Social Mobility: The Next Generation
Lost potential at age 16

Erica Holt-White and Carl Cullinane
June 2023
About the authors

**Erica Holt-White** is Senior Research and Policy Officer at the Sutton Trust

**Carl Cullinane** is Director of Research and Policy at the Sutton Trust and Co-Investigator on the COSMO (COVID Social Mobility and Opportunities) Study

Contents

Acknowledgements 3
Foreword 4
Key findings 5
Recommendations 7
Introduction 9
  - Disadvantaged high attainers - background 11
  - Approach and methods 13
Who are the disadvantaged high attainers? 16
Attainment at GCSE 25
Experiences of the pandemic 32
Post-16 education recovery and future plans 37
Discussion 44
Top 10 tips for schools 48
Appendix A: Methods 51

Lost potential at age 16
Acknowledgements

The inclusion of the Sutton Trust Opportunity Cohort in the COSMO Study has been made possible by funding provided by leading algorithmic trading firm, XTX Markets. XTX Markets is a major donor in the UK and globally, with current priorities including maths and science education as well as support for disadvantaged students to progress to degrees, PhDs and highly-skilled careers.

The authors would also like to thank members of the Sutton Trust COSMO Youth Panel for submitting case studies for inclusion in this report, as well as Georgia Carter for assistance in compiling.

This report includes data from the COSMO Longitudinal Study: http://cosmostudy.uk

COSMO is supported by UK Research and Innovation Economic and Social Research Council as part of their COVID-19 response fund [grant number ES/W001756/1]. COSMO is a collaboration between the UCL Centre for Education Policy & Equalising Opportunities (CEPEO), the Sutton Trust, and the UCL Centre for Longitudinal Studies (CLS). Our principal fieldwork partner is Kantar Public.

This analysis uses administrative data from the Department for Education (DfE)'s National Pupil Database (NPD), where consent was gained for this linkage, with additional weighting carried out to ensure (insofar as is possible) representativeness of analysis using linked administrative data. This work was produced using statistical data from the DfE processed in the Office for National Statistics' (ONS) Secure Research Service (SRS). The use of the DfE statistical data in this work does not imply the endorsement of the DfE or ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets, which may not exactly reproduce National Statistics aggregates.
Foreword

When I set up the Sutton Trust in 1997, it was driven by a belief that young people from all backgrounds should have the opportunity to excel. We have demonstrated countless times over the years that in modern Britain this is still not the case. We simply do not nurture all talent equally.

"The findings of this report lay bare the myth of the level playing field. The pathways of young people with basically the same grades going into secondary school diverge wildly, depending on what their home background is."

This is not just a problem for fairness. It’s also a big problem for the prosperity of the country more generally. If we allow young talent to wither on the vine, it’s a loss to the young person, but we also lose all the potential that young person could bring, as an entrepreneur, an inventor, an artist. Society is all the poorer if we are not making the most of our talents.

Economic modelling for the Sutton Trust has shown that even a modest increase in the UK’s social mobility, to the average of Western European countries, could increase GDP by £39 billion per year. That is huge. Improving the match between talent and jobs, and reducing the role that people’s background plays, is ultimately better for everyone. When the UK desperately needs to kickstart economic growth this is even more important.

The findings of this report lay bare the myth of the level playing field. The pathways of young people with basically the same grades going into secondary school diverge wildly, depending on what their home background is. This has knock on implications for A Levels, apprenticeships and university. The most competitive courses and roles are given out based on school grades. Once you fall behind, it can be difficult to catch up.

And those gaps are getting wider. Ten years of progress on the attainment gap has been reversed in just a couple of years. This is a ticking time bomb for social mobility. We need to make the next generation of young people our priority.

I would like to thank the authors for their work on this invaluable research.

Sir Peter Lampl

Founder and Executive Chairman of the Sutton Trust,
Chairman of the Education Endowment Foundation
Key Findings

*Social Mobility: The Next Generation* looks at a group of young people from disadvantaged backgrounds who showed academic potential at the end of primary school. It explores their progress during secondary school in comparison to non-disadvantaged peers with the same grades. As a longitudinal study, future reports will track their progress into higher education, training and the workplace.

What are the characteristics of disadvantaged high attainers?

- Disadvantaged high attainers are less likely to be White (62%), than average (75%) and other high attainers (79%). Among them, the number of Black African and Bangladeshi pupils is more than double their proportion in the population.

- They are also concentrated in London, with 25% attending school in the capital, compared to 14% of other high attainers. More advantaged high attainers are most likely to attend school in the wider South East. Just 5% of disadvantaged high attainers attend grammar schools, compared to 13% of other high attainers.

- 16% of disadvantaged high attainers are a young carer – 11 percentage points more likely than other high attainers (5%). They are less than half as likely to have a parent with a degree, and four times more likely to live in a single-parent household compared to other high attainers.

- Disadvantaged high attainers tend to be eligible for Free School Meals (FSM) for less of their school time than other FSM students, highlighting the impact of persistent disadvantage on grades.

How do disadvantaged high attainers progress at secondary school?

- Disadvantaged high attainers had GCSE grades on average more than three quarters of a grade lower per subject than the grades of other high attainers, a full grade lower than those from the most affluent backgrounds, and are almost twice as likely to drop out of the top third of attainment at GCSE.

- 62% of non-disadvantaged high attainers got five or more grade 7-9s at GCSE in 2021, compared to 40% of disadvantaged high attainers. If the disadvantaged group progressed at the same rate as their peers, there would have been almost 7,000 more achieving top grades. Over five years, this amounts to over 28,000.
• Looking at Progress 8, a measure of progress made between primary school and GCSEs, disadvantaged high attainers make less progress than the average student (a third of a grade per subject), and score more similarly to other Free School Meal students (half a grade less than average), compared to other high attainers, who progress a third of a grade higher than average. There was a slight widening of this gap in 2020 and 2021 in comparison to previous years.

• Within the disadvantaged high attainer group, those most likely to fall behind at GCSE included boys, White and Black Caribbean pupils, those with Special Educational Needs, and pupils in the North East.

• In Year 12, disadvantaged high attainers were nearly twice as likely to be at a Further Education college (12%) compared to other high attainers (7%).

Experiences and attitudes

• Despite their high grades, 21% of disadvantaged high attainers agreed with the statement ‘people like me don’t have much of a chance in life’, more than double the figure of other high attainers saying the same (10%).

• Disadvantaged high attainers were over three times more likely to lack a suitable device to study at the beginning of the pandemic, and twice as likely to lack a suitable place to study.

• They were less than half as likely to receive private tutoring compared to other high attainers, but more likely to receive catch-up tutoring at school - 26%, compared to 18% of other high attainers. Though this was less than other FSM pupils (34%).

• 37% of disadvantaged high attainers feel they have fallen behind their classmates as a result of the pandemic’s disruption, compared to 22% of other high attainers.

• When asked about what they are most likely to be doing in two years’ time, disadvantaged high attainers were 10 percentage points less likely to report that they think they will be studying compared to other high attainers, at 65% and 75% respectively. The figure for private school students of any attainment level is 85%.

62% of non-disadvantaged high attainers got five or more grade 7-9s at GCSE in 2021, compared to 40% of disadvantaged high attainers.
Recommendations

For policymakers

1. **There should be a national strategy to close the attainment gaps that have opened since the pandemic.** Addressing these gaps should be a national priority, with a long-term plan in place, based on evidence. This should include closing the gap at all levels of attainment, and not just the lowest attainers.

2. **In order to deliver this, the government must urgently review the funding given to schools, particularly those in the most deprived areas.**
   - **The National Funding Formula should better reflect the level of need in schools.** Disadvantage should be more highly weighted in the formula, and it should also reflect the persistence of eligibility for Free School Meals.
   - **The Pupil Premium should be extended to 16-19 year olds in education and training.** Disadvantage does not stop at 16, so key funding for this group should not do so either.
   - **The National Tutoring Programme (NTP) should be seen as a core part of the school system going forward, with delivery re-focused in the long term to tackle the attainment gap.** Tutoring programmes have been found to be beneficial for highly able students. Whilst the National Tutoring Programme has reached many disadvantaged students, a significant number have not yet benefited. Developing this programme provides a chance to have a long-term intervention to support disadvantaged pupils and narrow the attainment gap. Central funding of the NTP must be sufficient for schools to deliver high quality tutoring and bed the programme in for the long term.

3. **School admissions should be reformed so there is a better socio-economic mix of pupils across schools, particularly in the most oversubscribed.** High attaining disadvantaged pupils are much less likely than their peers to attend a high performing school. Those who attend more socially mixed schools progress more at GCSE. Oversubscribed schools should consider a variety of ways of diversifying their intakes, including ballots, banding and priority for Pupil Premium applicants.
Recommendations

For universities

1. **To make better and more ambitious use of contextual offers (including reduced grade offers) and admissions, to acknowledge the attainment gap.** Findings in this report show that disadvantaged students with high potential often underperform in the school system. Therefore, universities should make admissions decisions that take this context into account. For admissions decisions made for those impacted by the COVID-19 pandemic, including the summer 2023 intake, this is particularly important, especially for those who just miss out on their offer grades.

