Department for Education

Young Adult Outcomes for Pupils with SEN

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Authors: Kathryn Duckworth, Andy Ross and Carrie Harding: Verian Group

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Contents

List of figures

List of tables

Executive summary

Over 1.6 million children and young people in England have an identified special educational need (SEN), representing 18.4% - more than one in every six – of all pupils currently in school (DFE, 2024a). On average, their outcomes are poorer than their peers who do not have SEN, emerging at the earliest stages of assessment (DFE, 2024b), continuing throughout school and reflected in both academic performance (DFE, 2024c) and engagement (absences and exclusions; DFE, 2024d), and persisting into adulthood (DFE, 2024e; DFE, 2024f; DFE, 2018).

This report describes the lives of young people born in 1999/2000, who would have taken their GCSEs in the academic year 2014/15, and uses the SEN Code of Practice 2002[1] classifications of School Action, School Action Plus, Statement (mainstream) and Statement (special school) to capture the level of need and related provision received. With a focus on understanding the diverse nature of the subgroups within the SEN population, this report explores the characteristics, post-16 experiences and early adult outcomes (age 19/20) of young people who received different levels of SEN provision during school and compares them with their peers without any identified needs.

Many of the results presented here replicate other research in describing the characteristics of children and young people associated with having SEN, such as being a boy, coming from more socioeconomically disadvantaged homes, and having lower levels of academic achievement. The findings also build on the extant literature and explore early adult outcomes across a range of areas reflecting a greater focus on preparation for adulthood in a broader sense, providing insight into the variation across these groups into areas of mental health and wellbeing, health-related behaviours and indicators of independent living, as well as extending our understanding of variation in post-16 attainment and labour market outcomes.

Data

The findings are based on the second cohort of the Longitudinal Study of Young People in England (LSYPE2), a large-scale panel study which follows a sample of young people born in 1999/2000. Pupils across schools in England were first sampled when they aged 13/14 in Year 9, in the academic year 2012/13, and they turned 16 and took their GCSEs at the end of wave 3, the academic year 2014/15.

[1] assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/273877/special_educational_needs_code_of_practice.pdf

Preceding the introduction of the current SEND system, our measure of SEN comes from the National Pupil Database (NPD), captured in the spring of 2014 when young people were aged 14/15 (Year 10 / wave 2). In addition to the four levels of SEN provision recorded, we also include an additional group of young people with no identified SEN but who have a longstanding illness or disability (LSID) which parents reported as affecting their schooling. This is included as a proxy for those who might be classified as the "D" under the revised SEND classifications.

These five groups of our SEN population are then compared with their peers with no identified SEN. Executive Summary Table 1 provides details of the sample sizes and SEN status of the LSYPE2 cohort in terms of the level of provision received in Year 10 and indicates that 18.9% of the age 16/17 (wave 4) sample had SEN[2], rising to just over 1 in 5 (21.1%) with the inclusion of the LSID (No SEN Provision (NSP[3])) group.

[2] Figures here are broadly comparable with official statistics from the same year as our SEN measure was collected (age 14/15 in the academic year 2013/14) which show that 16.2% of pupils aged 14 were in receipt of SEN, with a further 3.9% having statements. Note also that pupils with SEN were oversampled as part of the LSYPE2 methodology (Kantar Public, 2015).
[3] We shorten the label of the LSID (No School Provision) group to LSID (NSP) from this point forward.

ES Table 1: SEN groups and sample sizes in the LSYPE2, by wave

Wave	**4**		**5**		**6**		**7**	
Calendar Year	**2016**		**2017**		**2018**		**2019**	
Age	**16/17**		**17/18**		**18/19**		**19/20**	
n / %	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
No SEN	6,333	78.9	5,762	78.9	5,052	78.6	4,436	78.5
LSID (NSP)	195	2.3	170	2.2	140	2.1	118	2
School Action	903	9.7	771	9.8	644	9.9	527	9.7
School Action Plus	532	5.4	431	5.3	358	5.4	293	5.5
Sub-total: School Action + School Action Plus	1,435	15.1	1,202	15.1	1,002	15.3	820	15.2
Statement	196	2.2	169	2.2	155	2.4	135	2.6
SEN School	112	1.6	91	1.6	74	1.6	63	1.8
Total SEN	1,743	18.9	1,462	18.9	1,231	19.3	1,018	19.6
Total SEN + LSID (NSP)	1,938	21.1	1,632	21.1	1,371	21.4	1,136	21.5
Total	**8,271**	**100**	**7,394**	**100**	**6,423**	**100**	**5,572**	**100**

