they transition into the labour market. These barriers are brought about by a combination of their SES, gender and ethnicity. Challenges can be more pronounced for some groups at some stages than others, for example, some groups of ethnic minority girls do very well throughout their education but encounter hurdles as they leave university or school and enter the workplace. Other groups, like those from low SES GRT backgrounds, face difficulties right at the start of their lives, and this creates a disadvantage that persists and grows as they move towards adulthood, dramatically constraining their social mobility.

Policy makers, as well as early years, school and HE leaders, urgently need to understand these factors, in order to take steps to better support young people's transitions to adulthood.

In particular, while much is known about the advantages in family engagement and expectations experienced by some ethnic minority groups and their links to migration patterns; a better understanding is needed of the attainment of migrants and the barriers to attainment caused by migration.

In the early years, a greater focus is required on access to high quality pre-school and HLE for children with EAL, in particular those of Bangladeshi and Pakistani origin and from low income White British backgrounds since these children are more lag behind at this crucial stage of development.

Schools and policy makers should continue to focus on low SES groups' access to high quality teaching. Schools should consider how to ensure that Black Caribbean boys in particular are not disproportionately disadvantaged by setting and tiering practices as well as teacher perception of behaviour. Careers advice in school should begin early in order to ensure that low SES girls in particular are aware of how school qualifications allow access to different career paths, especially for STEM. Meanwhile, the factors contributing to Indian and Chinese groups' attainment at school and the increasing progress of Pakistani and Bangladeshi groups, have the potential to deepen our understanding of the factors that drive educational success.

At University, an appreciation of recent increases in ethnic minority participation must not mask the difficulties faced some ethnic minority students, such as those from Black Caribbean groups, particularly in light of high drop-out rates and low achievement. At the same time, attention should be focussed on the factors that prevent low SES White British young people (and boys in particular) from participating equitably. Furthermore, simply attending University does not guarantee future social mobility; subject choice is crucial too. The tendency for gender norms to influence subject choices currently constrains some young people's social mobility. Schools, careers guidance services, parents and HE institutions themselves must therefore continue to encourage young people from low SES groups in particular, to question, and think beyond, gender norms.

Beyond education, urgent action is needed across all sectors of the labour market and society to address the barriers young people face (in particular women from Muslim groups) upon entry to the labour market. It is striking that many of the groups that now attain highest, or are improving their achievement fastest at school, are not yet able to translate educational success into labour market outcomes.

Recommendations

Recommendations for the Social Mobility Commission:

- Further research is needed on the relatively low and declining achievement of 'White Other' groups in British schools.
- Further research is needed on why Black pupils, particularly Black boys, do less well higher up the age range.
- Further research is needed in order to better understand the relatively low achievement and high drop out rates of ethnic minority groups at university, in particular Black Caribbean students.

Recommendations for universities, schools and Early Years providers:

- Schools should seek to involve and work with parents and should particularly target those from the groups that are least likely to engage in their children's education, such as low SES White British and GRT groups.
- Schools should avoid setting, particularly at primary level, and government should discourage schools from doing so.
- Schools, universities and employers should provide carefully targeted support to ensure Muslim women are able to achieve their career ambitions and progress in the workplace.
- Universities should ensure they provide the support that certain ethnic minority groups need, in particular Black Caribbean students, to reduce the rate at which those groups drop out and to increase their achievement at degree level.
- Universities should implement widening participation initiatives that are tailored to the issues faced by low SES White British students.

Recommendations for policy makers:

- Attention to the 'worst' performing groups should not detract from addressing issues faced by other poorly performing groups. For example, although low SES White British boys do badly at KS4, low SES White British girls also do worse than expected at KS4 compared to both higher SES White British girls and low SES girls from other ethnicities.
- Government departments should work together to systematically track asylum seeker and refugee groups, and make funding available, beyond the pupil premium, to better support these groups.
- The DfE should ensure that provision in the early years is sensitive to different ethnic groups needs. Additionally, the DfE should fund support for low SES parents to develop effective HLEs, especially amongst ethnic groups that achieve poorly at EYFSP.
- Government should provide targeted funding for evidence based approaches to widening access to HE for low SES White British students and addressing the factors leading to Black Caribbean students dropping out of HE at higher rates than other ethnic groups.

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Appendix 1: Technical notes on Section 1 data

Foundation Stage to Key Stage 5

Data is based on analysis of results from 2006/07 to 2014/15 - the last year for which data is available at the time of writing.

Data comes from the Department for Education's National Pupil Database (NPD). Further details on the NPD can be found [here](#).

As the cohort varies from year to year, there will be some random variation in the results observed and in cases where sample sizes are small (but do not require suppression), the effect of this variation will be greater.

Free school meals (FSM) information is drawn from the school census and is based on eligibility, not take-up.