2. **To recognise the disruption faced by students joining them in the autumn by supporting their transition and success in higher education.** When students arrive this autumn, universities should identify key gaps in learning at an early stage in the first term, and provide continuing support if necessary, as well as support for student mental health and wellbeing.
Introduction

School attainment plays a key role in social mobility, and a weight of evidence shows that those who do well in school have better life chances in terms of employment and income later in life.\(^1\) However, gaps in school achievement open up quickly. By the time they start school, disadvantaged children are already 4.6 months behind their peers. This grows during primary school to 9.3 months by the end of Year 6. Between Year 7 and Year 11, this gap grows by another 9 months, to 18.1.\(^2\)

"While inequality is baked in from an early age, these gaps accelerate during secondary school.\(^3\) A variety of Sutton Trust research has shown that those from disadvantaged backgrounds fall behind their peers during these years.\(^4\) This has significant knock-on implications for social mobility."

This report focuses on that period between the end of primary school and GCSE exams. Those showing academic potential at the end of primary school have the best chance of educational success. 63% go on to complete three A Levels, 65% go on to attend university and 24% attend a Russell Group university.

However, for those who experience disadvantage during secondary school, here measured by eligibility for Free School Meals (FSM), 45% complete three A Levels, 53% go on to attend university and 15% attend a Russell Group university (Table 1).

**Table 1. Educational progression of those in top third of attainers at the end of primary school, by eligibility for Free School Meals (FSM)**

<table>
<thead>
<tr>
<th></th>
<th>FSM high attainers</th>
<th>Non-FSM high attainers</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCSE -- 5 or more Grade 5+</td>
<td>74%</td>
<td>89%</td>
</tr>
<tr>
<td>3 A Levels</td>
<td>45%</td>
<td>66%</td>
</tr>
<tr>
<td>ABB or over at A Level</td>
<td>19%</td>
<td>37%</td>
</tr>
<tr>
<td>Attend higher education</td>
<td>53%</td>
<td>67%</td>
</tr>
<tr>
<td>Russell Group university</td>
<td>15%</td>
<td>26%</td>
</tr>
</tbody>
</table>
Nonetheless, disadvantaged pupils with high achievement in Year 6 have the best chance of mobility. They are two and a half times more likely to complete three A Levels than the FSM average, three and a half times more likely to achieve ABB or higher at A Level, twice as likely to progress to higher education, and three and a half times more likely to enter a Russell Group university. This group is thus key to understanding the factors that promote, and block, social mobility, and form the focus of this study.

**Social Mobility: The Next Generation**

In 1990, Doria Pilling published a study called Escape From Disadvantage. It followed children from the 1958 National Child Development Study as adults in order to understand the experiences of those who were brought up in poverty, but were educationally successful and relatively prosperous as adults. She concluded that mobility was a complex interplay between personal characteristics and circumstances faced, both in terms of within the home, but also in terms of the existence of opportunities. This study seeks to update this understanding in a modern context, among a cohort born in the mid-2000s, combining qualitative insights with longitudinal survey data.

The purpose of this series of reports is twofold. First, to explore what makes this high potential group different from other pupils facing disadvantage, and second, to explore the barriers that they face in comparison with pupils with the same grades from better off homes and why this potential isn’t always fulfilled.

Prior attainment is often the biggest factor in educational and career progression. This study establishes a common baseline of achievement at the end of primary school between those facing socio-economic disadvantage, and those not, in order to explore why gaps open up between those of similar abilities, and learn how opportunities can be equalised.

This is not to say that those with lower attainment do not have a chance of being socially mobile, or are less important for educational equity. It is vital for fairness that we seek to narrow the attainment gap across the attainment spectrum. There are many reasons why those from lower socio-economic backgrounds are already significantly behind by the end of primary school. But despite this, many will go on to be successful, and become socially mobile. The focus of this study is to show that even for those showing equal academic potential at a young age, the playing field is not level, and to explore how it can be made more even.
“The focus of this study is to show that even for those showing equal academic potential at a young age, the playing field is not level, and to explore how it can be made more even.”

Using the COVID Social Mobility and Opportunities (COSMO) study, a national representative study of over 13,000 young people around 16/17 years old, this series of reports will focus on a group of young people who were in the top third of attainers at the end of primary school and were eligible for Free School Meals during their time at secondary school. It will look at who makes up this group, what their educational trajectories during school are, and as the cohort grows older, track them into higher education, apprenticeships and the workplace, ultimately looking at their chances of social mobility as adults. Using both quantitative and qualitative methods, the study looks at what differentiated these students from other FSM pupils in the first place, and compares this group to those in the top third of primary school attainers who were never eligible for FSM, in order to explore the differing experiences and life trajectories of these groups. This cohort in particular has experienced substantial disruption to their education due to the COVID-19 pandemic at a significant point in their schooling (the run up to taking their GCSE qualifications in 2021); the impacts of which on inequity in life chances is also explored.

**Disadvantaged high attainers - background**

Previous research from the Sutton Trust in 2018, *Potential for Success*, highlighted that disadvantaged students are three times less likely to be in the top 10% for attainment than their more advantaged peers: 4% compared to 13% of other pupils. These disparities persist in secondary education – 72% of non-disadvantaged high attainers achieved 5 A*-A grades or more at GCSE, compared to only 52% of disadvantaged high attainers. This builds on research from the Trust in 2015, which found that highly able Pupil Premium pupils achieve half a grade less than other highly able pupils, on average, with a long tail of underachievement.

Understanding what circumstances high attaining disadvantaged students experience as they grow up and how they perform academically is vital to understand why inequalities persist later in the life course, making research into this group particularly relevant to social mobility. For instance, disadvantaged students are less likely to go to university than more affluent students even if they achieve the same grades.
Since the Trust last released research in this area in 2018, it appears that limited research on highly able disadvantaged students has been published. OECD Programme for International Student Assessment (PISA) data has shown that highly able students from poorer backgrounds are less likely to aspire to tertiary education,\(^10\) whilst other academics have also looked at disparities in attending an elite university between disadvantaged highly able students and their more affluent peers.\(^11\)

**Disadvantaged students are three times less likely to be in the top 10% for attainment than their more advantaged peers: 4% compared to 13% of other pupils.**

Furthermore, national policy has been relatively unchanged. A £23 million Future Talent Fund programme was announced by the Department for Education (DfE) in 2018, designed to support disadvantaged high achievers to continue to achieve highly.\(^12\) However, the funding was cut months after it was announced.\(^13\) Nothing has been announced to replace this programme, meaning England currently has no national programme for supporting highly-able students, with the DfE stating that Pupil Premium funding should be used to support high attaining disadvantaged pupils\(^14\) and changes made to the curriculum in 2016 intending to stretch highly able students in the classroom.\(^15\)

In 2022, the incoming Director for Fair Access at the Office for Students announced that universities would be expected to shoulder more of the burden in raising attainment in order to widen the pipeline of students from disadvantaged backgrounds progressing to university.\(^16\) While a focus on the attainment pipeline is key for widening participation in higher education, particularly at the most selective institutions, opinions have been mixed about the most appropriate role for universities in achieving this among younger age groups.\(^17\)

It remains the case that interventions to support highly able disadvantaged young people are not widely covered in academic literature. One of the most recent pieces was published by the DfE in 2018, which reviews the most successful ways to support able disadvantaged students between Key Stage 2 and 4.\(^18\)
The most successful schools had a notable strategic commitment to supporting highly able disadvantaged students (including an assigned member of the Senior Leadership Team (SLT), specific teacher training and designed lesson plans).

A further review of literature on outcomes for highly able students, as well as current national policy and best practice, can be found in Appendix B. Based on the review's findings, more research is needed to investigate the academic performance of highly able disadvantaged students and what works in supporting them.

**Approach and methods**

To understand the educational trajectories of socio-economically disadvantaged high attainers and the barriers they face throughout their education, this report analyses data from the Sutton Trust ‘Opportunity Cohort’. This is a group of 2,249 young people participating in the COVID Social Mobility and Opportunities (COSMO) longitudinal study with high academic potential (defined as coming within the top third of attainers at KS2 in English and Maths) and from socio-economically disadvantaged backgrounds (they have been eligible for Free School Meals at any point during their secondary education). Throughout the report, they are referred to as ‘disadvantaged high attainers’ or ‘disadvantaged highly able’. Free School Meal eligibility in the past 6 years (Ever6FSM) is the official DfE definition of disadvantage, and thus the terms are used interchangeably in the report. To facilitate detailed analysis and account for attrition in later stages of the study, their numbers within the COSMO study were augmented with a ‘boost’ sample of 959 students meeting these criteria.

The COSMO cohort completed Year 11 in 2021 and are taking their A Level and equivalent qualifications in summer 2023. Context on the full population for this cohort is provided by analysis of this cohort, and the four preceding cohorts, conducted by Education Datalab. Demographic characteristics of disadvantaged high attaining students are presented to demonstrate how their lives are different to their more affluent high-achieving peers, as well as other students eligible for FSM.