Source: NPD, LSYPE2: waves 1, 2, 4 to 7 (unweighted ns; weighted %s)

Key findings

Gradients of need

- There are clear gradients associated with the different level of support needs across the range of indicators and early adult outcomes explored: as the level of need increases, individuals, broadly, do less well.
- For example, experience of bullying and the proportions who truant rise fairly steadily with the level of need, while locus of control, taking part in sport and spending social time with friends decline.
- This pattern is even more apparent for the more academic-related outcomes, such as reading, time spent on homework and the likelihood of applying to

university, with the pattern in Key Stage 4 (KS4) / GCSE achievement most acute.

- Similar associations are also found across early adult outcomes, such as receipt of government benefits and financial support from parents, and post-16 attainment outcomes.

- However, these patterns are not observed for all the outcomes considered, in particular those relating to mental health and wellbeing outcomes.

Mental health and wellbeing

- Across measures of both psychological distress (the GHQ-12) and personal wellbeing (ONS4), no clear pattern amongst the levels of SEN needs emerged.

- Young people in the LSID (NSP) group fare significantly worse than those in the No SEN group – higher GHQ-12 scores, greater anxiety, more reports of loneliness, and lower levels of happiness – however, those in the School Action group and those with Statements (mainstream) report relatively good levels of adjustment.

- Young people in SEN Schools report significantly higher levels of happiness but on other mental health and wellbeing outcomes were not significantly different to those in the No SEN reference group. We note, however, that this group is particularly small and that the measures available in the LSYPE2 data were designed for a general population and not for those with specific educational needs.

- Pupils who received School Action Plus support at school appear to be a particular risk group, reporting greater psychological distress, lower life satisfaction, lower feelings of life being worthwhile, higher anxiety, and higher loneliness at age 19/20 than those with no SEN.

- Higher levels of engagement in risky behaviours during school does not translate into greater incidence of drug and alcohol use in early adulthood for any of the SEN groups.

- Young people's perceptions of the impact of COVID-19 on various aspects of their lives are evident in the LSYPE2 cohort, but typically appear greater for those in the No SEN group than for those who had been in receipt of various forms of SEN provision at school.

Social life and engagement with others

- Young people who received SEN provision at school, particularly those with greater levels of need, appear to have smaller social circles, for example being less likely to take part in sport and doing so less frequently than those in the No SEN reference group.

- Those who had Statements, both in mainstream settings and in special schools, are also less likely to go out frequently with friends compared to those without any identified SEN and report spending more time with their families and alone during their free time.

- The perceived impact of COVID-19 on young people suggests that, for the areas asked about, those in the No SEN and LSID (NSP) groups felt the most negatively affected.

Achievement

As with KS4 achievement, the post-16 attainment outcomes follow the same graded pattern: greater levels of need and poorer overall achievement.

- Three-quarters (74.8%) of the No SEN group achieved a Level 3 qualification by age 19/20, compared to 60.1% of those in the LSID (NSP) group, less than half (44.1%) of those in receipt of School Action provision and with Statements (40.1%), and around a third of those in the School Action Plus group (32.2%).

- Academic qualifications are more common amongst the No SEN group and their uptake gradually decreases as support needs rise.

- Nearly half (45.4%) of those who were in SEN Schools at age 14/15 are still in full-time non-HE education at age 19/20.

Early employment outcomes and material circumstances

There are few substantive differences across the early economic and work-related outcomes explored here but these analyses provide a good baseline from which to explore later outcomes in subsequent work.