Children for whom a certain characteristic is not known (e.g. FSM eligibility) have generally been excluded from the analysis. The exception to this is ethnicity, where children with missing ethnicity data have been kept in the data for all analysis except that done by ethnicity.

The year stated in all analysis is the start of the academic year in which it falls e.g. 2013 is academic year 2013/14.

Foundation Stage Profile (FSP)

Data used is as follows:

Pre-2012/13

Language: Percentage of pupils working securely within the four elements of FSP communication, language and literacy:

- Language for communication and thinking (score of 6-9 in CLL_AS1)
- Linking sounds and letters (score of 6-9 in CLL_AS1)
- Reading (score of 6-9 in CLL_AS3)
- Writing (score of 6-9 in CLL_AS4)

Maths: percentage of pupils working securely within the three elements of FSP maths:

- Problem Solving, Reasoning and Numeracy 1 (score of 6-9 in MAT_AS1)
- Problem Solving, Reasoning and Numeracy 2 (score of 6-9 in MAT_AS2)
- Problem Solving, Reasoning and Numeracy 3 (score of 6-9 in MAT_AS3)

Post-2012/13

Reading/language development: Percentage of pupils working at or above the expected level in all three components of FSP communication and language:

- Listening and attention (score of two or three in COM_G01)
- Understanding (score of two or three in COM_G02)
- Speaking (score of two or three in COM_G03)
- Reading (score of two or three in LIT_G09)
- Writing (score of two or three in LIT_G10)

Maths: Percentage of pupils working at or above the expected level the two elements of FSP maths:

- Numbers (score of two or three in MAT_G11)
- Shape, space and measures (score of two or three in MAT_G12)

Note that there was a change in FSP between 2011/12 and 2012/13, giving rise to a marked discontinuity in results at this point.

Key Stage 1 and 2

At Key stage one, data used is as follows

- Reading/language development: Percentage of pupils achieving 2B or above in reading teacher assessment
- Maths: Percentage of pupils achieving 2B or above in maths

At key stage two, data is used as follows:

- Reading/language development: % pupils achieving 4B or above in reading
- Maths: % pupils achieving 4B or above in maths

Note that a large-scale boycott of 2009/10 SATs papers means there is also a discontinuity in KS2 reading results in this year.

Consideration of pupils' English results at KS2 focuses on reading alone, as the data which allows the greatest comparability over time. For this reason, KS1 data used also relates to reading.

Key stage 4

At Key stage 4, data used is as follows

- Reading/language development: % pupils achieving A*-C in English Language
- Maths: % pupils achieving A*-C in maths

Pupils' best entries at GCSE have been considered, even post-2013/14 when performance tables moved to a first entry basis. This approach has been followed on the basis that what is of interest here is whether children have reached a certain standard.

Key Stage two to four value added

Analysis looks at the Key Stage 2 to Key Stage value added scores of children in England, and considers how this varies by different pupil characteristics. A value added score of six points above the average indicates that a pupil is one grade above expectation in one subject. Conversely, a score of minus six points indicates that a pupil is one grade below expectation in one subject.

Data is provided from 2006/07 to 2014/15 - the last year for which data is available at the time of writing.

Note that the method used to calculate Value Added here is based on FFT's preferred approach and differs from the DfE's method in the following ways

	FFT	DfE
Modelling method	Ordinary Least Squares	Random intercepts multilevel model
Aggregation of pupil value added scores	Unadjusted	Shrunken (multiplied by shrinkage factor)
Bias tuning	4 piecewise adjustments based on prior attainment	None
Month of birth	Included	Not included
Gender	Included	Not included
Teacher Assessments	Included	Not included

Key Stage five data

This analysis looks at post-16 completion rates and average point scores, and considers how these vary by different pupil characteristics.

STEM subjects have been defined as those which are both so-called 'facilitating subjects', and STEM subjects. These are: Biology, Chemistry, Physics, Pure maths, Further maths and Additional maths

Points awarded for different A-Level results are as follows:

A*	300
A	270
B	240
C	210
D	180
E	150

The number of points awarded for grades in some A-Level equivalents can be found [here](#):

Overall average point scores (APS) have been calculated on a per-entry basis: points divided by entries. STEM APSs have also been calculated on a per-entry basis: total points divided by total STEM entries

Higher Education Data

This analysis is based on two sources: a Department for Business, Innovation and Skills (BIS) research paper, and a report from higher education charity the Equality Challenge Unit (ECU); both published in 2015. Links to these sources are given below.

In the case of the BIS research paper, participation is measured among those aged 18 and 19. Data is for those who sat their GCSEs in 2008, meaning higher education participation in 2010-11 or 2011-12 is considered.