Academic progression is measured by their GCSE results, obtained through linking COSMO data to the National Pupil Database. One key limitation of looking at the subsequent performance of high attaining disadvantaged pupils is the phenomenon of ‘regression to the mean’ (see Appendix B for more details). Results in this report should be seen as purely descriptive, and future work will explore this issue in more detail, but other studies have shown that the widening of gaps in secondary school is robust to accounting for regression to the mean.
This cohort’s GCSE grades also provide an interesting case, as they comprise Teacher Assessed Grades rather than grades based on formal examinations, after the summer examination series for 2021 was cancelled. To contextualise this, data from pre-pandemic cohorts from the Education Datalab work is included.

The cancellation of GCSEs is just one aspect of young people's lives negatively impacted by the COVID-19 pandemic. Socio-economically disadvantaged students disproportionately faced barriers to their learning, from differing levels of online provision from their school to not having a laptop or suitable space to work in when learning at home.23

Thus, this report also considers topics such as lockdown learning and education recovery, previously explored in research briefings jointly written by researchers at the Sutton Trust and UCL,24 to enable a greater understanding of the experiences of and challenges faced by socio-economically disadvantaged high attainers throughout the pandemic.

The report is augmented with case studies from the Sutton Trust COSMO Youth Panel, a group of Sutton Trust programme participants broadly matching the profile of disadvantaged high attainers.

Comparison groups

Results for disadvantaged high attainers are compared to a comparison group, made up of state school students who match key characteristics of the cohort (KS2 high attainers from a state school) who do not receive Pupil Premium. They are described as ‘Other high attainers’. Where significant, figures are also compared to:

- A subset of the ‘Other high attainers’ group, where students have a parent working in a higher managerial, administrative or professional occupation. They are described as ‘Most affluent high attainers’.
- An average value for either all students or all students eligible for Free School Meals.
- Private school students.
- To isolate the impact of socio-economic status on outcomes, in some circumstances results are given for other attainers with a weighting applied to match the group to disadvantaged high attainers on background characteristics (apart from socio-economic factors). This effectively creates a ‘matched’ group who share characteristics apart from eligibility for free school meals. They are described as ‘Other high attainers (matched comparison)’.

Further detail on the methods used in this report can be found in Appendix A.
"Understanding what circumstances high-attaining disadvantaged students experience as they grow up and how they perform academically is vital to understand why inequalities persist later in the life course, making research into this group particularly relevant to social mobility."
Who are disadvantaged high attainers?

Identifying the cohort

Disadvantaged status in official statistics is based on eligibility for Free School Meals at any point in the preceding six years, equivalent to Pupil Premium eligibility. 26% of the 2021 GCSE cohort met this definition. Despite significant changes to FSM eligibility in recent years, this was broadly in line with the previous four cohorts, which had varied between 27% and 25.6%.\(^{25}\)

There are a variety of ways of defining high attainers, some of which have changed over time with changes to Key Stage tests and expected levels. For simplicity, we divide attainment at the end of primary school into three equal groups based on a combined English and Maths score at Key Stage 2. As shown in Figure 1, 20% of those eligible for FSM are in the top third of attainers. However, the non-disadvantaged group are almost twice as likely to be in the top third, even at this age. Similarly, the disadvantaged group are almost 20 percentage points more likely to be in the bottom third of attainers. Given these patterns, disadvantaged high attainers have clearly faced and overcome significant barriers to achieve as highly as they did.

**Figure 1. Key Stage 2 attainment groups by free school meal eligibility**

![Figure 1. Key Stage 2 attainment groups by free school meal eligibility](image-url)
Looking across five years pre-pandemic, these proportions were generally steady over time, though with some indications of closing gaps, with the proportion of disadvantaged pupils in the high attainer group increasing by 1 percentage point during that time.

The average size of the disadvantaged high attainer cohort over these years was 26,766, out of an FSM cohort of 146,030, and a total cohort of 556,818. Of the 2021 GCSE cohort, the focus of this study, the number was 28,204. These definitions were used to identify the target cohort during the sampling process for the COSMO Study, and to identify pupils eligible for the ‘boost’ sample, used to augment the numbers of those meeting these criteria in the study.

Who makes up the disadvantaged high attainer group – pupil characteristics

To contextualise the survey data from COSMO, administrative data from the National Pupil Database was used to explore the characteristics of the disadvantaged high attainer group, and how they differ both from non-disadvantaged high attainers, as well as from disadvantaged students generally. Females are slightly over-represented in the disadvantaged high attainer group, at just under 51%, compared to 49% of all FSM pupils (Figure 2). Disadvantaged high attainers are also more likely to come from ethnic minority groups. 62% are White, compared to 75% of all pupils, and 79% of non-disadvantaged high attainers. Particularly highly-represented groups include Black African and Bangladeshi, (both more than twice as likely as average to be in the group), as well as Pakistani. These patterns are also significantly different to other high attainers, where White British are over-represented, along with Indian pupils.

Figure 2. Selected characteristics by prior attainment and disadvantage grouping
22% do not have English as their first language, compared to 16% of all students, 19% of FSM pupils generally, and 11% of non-disadvantaged high attainers.

73% have no Special Educational Needs (SEN) at any point during their time at school, compared to an average of 60% in the population, and 86% among non-disadvantaged high attainers. Levels of SEN are one the biggest differentiators between the high attainer group and other disadvantaged students.

66% of low and medium attaining FSM pupils had Special Educational Needs, compared to 27% of high attainers, including 9% with an education, health and care plan (EHCP), compared to just 1% of the high attainer group.

High attainers are also, on average, less likely to have been persistently disadvantaged during their time at school. While 30% of all FSM pupils were eligible for 80% or more of their time, this was 23% for high attainers (Figure 3). 25% of the high attainers were eligible for FSM for less than a quarter of their time at school, compared to 19% on average.

**Figure 3. Proportion of time in school spent eligible for free school meals**

Disadvantaged high attainers are also concentrated in London, with 25% attending school in the capital, in comparison to 14% of other high attainers, 19% of FSM students and 15% of students overall. In contrast, other high attainers are more likely to be located in the South East (18% compared to 11% for the disadvantaged group), as well as the South West and East of England.

**School characteristics**

As shown on Figure 4, just 5% of disadvantaged high attainers attend grammar schools, compared to 13% of other high attainers. 28% are in the most deprived fifth of secondary schools, compared to 8% of other high attainers, and close
to the overall FSM average of 30%. They are nonetheless more likely than the average FSM pupil to be in a school with the lowest levels of disadvantage (13% compared to 8% FSM average). Just 2% attend special schools, alternative provision or Pupil Referral Units, compared to an overall FSM rate of 7%.

They are also more likely to attend high performing state schools than other FSM pupils (20% are in the top fifth of schools, compared to an FSM average of 12%). However, this is still substantially lower than the 35% of non-disadvantaged high attainers who attend the highest performing schools.

These trends also hold if you rank schools by progress scores instead of raw grades, albeit with smaller gaps.

**Figure 4. Selected school and geographic characteristics, high attainers**

While background information held in the National Pupil Database is limited, the COSMO study allows us to look at the characteristics of these groups in greater detail, among the smaller number of pupils sampled in the study.
Pupil and household characteristics

While background information held in the National Pupil Database is limited, the COSMO study allows us to look at the characteristics of these groups in greater detail, among the smaller number of pupils sampled in the study.

In terms of specific Special Educational Needs (SEN), 9% of disadvantaged high attainers are categorised as having SEN in Year 11 – nearly twice as likely as other high attainers, at 5%, but significantly lower than the FSM average of 25%.

The most common SEN type is ‘social, emotional and mental health’, at 3.2% (almost three times higher than other high attainers), followed by ‘communication and interaction’ (which includes autism spectrum disorder, and other speech and language needs) at 2.7%, almost twice as high as other high attainers.

As may be expected, levels of cognitive learning difficulties are very low in both high attaining groups.

Breakdowns for comparison groups, as well other demographic variables discussed below, can be found in a summary table in Appendix C.

In terms of socio-economic class, 54% of disadvantaged high attainers have a parent working in a routine or manual role (or have never worked) compared to an average for all Free School Meal students of 65% (Figure 5). 18% of other high attainers have a parent in these professions. Just over a quarter (26%) of disadvantaged high attainers have a parent with a degree, compared to 60% of other high attainers, 76% of high attainers from the most affluent background and 89% of private school students. Nonetheless, it is 7 percentage points higher than the average for all Free School meal students.

Figure 5: Socio-economic class (NS-SEC)
For those where data is available, 55% of disadvantaged high attainers are from a household in the bottom income quartile nationally, slightly lower than the average for all Free School Meal students (60%). Just 11% of other high attainers are in this quartile, while only 6% of private school students are.  

45% of disadvantaged high attainers report living in social housing; 8 percentage points lower than the Free School Meal student average of 54% (Figure 6). Only 6% of other high attainers report living in social housing, with this group most likely to be living in a home owned outright (87%). Disadvantaged high attainers are also four times more likely to live in an overcrowded home, twice as likely to live in a house with heating or ventilation issues, as well as 65% more likely to live in a house with damp or mould.