- Post-16 transitions in economic activity over a four-year period vary significantly across the groups. Most notably, as the level of need increases, the proportions moving to university declines while the numbers moving into work increases, particularly so for those who received School Action and

School Action Plus provision at school where just under half are employed at age 19/20.

- The high proportion of unemployed young people amongst those who received School Action Plus provision at school is particularly notable. At age 16/17, they make up 7% of this group, twice the proportion seen for those in the School Action group and higher than any of the groups explored. This figure rises to nearly 1 in 5 young people by age 19/20 and is comparable with the rate observed for those who were in SEN schools.

- Across all the SEN categories explored, receipt of benefit is higher than for the No SEN reference group, even after controlling for other factors.

- We also find that where debt is lower, other forms of financial support, including from parents, are higher, particularly those with greater levels of need, namely those who received School Action Plus and Statement provision, as well as young people who were in SEN Schools.

Concluding thoughts

The findings presented in this report replicate much of the existing research on the characteristics associated with young people who have SEN and their outcomes, extending it both to different tiers of need with the support system and a broader range of areas of early adulthood.

The results are in line with a graded level of support provided to young people with varying needs and requirements resulting from their SEN and demonstrate the value in taking a more detailed look within levels of provision to ensure that all areas of young people's development are being supported.

There is some tentative evidence to suggest a possible protective element of having been in a special school (SEN School) for those with the highest levels of support needs. In line with other research (Barnes & Harrison, 2017), our findings indicate that in contrast to other forms of SEN provision, young people in SEN Schools are no more likely to report experiencing bullying than those with no identified SEN. Young people in SEN Schools also report greater happiness than those in the No SEN group and no differences in relation to feeling lonely. Those with statements in mainstream provision are more likely to have been bullied in school, and to experience loneliness and lower life satisfaction in early adulthood. However, we are cautious in overstating these findings as our analysis relies on measures developed for a non-SEN population and there is evidence to suggest they might not be appropriate for those with higher levels of need or specific challenges such as

language difficulties. Further research should attempt to use assessments tailored specifically for those with additional needs and disabilities.

Finally, these findings demonstrate the merits of an additional layer of provision for those young people whose longstanding illness or disability affects their schooling, here defined as the LSID (NSP) group, whose outcomes are typically poorer than those without any identified need. The evidence presented here suggests that this group may represent a currently under-supported set of pupils.

Introduction

In 2023/24 over 1.6 million pupils in England have an identified special educational need (SEN), an increase of 101,000 from the previous academic year 2022/23 and continuing an upward trend since 2016. This figure represents 18.4% of all pupils, with the majority in mainstream schools (DFE, 2024a). On average, their outcomes are poorer than their peers who do not have SEN, emerging at the earliest stages of assessment (DFE, 2024b), continuing throughout school and reflected in both academic performance (DFE, 2024c) and engagement (absences and exclusions; DFE, 2024d), and persisting into adulthood (DFE, 2024e; DFE, 2024f; DFE, 2018a).

Yet children and young people with SEN are a diverse group and the averages that frequently get reported are often unable to take into account this heterogeneity: identified SEN range from comparatively minor to the most severe and the characteristics of those within this population vary (Barnes & Harrison, 2017; DFE, 2024a). Understanding the ways in which background factors, individual experiences and outcomes differ across this population is crucial for developing policies and building appropriate mechanisms that best support all children and young people in achieving their full potential and ensuring they lead happy and fulfilled lives.

Using data from the second cohort of the Longitudinal Study of Young People in England (LSYPE2), this report explores the variation in individual characteristics and early adult outcomes across young people who received different levels of SEN provision in secondary school and compares them with their peers without any identified needs. While its definitions of SEN fall under the previous categories of provision, by using the LSYPE2's rich, large-scale survey data, we seek to address some of the evidence gaps other studies are unable to speak to due to their limitations in being able to disaggregate sub-groups of the SEN population or benchmark against a meaningful reference group.