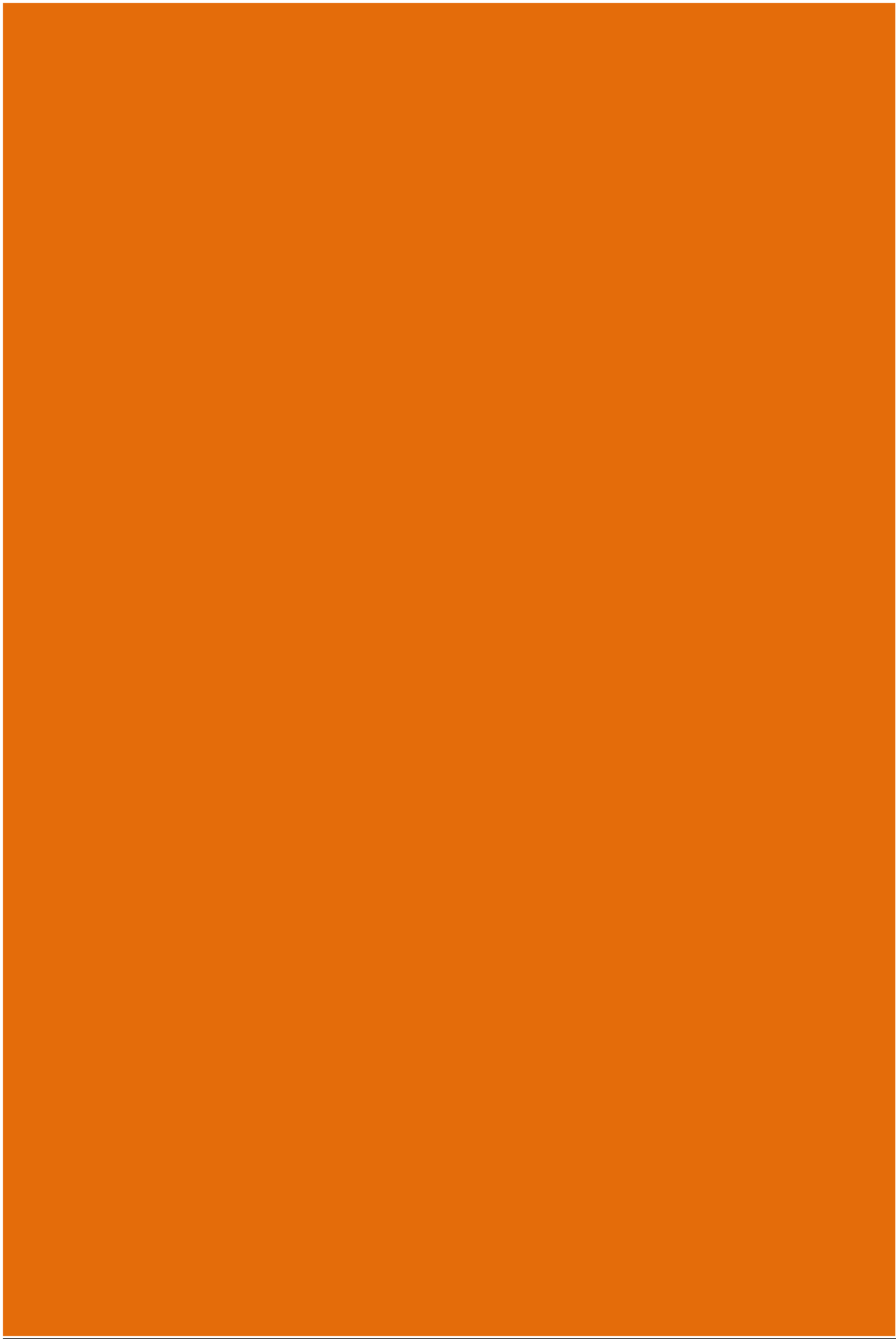
Analysis in the research paper is based on data from the National Pupil Database, the Individual Learner Records and National Information System for Vocational Qualifications (NISVQ) databases, and Higher Education Statistics Agency data.

The ECU analysis is based on 2013-14 data. Analysis in the ECU report is based on HESA data. Full details of the methods used can be found in the two reports.

Sources:

BIS research paper '*Socio-economic, ethnic and gender differences in HE participation*' by Ellen Greaves and Claire Crawford (November 2015) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474273/BIS-15-85-socio-economic-ethnic-and-gender-differences.pdf and underlying data courtesy of the authors

Equality Challenge Unit report '*Equality in higher education: statistical report 2015*' (November 2015) <http://www.ecu.ac.uk/wp-content/uploads/2015/11/Equality-in-HE-statistical-report-2015-part-2-students.pdf> and underlying data <http://www.ecu.ac.uk/publications/equality-higher-education-statistical-report-2015/>





Social Mobility
Commission

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