**Figure 6: Type of housing**

Looking at family structure, 50% of disadvantaged high attainers live in a single-parent household, compared to 12% of other high attainers and 15% of private school students (Figure 7). While 93% of other high attainers are still in contact with both parents (where both are alive), this is 68% for the disadvantaged group.

Just over a quarter (26%) of disadvantaged high attainers have a parent with a degree, compared to 60% of other high attainers.
Additionally, 16% of disadvantaged high attainers report being a young carer, regularly looking after a family member or other person who is ill, elderly or disabled, without being paid. This is lower than the 22% average of all students who have been eligible for Free School Meals, but more than three times the proportion of other high attainers (5%) and private school students (10%) (Figure 8).

Overall, these figures show the very different circumstances of high-potential students from different socio-economic backgrounds, from parental education levels, to material resources, to housing conditions and family structures. Reflecting one of the key findings of *Escaping from Disadvantage*, there are indications that high-performing FSM pupils are slightly less materially disadvantaged than other FSM pupils. However, these differences are generally relatively small. The largest differences are in experiences of Special Educational Needs.
Attitudes to school and learning

75% of parents of disadvantaged high attainers said they always talk to their child about their school report or progress review, with a further 20% saying they discuss them only when there is an issue (Figure 9). This compares to 91% and 7% respectively for parents of other high attainers, and 91% and 8% respectively for parents of private school students. 5% of disadvantaged high attainers’ parents said they rarely or never have these discussions, compared to 2% of parents of other high attainers.

85% of parents of disadvantaged high attainers said that they wanted their child to stay in education after Year 11, compared to 91% of parents of other high attainers and 97% of parents of private school students. 10% did not mind what their child did, compared to 7% of other high attainers’ parents and 3% of private school student’s parents.

95% of disadvantaged high attainers’ parents agreed with the statement ‘I want my child to have a better education than I did’ (with 81% strongly agreeing) compared to 90% of parents of other high attainers (with 56% strongly agreeing) and 91% of parents of private school students (with 67% strongly agreeing). The average for all Free School Meal student parents is 96% (with 82% strongly agreeing). Unsurprisingly, educational aspirations among parents were high across the board.

Figure 9: Whether parent talks to student about their school report or progress review

![Bar chart showing the percentages of parents who talk to their child about their school report or progress review.](Image)
“Coming from a relatively low-income region, compared to those at higher quality schools in the area, I feel like there was this stigma that the lucky few could truly succeed, and this idea was perpetuated to the ‘top-set’ pupils as they could be those people” - Jake, East Yorkshire

Students were also asked questions about their perception of how much control they hold over their school experiences and life outcomes; often described as ‘locus of control’, which has been shown to positively correlate with chances of educational mobility. There were no differences in responses for questions regarding working hard bringing success and feeling able to make key decisions about the future between disadvantaged high attainers and their more advantaged peers, and answers were also similar to other FSM pupils. However, 21% agreed with the statement ‘people like me don’t have much of a chance in life’, more than double the proportion of other high attainers (10%) (Figure 10).

Figure 10: Students’ views on the statement “People like me don’t have much of a chance in life”
Attainment at GCSE

Looking at how high attaining groups progress during secondary school, analysis of the National Pupil Database shows the attainment levels and progress of the groups of interest across five years, both pre- and post-pandemic.

Figure 11(a) shows the proportion of those obtaining five or more grade 7-9s at GCSE by our various groups of interest between 2017 and 2021. There was minimal change in the three years pre-pandemic, before the grade inflation associated with the cancellation of exams in 2020 and 2021 kicked in. The number of pupils getting five or more 7-9s increased substantially for both high attaining groups. However, there is some indication of a widening of the gap, from 19 percentage points in 2019 to 22 percentage points in 2021, when 62% of non-disadvantaged high attainers got five or more grade 7-9s, compared to 40% of disadvantaged high attainers.

This is reinforced by Figure 11(b), which shows Progress 8 scores over those five years. Because Progress 8 measures differences in progress to an average student with the same starting grades, this cancels out the overall inflation. However, it shows that while the progress of high attainers in 2020 and 2021 stayed almost exactly the same as 2019, the relative performance of other high attainers improved slightly from +0.13 in 2019, to +0.14 in 2020 and +0.17 in 2021.
Differences within the disadvantaged high attainer group

Given that disadvantaged high attainers fall behind their similarly attaining peers between Key Stages 2 and 4, what are the factors associated with greater or lesser progress?

Figure 12 shows a breakdown of Progress 8 scores by pupil characteristics within the disadvantaged high attainer group. Almost every category falls behind in comparison to the average student (i.e. has a negative score). However, there are differences between groups.

Figure 12. Progress 8 scores by pupil characteristics, within the disadvantaged high attainer group
The groups who progress more than an average student are Indian, Bangladeshi, Black African and Other ethnicity pupils. The group that falls behind the most are those with Special Educational Needs, who fall back by over a grade per subject in comparison to average. Trends in general match the pattern of which groups are more likely to be in the high attaining group in the first place.

Boys fall behind girls. White and Black Caribbean are most likely to fall behind other ethnicities. The pattern of scores by level of disadvantage in a school is relatively even, apart from the schools with the lowest levels of FSM, where disadvantaged high attaining pupils are less likely to fall behind. Pupils in London make close to an average level of progression, significantly ahead of other regions, with those in the North West and North East most likely to fall behind.

**COSMO cohort**

The NPD analysis highlights the longstanding extent of the attainment gap between socio-economically disadvantaged high attainers and their more advantaged peers. But for the COSMO cohort we are focusing on, GCSE grades and the subsequent attainment gap should be analysed in context of the COVID-19 pandemic. Following substantial disruption to education from the pandemic, formal examinations were cancelled in both the summers of 2020 and 2021. For the GCSE class of 2021, grades were awarded by schools as Teacher Assessed Grades (TAGs), with mini exams often sat instead of formal assessments, and thus students were not able to demonstrate their ability at the end of Key Stage 4 in the typical way. Indeed, initial analysis of COSMO data has shown that pupils who had particularly disrupted experiences during the COVID-19 pandemic received lower GCSE Teacher Assessed Grades (TAGs) than their peers whose disruption was more moderate. Concerns were also raised about unconscious biases in the grading process, which could mean that disadvantaged students were unfairly graded down.
The following section considers linked NPD GCSE results for the COSMO Opportunity Cohort compared to their peers. Looking at the Attainment 8 measure, which takes grades from a student’s best 8 subjects (with English and Maths double weighted) into account, the average score for disadvantaged high attainers was 64.1. While this is higher than the average score for all students of 53.1, it is notably lower than their more affluent counterparts (Table 2): other high attainers had a score around 8 grades higher at 72.3 and the most affluent high attainers scored 74.5. These figures indicate that, on average per subject, disadvantaged high attainers had GCSE grades that were over three quarters of a grade lower than the grades of other high attainers, and around one grade lower than affluent high attainers.

Controlling for other background characteristics including gender, ethnicity, region, and school type using the matched comparison group, the gap between disadvantaged high attainers and other high attainers narrows only slightly, to 7.5 grades.

Importantly, this indicates that it is the socio-economic disadvantage, rather than other characteristics, that is driving the emergence of this gap between Key Stage 2 and GCSEs.

Table 2: Attainment 8 scores for COSMO cohort, 2020/21

<table>
<thead>
<tr>
<th>Mean attainment score</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantaged high attainers</td>
<td>64.1</td>
</tr>
<tr>
<td>Other high attainers</td>
<td>72.3</td>
</tr>
<tr>
<td>Most affluent high attainers</td>
<td>74.5</td>
</tr>
<tr>
<td>All FSM students</td>
<td>42.9</td>
</tr>
<tr>
<td>All students</td>
<td>53.1</td>
</tr>
</tbody>
</table>

As shown by Figure 13, the gap in GCSE performance is similar at all levels of prior attainment; for instance, disadvantaged students who were low attainers in Key Stage 2 had grades that were four fifths of a grade lower than those of their more advantaged peers with the same prior attainment.
Looking at whether Key Stage 2 high attainers remained in the top third of the grade distribution, 63% of disadvantaged high attainers remain so (based on Attainment 8 score) at Key Stage 4. This is around 18 percentage points less than other Key Stage 2 high attainers (81%).

Disadvantaged high attainers at Key Stage 2 are almost twice as likely to fall out of the top third for attainment when they reach Key Stage 4, at 37% compared to 17% of other high attainers (as shown in Figure 14). 88% of the most affluent high attainers at Key Stage 2 remain high attainers at Key Stage 4.
This is also reflected when looking at a measure of progress between Key Stages 2 and 4. Using an approximation of Progress 8, disadvantaged high attainers have a score (-0.32) more similar to other Free School Meal students (-0.44) than other high attainers (+0.33) (Figure 15). The most affluent high attainers have the highest Progress 8 scores of the groups, at +0.47. These results mean that disadvantaged high attainers at Key Stage 2 have GCSE grades that are on average a third of a grade lower than expected, based on their prior attainment, whereas other high attainers have GCSE grades a third of a grade per subject higher than expected.