The central aim of this research is to take a broader, more holistic view of young people's development and examine in detail how the early adult outcomes of young people identified with different types of SEN vary and compare to those without. Our interest lies in understanding the post-16 experiences of these groups as they make the transition to adulthood considering a range of outcomes which better capture their preparation for happy, healthy and productive adulthoods.

Context

Understanding the lives of young people with SEN is an important area for government and is a policy area which has seen a number of reforms during the lifetime of the LSYPE2 study (see, for example, the Children and Families Act

(2014), the SEND Code of Practice, 2015 and SEND Improvement Plan, 2023, as well as further developments planned by the current government (McKinnell, 2024)). One of the key developments within this landscape has been changes to the broad levels of support given to children and young people, how needs are defined and measured, as well as related shifts in guidance, standards and investment.

Changing classifications

Defining special educational needs is not a straightforward endeavour. The current SEND (Special Educational Needs and Disabilities) population are classified into one of two groups:

- Those receiving **SEN Support**: 13.6% of all pupils. SEN Support covers provision that is in addition to, or different from, that given to same age children as part of their schooling. It is provided for those who are identified as having a learning difficulty or disability which requires support over and above the school's usual curriculum offer. The most common type of need for those with SEN Support is speech, language and communication needs.

- Pupils with an **Education, Health and Care (EHC) plan** make up 4.8% of all SEN. A local authority may issue an EHC plan for a pupil who needs more support than is available through SEN Support and considers the child's specific needs and any relevant health and social care needs; sets long term outcomes; and details provision. The most common type of need for those with an EHC plan is autistic spectrum disorder (ASD) (DFE, 2024a).[4]

The current classifications follow reforms made to the SEND system introduced by the Children and Families Act (DfE, 2014) which sought, amongst other things, to strengthen the rights of children with SEN, ensuring better support and accommodations. These changes also saw the previous categories of **School Action** and **School Action Plus** replaced by a single category of SEN Support and **Statements of Special Educational Needs** by the EHC plan.

Transition from the old categories to the new took place between September 2014 and April 2018 (see for example, DfE, 2019), the period when the measure of SEN in the LSYPE2 was captured using the National Pupil Database (NPD). As such, our data reflect the earlier classification of SEN types and not the current one. While this makes direct comparison between the LSYPE2 cohort and pupils in the current

[4] Note that many autistic individuals prefer not to use the term 'disorder' to describe themselves, opting instead for the term 'condition'. Moreover, guidance from the National Autistic Society on language advises against using the word 'disorder', favouring 'an autistic child or young person' or 'has been diagnosed as autistic'. However, census categories have not yet been updated to reflect this and so we use the formal category as it is currently captured in the NPD data for consistency.

SEND system less than perfect, our approach (see Chapter 2 for further detail here) is able to distinguish between all the possible levels of SEN provision available in the data in an attempt to draw out any variations that might exist between them.

SEN Types: Old vs. new language

SEN data for the LSYPE2 cohort pre-dates the changes made under the new SEND system and is based data on the old categories of **School Action**, **School Action Plus** and **Statements** of SEN (see SEN Code of Practice 2002). To further distinguish those with Statements, we separate out those in mainstream settings from young people receiving provision in special schools, here referred to as **SEN Schools**.

Moreover, the indicator drawn from the National Pupil Database (NPD) only records whether pupils have a Special Educational Need, not whether they have a disability. Therefore, the language and definitions used throughout this report and its analyses will refer to these earlier categories and use the acronym **SEN** rather than SEND. Where we refer to SEND, it is in the context of current policy, research specifically using SEND, and/or official figures relating to current participation or destinations.

For more detail on how these groups are defined in the LSYPE2 data, see the section on Identifying the SEN sample.