Figure 15: Progress 8 scores for COSMO cohort, 2020/21

Again, a gap in attainment using Progress 8 is present for all levels of attainment. For example, while disadvantaged students in the bottom third of attainment at Key Stage 2 have GCSE grades almost half a grade lower (-0.41) than expected, other low attainers have GCSE grades around a fifth higher than expected.

It is important to remember the context of these grades, which were determined by teachers and were subject to grade inflation to limit the impact of the COVID-19 pandemic’s disruption when comparing the grades to previous years.
Because of this, the true extent of the attainment gap for this cohort is hidden and may be wider than indicated here. Gaps at Key Stages 1, 2, 4 and 5 all widened substantially when national exams returned in 2022, with the growth in the GCSE attainment gap reversing 10 years of progress.\textsuperscript{36}

“Any problems I was having were exacerbated by the period of school closures due to the pandemic. Whilst I was happy to receive my GCSE results, overall, it felt a bit bittersweet because I knew that some opportunities for me to do better were taken away due to my grades being teacher-assessed” - Jake, East Yorkshire

COSMO data shows that there were also differences in perceptions among students on the outcomes of 2021’s grading process. Just over one in five (21\%) of disadvantaged high attainers said that their GCSE grades were worse than expected. This is 9 percentage points more than other high attainers (Figure 16). The most affluent high attainers were even less likely to report this, at 10\%, as were private school students at 9\%.

**Figure 16: Students’ views on their GCSE grades (awarded by TAGs)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Worse than expected</th>
<th>As expected</th>
<th>Better than expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantaged high attainers</td>
<td>21%</td>
<td>51%</td>
<td>28%</td>
</tr>
<tr>
<td>Other high attainers</td>
<td>12%</td>
<td>53%</td>
<td>35%</td>
</tr>
<tr>
<td>Private school students</td>
<td>9%</td>
<td>50%</td>
<td>42%</td>
</tr>
<tr>
<td>All students</td>
<td>23%</td>
<td>48%</td>
<td>29%</td>
</tr>
</tbody>
</table>
Experiences of the pandemic

The COVID-19 pandemic played a big role in shaping the secondary school experiences of this cohort. They were in Year 10 when schools first closed, experienced further closures in the spring term of Year 11, and their GCSE exams were cancelled in favour of TAGs. They also transitioned to post-16 study during a time of great disruption. The first wave of COSMO data has revealed numerous socio-economic inequalities in experiences and impacts of the COVID-19 pandemic for young people.\(^3^7\)

Students from the poorest backgrounds were on average completing fewer hours of schoolwork per week than their more advantaged peers.\(^3^8\) These students were also more likely to experience barriers to remote learning, such as not having a suitable digital device or a quiet place to study. On returning to school, encouragingly, those in the most deprived comprehensive schools were the most likely to have taken part in some sort of catch-up activity,\(^3^9\) but despite this, many students from the poorest backgrounds felt that their education had been severely disrupted.\(^4^0\) The pandemic’s impact led to many students changing their future education and career plans post Year 11, with disadvantaged students more likely to do so.\(^4^1\)

The next section looks at disparities for the Opportunity Cohort of high attainers from disadvantaged backgrounds alongside other comparison groups.

Lockdown learning

Of those who worked at least one day per week, 51% of disadvantaged high attainers completed three or more hours of work per day in lockdown 1 in March 2020 (similar to the Free School Meal average of 53%), compared to 59% of other high attainers and 86% of private school students.

“At the start, I was kind of more chilled about learning at home and then as it progressed then I started getting more, kind of, frazzled. I had no motivation to do basically anything. Like I would not maintain a proper day to day routine because there was no routine so I would have to” - Opportunity Cohort participant, East of England

In lockdown 3 (January-March 2021), 69% of disadvantaged high attainers were completing three or more hours of work per day (again similar to the Free School Meal average of 68%), while 77% of other high attainers and 91% of private school students reported the same.11% of disadvantaged high attainers said they did not do any schoolwork in lockdown 1, compared to 6% of other high attainers and 6% of private school students.
There was less disparity during the third lockdown, where 7% of disadvantaged high attainers said they did not do any schoolwork, compared to 5% of other high attainers and 3% of private school students.

Just over one in five (21%) of disadvantaged high attainers said they did not have a suitable device to study from at the start of lockdown 1, compared to 6% of other high attainers and 2% of private school students (Figure 17). The figure was 4 percentage points lower than the Free School Meal average of 25%. A smaller proportion of disadvantaged high attainers reported this issue at the start of lockdown 3 (14%), but there was still a substantial 11 percentage point gap between them and the 3% of both other high attainers and private school students reporting this issue.

**Figure 17: Whether student didn’t have a suitable digital device or study space to work from at home during March 2020 to June 2020 national lockdown (lockdown 1)**

Disadvantaged high attainers were also more likely to report sharing a digital device when learning at home with others in their household, at 19% and 11% in during lockdowns 1 and 3 respectively. In lockdown 1, this figure was 4 percentage points more than the FSM average (15%), but in lockdown 3 the figure was the same (11%). This compares to 12% and 7% of other high attaining students reporting this issue during lockdown 1 and lockdown 3 respectively.

Almost a third (31%) of disadvantaged high attainers said they had an unsuitable space to study at home during lockdown 1 – nearly double the figure of other high attainers (16%), with even fewer of the most affluent high attainers (11%) reporting the issue. As with sharing a device, disadvantaged high attainers were more likely to report this issue than the Free School Meal average (25%). This may be because high attainers were more likely to perceive device sharing and an unsuitable study space as a problem for them.

Difficulties with learning during lockdown was highlighted as a particular struggle by Riley from the Sutton Trust COSMO Youth Panel (see below):
CASE STUDY: RILEY, YEAR 13, WEST MIDLANDS

School was difficult for me, as I am an autistic person who found the environment incredibly difficult, but I really loved learning and being able to support fellow students through student leadership roles.

In the classroom, I feel like the set system set me up to fail. I was in the lower sets for quite a few subjects and felt like teachers underestimated my abilities. By the time I did move up into set 2, I was behind everyone else which meant I had to work a lot harder. This also affected my self-esteem, as I went from top of the class to the bottom, leaving me feeling incredibly inadequate. However, I really do feel proud that as a dyslexic student I have been able to go on to study English literature and linguistics at A Level’.

"Some trips in school were off limits for me as they were simply too expensive…I even remember paying for trips myself a few times because I didn’t want to ask my parents."

Outside of the classroom, pupils at my school came from a range of different financial backgrounds, meaning there was a huge divide in who could and couldn’t afford things. When speaking to peers from other schools, they typically came from more affluent areas and attended lots of clubs, often provided by their school. I found that I often couldn’t afford to take part in extracurricular activities outside of school, like swimming and going to theatre, so sometimes felt left out.

The pandemic came at a time where It was unhelpful to have a lot of time off school, with my exams fast approaching, but also gave me the break I needed. My school didn’t organise much in terms of home learning during the first lockdown, which meant I spent more time with family and doing my hobbies.

During the second lockdown there was a huge shift in workload, and we were often expected to do more work than we would normally in school. As I had insufficient access to the internet, I did go into school during the closures but the technology at my school often wasn't sufficient either, which did leave me stuck some days. When everyone returned to school it was evident that there was a lot of content that we should have learnt that we simply didn’t know. Often some people would have covered topics and others wouldn’t have, meaning we were all at very different levels. To try and fix this, we were promised catch-up sessions, but these never actually took place.
Catch-up activities and tutoring

Pupils also faced different challenges when schools reopened again. Catch-up was particularly important to this group as there were only a few months between the end of the third lockdown school closures and the end of their compulsory schooling. The majority (59%) of disadvantaged high attainers had taken part in at least one catch-up activity, compared to 51% of other high attainers and 57% of all FSM pupils.

26% of the group took part in any form of tutoring organised by their school, compared to 24% of private school students and 18% of other high attainers (Figure 18). Other students receiving Free School Meals were 8 percentage points more likely to take part in tutoring, at 34%. This gives some indication that catch-up tutoring was targeted towards disadvantaged students.\(^{42}\)

**Figure 18: Whether student took part in school-based tutoring**

![Bar chart showing participation in school-based tutoring](image)

18% of disadvantaged high attainers took up the offer of additional classes during school holidays and weekends, compared to 12% of other high attainers. 11% of the most affluent high attainers took up the offer, as did only 10% of those at a private school.

**59% of disadvantaged high attainers took part in at least one catch-up activity during year 11.**
Outside school-based activities however, disadvantaged students were less likely to receive private tutoring. 5% of the parents of disadvantaged high attainers said they had paid for private tuition for their child during term time of Year 11 (slightly higher than the Free School Meal average of 4%). This figure is just under half of the 11% of other high attainers who received private tutoring (Figure 19).

**Figure 19: Whether student received private tutoring in Year 11**

While parents of disadvantaged high attainers were slightly more likely to spend any additional funds on their children’s education as a result of the pandemic (47%) compared to parents of other high attainers (44%), they were less likely to spend large amounts: 14% spent over £300, which was less than the 18% of parents of other high attainers and 22% of parents of private school students, and similar to the FSM average of 13%.