Existing evidence

Post-16 destinations

The most recent set of official figures on post-16 activity indicate that in the first year after completing their Key Stage 4 (KS4) studies and in the academic year 2021/22[5], nearly all young people (93.9%) are recorded as having sustained education, employment and apprenticeship destinations[6] (Official Statistics, 2024e). For those without any identified SEN, this figure rises to 94.6%. It falls to 88.8% for those with SEN support and sits at a slightly higher at 90.0% for those with an EHC plan. This higher proportion amongst those with an EHC plan reflects the fact they are more likely to have sustained education pathways than pupils with SEN support: 85.4% and 79.5%, respectively. They are, however, less likely to have either sustained

[5] Note this period covers destinations during the coronavirus (COVID-19) pandemic. See Chapter 7 for a descriptive overview of young people's perceptions of how COVID-19 impacted the lives of the LSYPE2 cohort.
[6] A 'sustained destination' is one defined as having six month of continuous activity – education, apprenticeship, or employment – here, between October and March 2021/22.

apprenticeship (1.4% compared to 3.7% of those with SEN support) or employment destinations (3.2% against 5.6%).

Similar proportions were also observed for young people completing KS4 in the same year as the LSYPE2 cohort (2016/17, DFE, 2018b): 94% of all young people were in sustained education, employment or apprenticeships, compared with 89% of pupils with SEN. Pupils with SEN were also less likely to go into any sustained education destination (81%) than all other pupils (87%), but again those with statements[7] were just as likely (87%).

The progression rates into Higher Education[8] (HE) for pupils with SEN also lag well behind those of their peers with just 8.9% of those with an EHC plan in university by age 19 (2021/22 figures, DFE, 2023) and 24.2% for those with SEN support, compared to 51.2% of pupils without any identified SEN. For pupils receiving SEN support, this progression is at its highest level since these records have been captured. Note, however, that while progression rates rose for all three groups from the previous academic year, the increase remained largest for those with no SEN.

Young adult outcomes for pupils with SEN

Outcomes in early adulthood for young people who were identified as having SEN at school are also consistently poorer than those who did not have a recorded SEN. For example, analysis of post-16 education and labour market activities and outcomes using the Longitudinal Education Outcomes data (LEO; Anderson and Nelson, 2021) indicates that individuals who have SEN have poorer labour market outcomes than their peers without. Their analysis found that labour market outcomes measured 15 years after young people took their GCSEs indicate 63% of those with no identified SEN were in employment, with 6% claiming out of work benefits. However, for those with SEN without a statement these proportions were 50% and 15%, respectively, and for individuals with a statement of SEN were 39% and 33%. The results for earnings follow a similar pattern with the no SEN group reporting average earnings of £24,000, those with SEN without a statement£20,000, and those with a statement £17,000.[9]

Anderson and Nelson's analysis also demonstrates the returns to education over and above SEN status. For example, young people with SEN who completed a

[7] Or EHC plans where transition to the 2014 SEND system had taken place.
[8] Official statistics reporting participation in further education (FE) and skills measured at age 19+ is measured slightly differently but indicate that in 2023/24 learners recorded as having a learning difficulty or disability (LLDD) account for 19.2% of the FE cohort, an increase of 7.0% from 2022/23.
[9] Data for this study uses HMRC tax and benefit records alongside further education and higher education figures to capture other main activity outcomes including other education destinations, no sustained activity, and where no activity is recorded. As such, the results are not directly comparable with the LSYPE2 cohort which only has data for those who completed the survey.

university degree are more likely to be in employment and have higher earnings than those not identified with SEN but who did not graduate[10]: 64% of graduates identified with SEN were recorded as being in employment 15 years after completing their GCSEs, with an average earnings of £26,000 and a further 4% claiming out of work benefits; compared with 59% of non-SEN non-graduates, with average earnings of £21,000 and 9% in receipt of out of work benefits.

More recent evidence from these authors using the LEO dataset further indicates that the presence of a statement of SEN significantly reduces the probability of achieving a 'good outcome'[11] in their mid to late 20s. The presence of a statement of SEN is also associated the highest probability of being in a 'poor outcome'[12] (Nelson and Anderson, 2024).

Earlier research by DfE (2018a) similarly using the LEO data, again with matched information from the DWP and HMRC, also finds that pupils with SEN were 25% less likely to be in sustained employment aged 27 when compared to their peers who were not identified with SEN and 3.7 times more likely to be on out-of-work benefits. Note, however, this study only reports differences between those identified with SEN and their peers who were not and does not distinguish between the level of SEN support provided.