48% of disadvantaged high attainers do not feel that they have been able to catch up with the learning missed due to the pandemic.
Post-16 education recovery and future plans

Perceptions of recovery

37% of disadvantaged high attainers feel they have fallen behind their classmates as a result of the pandemic’s disruption (Figure 20), compared to 22% of other high attainers, 18% of the most affluent high attainers and 16% of private school students.

Figure 20: Student views on the statement “I have fallen behind my classmates as a result of the COVID-19 pandemic”

“Staying at home I still did my online sessions, but I don’t think I retained anything. And that affected my background knowledge. So, when I went on to do my A Levels I noticed I was missing gaps in my knowledge compared to my peers who had covered those certain topics. I felt like I was quite behind” - Opportunity Cohort participant, West Midlands

Nearly half (48%) of disadvantaged high attainers do not feel that they have been able to catch up with the learning missed due to the pandemic (the same figure as the Free School Meal average), compared to 43% of other high attainers and 27% of private school students.

Ryan, from the Sutton Trust COSMO Youth Panel, shares his experience of falling behind during the pandemic in the case study below:
CASE STUDY: RYAN, YEAR 13, WEST MIDLANDS

I enjoyed my time at secondary school, with my highlights being taking part in school debates, as well as achieving a gold in the UKMT Senior Maths Challenge.

I always wanted to do something in STEM, in particular medicine, for most of high school and sixth form, so I chose to take Maths, Further Maths and Chemistry at A-level. I didn't tell my parents about picking these options as I feared that they would judge me, but I definitely think teachers at my school wanted me to take Maths and Further Maths.

I feel I had a different experience of being a teenager compared to my peers in some ways. I never had the opportunity to go abroad during the summer, and I definitely couldn't take part in school visits overseas or the skiing trip, which made me feel lesser in a way. In terms of extra-curriculars, I had school music lessons and was able to take a few exams, but due to a lack of time and money, I couldn't progress very far.

I think an even bigger difference was created in Year 11 because I had to work weekdays and weekends to be able to support the household, but others in my class had no job, or only a weekend job at most. I often missed out on socialising and spending time with my friends because of this.

Going into the pandemic, I struggled to begin with as my parents had no idea what I did at school and how long my work would take me to complete. When we went back to school, we were all behind on different topics and a lot of our class groups were mixed ability, so it was impossible to go through everything. This meant that some groups were left behind more than others.

I plan to go to university in September to study Maths, with the aim to do something in finance in the future. I changed my mind about going down the Medical route after seeing how Junior Doctors were treated during the pandemic and more recently going on strike. I’m really excited to go, but I am concerned about starting university in the middle of a cost-of-living crisis. I have been applying to lots of scholarships and bursaries over the past two years and will be working as much as possible over the summer to have money saved for when I start, as I cannot work during term time at my top choice university.
58% of disadvantaged high attainers said that the pandemic’s impact on their education has made them less motivated to study, compared to 55% of other high attainers. A similar proportion of disadvantaged (22%) and other (21%) high attainers said the pandemic made them more motivated to study. Interestingly, it was other Free School Meal students (who have lower levels of attainment) who were more likely to say the pandemic motivated them to study, at 31%.

46% of disadvantaged high attainers did not feel prepared for their next steps after Year 11, compared to 42% of other high attainers, 38% of the most affluent high attainers and 28% of private school students.

Views of COSMO participants regarding the impact of the pandemic on their progress were echoed by their parents: 67% of the parents of disadvantaged high attainers said that their child’s academic progress had suffered due to the pandemic, compared to 63% of the parents of other high attainers and 55% of those in private schools; though all are below the overall average of 70%.

The pandemic also had a substantial impact on many young people’s mental health and wellbeing, with average scores for the General Health Questionnaire (GHQ-12) much higher than previous cohorts. 49% of disadvantaged high attainers displayed signs of high psychological distress in Year 12, indicated by a GHQ-12 Score of 4 or above, compared to 43% of other high attainers. 41% of the most affluent high attainers reported this, as did 41% of private school students.

“I think as long as I’m happy in the career that I’m in and like it’s providing a stable income that I can rely on, then I think that’s the most important thing” - Opportunity Cohort participant, North East

Post-16 pathways

In the year following their GCSEs, 94% of disadvantaged high attainers reported ‘school or college’ as their main activity compared with 98% for other high attainers. About 1% of each group reported they were undertaking an apprenticeship. 1.6% of disadvantaged high attainers reported work as their main status, compared to less than 1% of other high attainers. 2.5% were categorised as not in education, employment or training (NEET), three times higher than the 0.7% of other high attainers, but less than half of the FSM average.

In terms of education or training providers, the majority of disadvantaged high attainers (85%) and other high attainers (92%) were at a school or sixth form for Year 13 (Table 3). Disadvantaged high attainers were nearly twice as likely to be at an FE college (12%) compared to other high attainers (7%).
Table 3. Location of education and training

<table>
<thead>
<tr>
<th></th>
<th>Disadvantaged high</th>
<th>Other high</th>
<th>Most affluent high</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>54.2%</td>
<td>63.2%</td>
<td>65.4%</td>
<td>51%</td>
</tr>
<tr>
<td>Sixth Form college</td>
<td>30.6%</td>
<td>28.9%</td>
<td>28.2%</td>
<td>28.2%</td>
</tr>
<tr>
<td>FE college</td>
<td>12.5%</td>
<td>6.7%</td>
<td>5.5%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Training provider</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Specialist college</td>
<td>2.30%</td>
<td>1.10%</td>
<td>&lt;1%</td>
<td>1.90%</td>
</tr>
</tbody>
</table>

Plans for the future

As shown above, the COVID-19 pandemic had a substantial impact on the education and personal lives of young people. It is therefore understandable that some students’ experiences may have influenced their plans for the future, from applying to university or thinking about their future career path.

Of those who had education plans pre-pandemic, 68% of disadvantaged high attainers said they changed their plans in some way due to the pandemic (similar to the Free School Meal average of 69%), compared to 56% of other high attainers who said the same (Figure 21). A similar pattern is seen for changes to career plans.

Figure 21: Whether student has changed their education or career plans due to the COVID-19 pandemic
In terms of information, advice and guidance, 70% of disadvantaged high attainers said they received IAG from their school; about average for all pupils. 74% of other high attainers said they had received some and an even higher 85% of private school pupils said so. Disadvantaged high attainers reported taking part in 1.4 school-based careers activities on average, compared to 1.5 of other high attainers. The group also spoke to 2.4 people on average about careers compared to 2.7 people for other high attainers.

**Higher education and career plans**

Disadvantaged high attainers are a key group for university access generally, and fair access to the most selective institutions more specifically. The majority (82%) say it is likely that they will apply to university, though this is five percentage points less than the 87% of other high attainers planning to apply (Figure 22). 98% of private school students say it is likely they will apply. Disadvantaged high attainers were also more likely to say that even if they apply, they do not think they will get into university (7% said this compared to 3% of other high attainers).

**Figure 22: Likelihood of student applying to university**

<table>
<thead>
<tr>
<th></th>
<th>Very likely</th>
<th>Fairly likely</th>
<th>Not very likely</th>
<th>Not at all likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantaged</td>
<td>53%</td>
<td>29%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>high attainers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other high</td>
<td>59%</td>
<td>27%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>attainers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students from disadvantaged backgrounds may find the process of applying to university, such as writing a personal statement, more difficult and daunting, without the support that other pupils receive.45

Indeed, this was something Hemlata from the Sutton Trust COSMO Youth Panel experienced (see below):
CASE STUDY: HEMLATA, YEAR 13, SOUTH WEST ENGLAND

At school, from Year 8 onwards, I realised I was quite academic, and I got joy out of fostering dedication towards what I was studying.

Ultimately, for GCSE, I chose a mix of subjects that interested me and were also useful for potential career paths. I flourished at GCSEs and got 10 grade 9s despite not being born in this country, mental health issues (especially over lockdown) and living in an area where not many go to university. I do wish I had an ‘older sister’ type figure in my life while making decisions around options, especially at A Level but also at GCSE, as my parents didn’t know and still don’t know how best to support me academically, as they didn’t grow up in the UK.

For A Level choices, I decided on Maths, Chemistry and Biology, with the intention of studying Biochemistry at university. I definitely experienced increased pressure starting Year 12 due to the heavier workload and the importance of A Level grades for university applications, but it was great to be studying subjects I love.

However, I did not always get to do everything I wanted to do as a teenager, not only due to financial limitations but the fact that I had to be home when my parents were working or one of my parents was abroad, as I have a younger sibling who I help to care for. I attended secondary school and now sixth form at two different schools, both with the majority of students from a more financially privileged background than me. I was able to partake in less ‘enrichment’ activities, such as sports clubs and get-togethers, than my peers did. Also, since I don’t come from a White British background, celebrations like Christmas/Easter meant I sometimes felt isolated from my peers. In the classroom, those with private tutors, expensive equipment and access to better academic facilities, but also more chance to relax, seem to do better. I have close friends who struggle to heat their homes and don’t have sufficient Wi-Fi and I don’t think that it’s fair that they have to compete with others more well off than them.