There is some evidence on the subjective and psychological wellbeing of children with SEN, as well as their relationships with others (Barnes & Harrison, 2017; Crowley, Khriakova, Knudsen and Reddin, 2023) but less that focuses on broader life outcomes such as health and indicators of independence into adulthood.

In a follow-up to our work on post-16 pathways across the LSYPE2 cohort, we examined the experiences of young people at age 19/20 within the different pathway groups (adjusting for a range of factors), which also provides some initial understanding of the experiences of those with SEN. We found that young people with SEN were more likely to have mixed outcomes (a balance of good and less good outcomes), compared to those without SEN. For example, young people with SEN were more likely to have low attainment, but often very good life satisfaction and psychological wellbeing and, among those in paid work, positive evaluations of their employment. Note, however, that in many cases differences with other young people were no longer statistically significant after adjusting for KS4 scores,

[10] Note, this result was not observed for graduates with statements of SEN in comparison with no SEN non-graduates.
[11] A 'good' labour market outcome is a measure combining earnings and employment and is defined as achieved when an individual was in paid employment for at least one day in each of the 12 months of the 2017-18 tax year **and** had upper quintile earnings.
[12] A 'poor' outcome identifies an individual who was claiming out-of-work benefits for at least one day in each of the six or more consecutive months of the 2017-18 tax year.

suggesting that prior attainment was driving a lot of the difference and highlighting the need to take into account associated factors when exploring group variation.

Report aims

By using rich, longitudinal, large-survey data, not available in many studies comparing SEN populations with their no SEN peers, our aim is to provide a more detailed understanding of the diverse subgroups within the SEN population that sit behind the headline categories and capture in detail any differences in their secondary schooling experiences and transition to adulthood. The report also describes the main activities of these different groups four years post-16, as well as provides an overview of how young people with SEN perceived the impact of the disruptions cause by the COVID-19 pandemic on their studies, employment, health and social lives.

Structure of the report

The remainder of the report is structured as follows: our Approach chapter sets out the different SEN groups used in the analysis and how they are defined and includes a section on the caveats and limitations of this approach, including attrition and survey response amongst the SEN population. The Data and Methods chapter describes the LSYPE2 data in more detail, providing an overview of our method and related analytic plan, as well as an overview of the variables used and variation in the mode of assessment.

The analysis comprises four chapters. The first two core analytic chapters explore variation between the six identified groups of interest in terms of factors associated with different levels of SEN provision and variation in the early adult outcomes of each, followed by two additional sets of analyses exploring some of the longitudinal data in the LSYPE2 and separately young people's perceptions of COVID-19.

The report concludes with a summary of the main findings and key themes.

Approach

The central aim of this report is to describe in detail the characteristics, experiences and outcomes of the diverse subgroups within the SEN population, whilst anchoring their comparison against young people without identified needs. However, as noted, our measure of SEN provision pre-dates the revised classifications introduced under the current SEND system and so we are limited by earlier definitions. Moreover, the study of young people with additional needs is not itself uncomplicated and there may be concerns about differential attrition rates and/or the validity of some responses given potential difficulties or differences in interpreting certain questions.

This chapter outlines our approaches to these issues, the first step in which is to define the subgroups of interest.

Identifying the SEN sample

We use the second cohort of the Longitudinal Study of Young People in England (LSYPE2) to investigate variation within and between the different levels of provision within the SEN population. Our measure of SEN comes from the matched National Pupil Database (NPD) and was captured in Spring 2014 when young people were aged 13/14 (wave 2 / Year 10) and identifies the following levels of provision:

- **School Action**: A graduated approach to SEN, used when a child is not making progress and there is a need for action to be taken by the school.
- **School Action Plus**: An increased level of support for pupils who need more help than they can received on School Action, which may involve outsourced specialist help.
- **Statement**: A legal document detailing a child's educational needs and setting out how the Education Authority will meet those needs.
- **SEN School**: SEN schools in England offer specialised provision tailored to children and young people with various learning needs and disabilities. Children and young people attending special schools will have a statement of SEN in place.[13]