When applying to university, I found that my peers who had relatives who had gone to university in the UK had more knowledge about the process. It feels like it is about who you know who can help you with work experience and interview practice.

However, I also found ways to make the most of the resources available to me. Now I can’t wait to start an internship at a Biotech firm before heading off to university!
Attitudes to careers and jobs were very similar between the disadvantaged and non-disadvantaged high attainer groups. Both overwhelmingly agreed that a job or career was important to them, just over a third reported not really thinking about their future, and a majority of both felt it was more important to do something they enjoy rather than worrying about the future. However, when asked about what they are most likely to be doing in two years’ time, while the most common response for the whole sample was studying, disadvantaged high attainers were 10 percentage points less likely to report this than other high attainers, at 65% and 75% respectively. Though both figures are lower than the 85% of private school students who said the same (Figure 23). 11% of disadvantaged high attainers said they will most likely be in a full-time job, compared to 6% of other high attainers.

**Figure 23: What student expects to be doing in two years’ time**
Discussion

Ensuring that socio-economically disadvantaged students with potential are able to fulfill that potential throughout their time in education is key for social mobility. However, this report shows the extent to which this is not happening. Our analysis shows that such students are falling behind at GCSE compared to those who started secondary school with a similar baseline, with disadvantaged pupils in the top third of attainers at Key Stage 2 twice as likely to fall out of the top third at GCSE as those from better off homes.

Looking at the characteristics of this group, it is clear the impact that poverty and socio-economic inequality has throughout a child’s schooling. Those in the high potential group tend to have suffered from fewer disadvantages than other FSM eligible pupils. The level and persistence of poverty impacting the chances of being socially mobile. However, these differences are generally small in magnitude, and the impact of disadvantage on the high attaining group during their time in secondary school is also clear. Controlling for other demographic characteristics, this group fell behind similar non-disadvantaged students by three quarters of a grade in every subject.

Looking at the characteristics of this group reveals some of the factors that may be driving this; for instance, 16% are young carers (three times more likely than other high attainers - 5%), they are almost twice as likely to have Special Educational Needs, they are less than half as likely to have a parent with a degree, are four times more likely to live in a single-parent household, and just over half as likely to be taught in the highest performing schools. For the COSMO cohort particularly, not having a device to learn from during national lockdowns and accessing tutoring also played a role.

“It is imperative that the attainment gap for all levels of ability should be closed, and those at the higher end of the attainment spectrum should not be forgotten about.”

Without suitable support, disadvantaged high attainers tend to fall behind their equally talented peers. Underachievement at this level is likely to hold these students back even further through post-16 education and beyond, when they are competing against peers from more affluent backgrounds for university places and graduate jobs. Without adequate intervention, the social mobility of the next generation is under threat. There should be a national strategy to close the attainment gaps that have opened since the pandemic. Addressing these gaps should be a national priority, with a long-term plan in place, based on evidence.
To facilitate this, a review of funding given to schools to support disadvantaged students is clearly needed. Recent polling from the Sutton Trust found that 41% of school leaders are using the Pupil Premium to plug gaps in their budget; up from 33% in 2022.\(^{46}\) As schools are expected to spend their Pupil Premium on interventions to support highly able students,\(^{47}\) without funding improvements, schools will be stretched even further by delivering this support in their school.

The National Funding Formula should better reflect the level of need in schools, with disadvantage more highly weighted in the formula. Funding, whether through the Pupil Premium or the overall Funding Formula, should also take into account the persistence of eligibility for Free School Meals to better reflect the needs of the group.

This improved funding should include extension of the Pupil Premium to 16–19 year-old students in education and training. We know from other studies that the attainment gap between disadvantaged highly able students and their more affluent peers persists into post-16 education and beyond.\(^{48}\) This report has shown that this cohort entered post-16 education at a significant disadvantage, yet the funding dedicated to those students stops at 16. Extending the premium is vital so schools can continue this support for all disadvantaged students in their school until they leave for higher education and/or employment.

However, while investment is a necessary condition for closing gaps, it is not a sufficient one, and it is vital that schools use their funding wisely, to deliver impactful interventions based on evidence. Using the Sutton Trust/EEF Teaching and Learning Toolkit to inform strategies to close the attainment gap among those of all abilities is crucial. To particularly support disadvantaged pupils with high potential there are some other steps that schools can take, outlined as ‘Top 10 tips for schools’ in this following section of this report. These tips can help to ensure promising students from all backgrounds are identified and supported throughout their time at school. More detail on these recommendations is outlined in *Potential For Success*.\(^{49}\)

Tutoring is another key intervention to support students to continue to achieve their full potential throughout their education. Additional COSMO study analysis has found an association with catch-up tutoring as part of the National Tutoring Programme (NTP) (both one-to-one and small group) and better performance in GCSE TAGs, compared to the performance of similar individuals who were offered tutoring but did not take it up.\(^{50}\) While the figures regarding tutoring for disadvantaged pupils overall are encouraging, the high attainer group were less likely to have had any form of tutoring during the COVID-19 pandemic compared to other students eligible for Free School Meals. The NTP should be seen as a core part of the school system going forward, with delivery re-focused in the long term to tackle the attainment gap at all levels. While the government has recently reduced a planned cut to the subsidy for the programme in 2023/24,\(^{51}\)
in the longer term, central funding must increase to be sufficient for schools to embed the NTP into their provisions.

Also, a notable finding in the report was the very different profile of school attended by high attaining pupils of different backgrounds. Non-disadvantaged pupils tend to be educated at the schools with the lowest levels of FSM eligibility and the strongest exam results. Their disadvantaged counterparts are much more likely to attend schools with high levels of FSM. The analysis shows that those in more socially mixed schools progressed better at GCSE, showing the importance of high performing oversubscribed schools widening their intakes. Upcoming Sutton Trust work will explore further how schools can reform their admissions codes to widen access for disadvantaged pupils.

Many of the recommendations highlighted here are relevant across generations. But the unique experience of the generation captured in the COSMO study is also a reminder of the long-lasting impact of the COVID-19 pandemic on education for several year groups. A review of evidence on learning loss from the Education Endowment Foundation highlights that, particularly for younger age groups, attainment gaps between the poorest and richest students have widened since 2020, and a review from the House of Commons concluded that the COVID-19 pandemic has reversed a decade of progress in narrowing the attainment gap, with the Department for Education raising that it could take a decade to return to pre-pandemic levels. Moreover, thinking about the COSMO cohort specifically, the fact that their GCSE grades were determined by TAGs, means that the attainment gap for this group is likely to be even wider than evidence suggests. To tackle this, support for students who missed key content relevant for later years of education should continue.

**Post-18 transitions for the COSMO cohort**

Interventions to support highly able disadvantaged students after secondary education are also important, and particularly so for the COSMO cohort, due to progress to higher education and other pathways in summer 2023. Contextual admissions – where the social background of a university applicant is taken into account in the admissions process – should be used to widen access to higher education, recognising that the playing field is not level at the point of entry to university. Information regarding how contextual admissions are used at an institutional level should also be easily accessible and understandable for students before they apply.

“As schools are expected to spend their pupil premium on interventions to support highly able students, without funding improvements, schools will be stretched even further by delivering this support.”
Widening participation should be a key factor when universities are giving discretionary acceptances to those who have missed their offers this year. During the clearing process, applicants from disadvantaged backgrounds who have narrowly missed their offer grades should be given additional consideration in admissions decisions.

“The substantial impact of the COVID-19 pandemic on education highlighted in this report shows it is more vital than ever for universities to take contextual factors into account and recognise that grades may not reflect a young person’s full potential.”

Furthermore, when students arrive this autumn, universities should identify key gaps in learning at an early stage in the first term, and provide support if necessary, as well as support for student mental health and wellbeing. Elements of mental health and wellbeing support offered by universities should recognise the pandemic’s toll on young people. Life skills, such as communication and teamwork, should also be covered – employers have noticed that since the COVID-19 pandemic, fewer junior employees are arriving with these skills compared to pre-pandemic cohorts. Support of this kind should be accessible for students throughout their time in higher education.

As the cohort moves to the next stages in their education and career, this study will follow them. Future work using COSMO Opportunity Cohort data, including qualitative work, will dig deeper into how education experiences differ for this group compared to their more affluent peers, and explore how the inequalities discussed in this report develop into Key Stage 5 and beyond. However, acting on the recommendations outlined here is vital to ensure that following generations experience a more level playing field than this one has had. Without this, too many will continue to fall behind.
Top 10 tips for schools

Identifying highly able students

Despite the challenges in identification, it is still important to track highly able students, so your school can track the progress of the group and provide additional targeted support for those who have previously achieved highly but are falling behind.

All methods have limitations, but testing is likely to have fewer issues than identification by teachers, as it is easier to make the process transparent. Assessment of all students should be ongoing, starting when students are in primary school, and continuing throughout their time in education. Results of disadvantaged students should be considered within the context of their background.

Staff responsibility and organisation

Schools should consider designating a team of teachers as highly able coordinators, a group of staff with collective responsibility for implementing programmes and practices for the highly able.

A school’s highly able team should ensure all staff receive training on how best to cater for this group, coordinate the teaching of this group across the school and the sharing of best practice between schools.

Pupil premium funding should be used to support highly able disadvantaged students, to ensure they have access to activities and programmes tailored to their particular needs, and recorded in a school’s pupil premium report.

Interventions

Due to the difficulties in identifying highly able students, wherever possible, interventions to benefit the highly able should be available to all students. This should include stretch activities in classes and extra-curricular activities to be open to attend (with promotion to high able students where required).
Structured mentoring and tutoring programmes should be accessible for disadvantaged highly able students (notably through the National Tutoring Programme using pupil premium to subsidise costs).

Teachers should adapt the level of challenge and support given to pupils according to prior knowledge and need. Classroom assistants should support those in the class with stretch activities.

Setting should be used with caution, as it can harm the attainment of students in lower sets. If used, sets should be fluid, with regular opportunities for students to move between different sets, and appropriate measures to manage mixed ability classes, such as teaching assistants.

Interventions should, where possible, also engage the families, guardians and communities of the students involved. For those from disadvantaged backgrounds particularly, support from their family and wider community can be vital in ensuring their progression and attainment.
“Acting on the recommendations outlined here is vital to ensure that following generations experience a more level playing field than this one has had.”
Appendix A: Methods

A.1: Education Datalab research:

The National Pupil Database is used as a source for Key stage 2 (KS2) and KS4 attainment data from 2017 to 2021, for state school students only.\(^56\)

Disadvantaged pupils are defined as those eligible for Free School Meals (FSM) at least once in the six years up to the end of KS4. To determine who is a ‘high attainer’, pupils are ranked based on their KS2 prior attainment from five years earlier and are defined as those in the top tercile within their cohort. ‘Middle’ and ‘low’ attainers are defined as those within the middle and bottom terciles, respectively. KS2 tests changed during the period observed, notably in 2016 (2021 KS4 cohort) with the introduction of new tests measured by scaled scores. Previously, tests had been scored using National Curriculum levels.

For each cohort, the boundary KS2 scores for the top and middle terciles of attainment, using a combined score with reading weighted 25%, grammar, punctuation and spelling 25% and Maths 50%, were 106.25 for the top third and 100.5 for the middle third. For comparison with the previous system, the equivalents scores for the 2019 cohort were 5.18 and 4.56.

Within each cohort, around 10% of pupils do not have prior attainment data. This may be due to absence or because they were being educated outside England at the time tests would have been taken.

Pupils are also ranked based on their KS4 ‘Attainment 8’ scores to examine movement between terciles from KS2 to KS4; this measure takes into account results from 8 GCSE-level subjects including English and Maths.\(^57\) For the 2019 and 2021 KS4 cohorts, the boundary Attainment 8 scores for the top, middle and bottom terciles are shown in the table below:

<table>
<thead>
<tr>
<th>KS4 year</th>
<th>Lowest Attainment 8 score</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top tercile</td>
<td>Middle tercile</td>
</tr>
<tr>
<td>2019</td>
<td>56.00</td>
<td>37.00</td>
</tr>
<tr>
<td>2021</td>
<td>61.00</td>
<td>42.00</td>
</tr>
</tbody>
</table>

Attainment measure ‘Progress 8’ is also used to indicate how each student’s Key Stage 4 attainment compares to their previous attainment at Key Stage 2, showing how they have progressed in 8 subjects from Year 6 to Year 11.\(^58\)
This measure considers Key Stage 4 grades relative to grades a young person is predicted to receive based on their performance in Key Stage 2 tests taken at age 11 (SATs tests). Scores above zero represent an average grade that is higher than would be predicted based on age 11 performance alone, while scores below zero represent an average grade below that prediction.

Results for disadvantaged high attainers are compared to other students eligible for Free School Meals and other high attainers not eligible for Free School Meals.

A.2: Opportunity Cohort analysis:

For further analysis of GCSE attainment as well as the impact of the COVID-19 pandemic on highly able disadvantaged young people, data from the COVID Social Mobility and Opportunities (COSMO) Study is used. COSMO is a national longitudinal cohort study of over 13,000 young people in England, focused on the cohort of pupils who were in Year 11 in 2020/21 and had their GCSE preparations severely disrupted and ultimately their exams cancelled. Data here is presented from Wave 1 of the study, conducted in the winter and spring of 2021/22.\textsuperscript{59}

This research report is the first to look at the study's Opportunity Cohort. This is a group of 2,249 state school students with high academic potential (within the top third of English and Maths attainers at Key Stage 2) and are from socio-economically disadvantaged backgrounds (eligible for free school meals at any point during their secondary education). This involves 959 students who were part of a ‘boost’ sample to augment the size of the group in question, who have previously been excluded from COSMO analysis, and a further 1,290 students who are a part of the overall COSMO cohort that meet the ‘Opportunity Cohort’ criteria. Throughout the analysis section of this report, this group are referred to as ‘disadvantaged high attainers’.

Attainment data for this group again uses the measures Attainment 8 and Progress 8, accessed through data linkage to the National Pupil Database.
A.3: COSMO Panel case studies:

Student testimonials have been gathered from members of the Sutton Trust COSMO Youth Panel. This is a group of students which, whilst separate from the COSMO study itself, has members who are applicants to Sutton Trust programmes and have faced disadvantages and barriers of various kinds. As Sutton Trust programmes are targeted to students with similar characteristics to the COSMO Opportunity Cohort, the case studies gathered from the Youth Panel provide personal insights into the lives of high attaining young people from poorer backgrounds.

Some student quotes have been taken from a qualitative research piece which will be published as part of this series in the coming months.
References


13 Whittaker, F. (2018, September 12). £18m ‘future talent fund’ cancelled less than a year after it was announced. *Schools Week*. Available at: https://schoolsweek.co.uk/18m-future-talent-fund-cancelled-less-than-a-year-after-it-was-announced/


17 Holt, S. and Bellaera, L. (2019). *Driving attainment to increase university access*. WONKHE. Available at: [https://wonkhe.com/blogs/driving-attainment-to-increase-university-access/](https://wonkhe.com/blogs/driving-attainment-to-increase-university-access/)


27 This 6% will include those on bursaries to private schools, as well as households with considerable wealth but who report low income.


Anders, J. et al. (2021). *Pupils with graduate parents received an unfair advantage in their A-level results last year.* London School of Economics and Political Science: LSE COVID-19 Blog. Available at: [https://eprints.lse.ac.uk/111115](https://eprints.lse.ac.uk/111115)

Consistent with other COSMO publications, given that Progress 8 was not officially calculated for this cohort due to Teacher Assessed Grades, we estimated our own progress score for pupils in our sample by estimating the residual from a linear regression model of a pupil’s Attainment 8 score on their reading; grammar, punctuation and spelling; and Maths point scores from age 11/end of Key Stage 2 National Curriculum tests.

The score for the other high attainers (matched comparison) group is only slightly smaller at +0.30.


41 Yarde, J. et al. (2022). *Wave 1 Initial Findings - Future plans and aspirations. COVID Social Mobility & Opportunities (COSMO) study Briefing No. 3.* London: UCL Centre for Education Policy and Equalising Opportunities & Sutton Trust. Available at: https://cosmostudy.uk/publications/future-plans-and-aspirations


43 For findings on other measures see: https://cosmostudy.uk/publications/mental-health-and-wellbeing

44 The General Health Questionnaire (GHQ) involves 12 questions that indicate whether a person is experiencing psychological distress. More information about the measure can be found at: https://www.gl-assessment.co.uk/assessments/products/general-health-questionnaire/

The analysis is simplified by focusing on proportions above the threshold value of 4 and above. Given the non-clinical context in which this measure is being used, these scores are interpreted as an indicator of ‘high psychological distress’.


54 Holt-White, E. et al. (2022). Wave 1 Initial Findings – Mental Wellbeing. COVID Social Mobility & Opportunities (COSMO) study Briefing No. 4. London: UCL Centre for Education Policy and Equalising Opportunities & Sutton Trust. Available at: https://cosmostudy.uk/publications/mental-health-and-wellbeing

55 Jolly, J. (2023, May 2). Covid era graduates struggle with communication, say Deloitte and PwC. The Guardian. Available at: https://www.ft.com/content/a8b20502-8238-4655-ba82-30d6243332d9

56 As private school students typically do not sit exams at the end of Key Stage 2, and many sit International GCSEs (IGCSEs) at Key Stage 4 which are not recorded in the NPD.
57 Each grade a pupil gets is assigned a point score from 9 (the highest) to 1 (the lowest). Points are then added up, with English and Maths counted twice. More information on this measure can be found at: https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/11-to-16-years-old/gcse-results-attainment-8-for-children-aged-14-to-16-key-stage-4/latest#:~:text=Attainment%208%20is%20a%20way,8%20include%20English%20and%20maths

58 Like Attainment 8, Progress 8 uses the grades for 8 subjects including English and Maths, which are each counted twice. More information on this measure can be found at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/285990/P8_factsheet.pdf


60 More information can be found at: https://cosmostudy.uk/about/the-cosmo-youth-panel