[13] Our definition does not include young people in pupil referral units (PRUs) more typically attended by those excluded from mainstream schools for behavioural problems, which is often (although not always) a temporary measure. They were also too few (n = 16) to consider as a separate group and therefore pupils here were allocated according to the level of SEN provision they received, i.e. no SEN (n = 1); School Action (n = 1); School Action Plus (n = 13); Statement (n = 1). Attrition in Wave 7 reduced the overall figure in our analysis of early adult outcomes to just n = 5: School Action Plus (n = 4); Statement (n = 1).

These four groups comprise 18.9% of young people received SEN provision (n = 1,743, see Table 1.[14] Official Statistics from the same year as the LSYPE2 data were collected indicate a slightly higher proportion of pupils aged 14 in the SEN population: 20.1% of 14 year olds (16.2% in receipt of SEN Support and 3.9% with statements: see National tables: SFR 26/2014: Table 5D).[15] Our slightly lower figures for the SEN Support equivalent indicator (i.e. School Action or School Action Plus in our data; 15.1%) likely reflecting attrition and/or lack of consent to match with NPD data from this group in the LSYPE2 cohort more broadly but note that the proportion in receipt of statements (3.8%: 2.2% in mainstream settings and 1.6% in special schools) is almost identical.

We also include a further group of young people with no identified SEN but who have a parent-reported longstanding illness or disability (LSID) which affects their schooling[16] as a proxy for those who might be classified as the "D" under the revised SEND classifications: the LSID (No SEN Provision (NSP)) group.

Table 1 shows the type of LSID reported by parents, the majority of which are physical: the most common LSID reported is chest or breathing-related difficulties (25%), followed by problems or disabilities with limbs, back and/or next (17%), and then digestive or gastrointestinal problems (13%). These pupils may fall short of SEN thresholds. Equally, it may be that their needs have been missed or are yet to be classified[17] – the 12 pupils with behavioural problems or the seven individuals with 'autism, Asperger's syndrome or other ASD', for example - or simply that parents' views differ from the school's. Regardless, these individuals represent a group of pupils whose day-to-day school life is reported as being negatively affected and as such they may benefit from additional learning supports or resources. Inclusion of this group allows us to explore how these young people, who for whatever reason have missed out on provision or possibly do not meet the intervention requirements, might differ from the core SEN groups as well as those without any additional needs or reports of school-related difficulties.

[14] Although the information on SEN provision was collected at age 13/14, the figure 18.9% relates to the Wave 4 sample when they were aged 16/17, because this was the point at which they gave permission to link with NPD.
[15] Across all pupils in the academic year 2013/14, the proportion is slightly lower: 17.9% of all pupils in schools in England were recorded as having special educational needs, with 2.8% having statements.
[16] Parents were asked whether this disability either caused them difficulty with doing their schoolwork and/or difficulty regularly attending school.
[17] Our own further analysis indicates that there is slight movement between the SEN groups and LSID (NSP) category between Years 9 – 11 and suggests that some of these pupils might be borderline in terms of their eligibility for SEN provision. For example, 28 of the LSID (NSP) group were receiving School Action (n = 23) or School Action Plus (n = 5) in Year 9, and 12 were receiving School Action (n = 2) or SEN support (n = 10) in Year 11. These additional tables are available on request.

Table 1: Type of longstanding illness, disability of infirmity for those with an LSID that affects schooling but have no identified SEN

Type of longstanding illness, disability or infirmity	n	%
Chest or breathing problems, asthma, bronchitis	48	25%
Problems or disabilities with arms, hands, legs, feet, back or neck	34	17%
Stomach, liver, kidney, or digestive problems	23	13%
Severe disfigurements, skin conditions, or allergies	24	12%
Learning difficulties	19	9%
Other health problem or disabilities	18	9%
Migraines/headaches	10	6%
Heart, blood pressure, or blood circulation	9	5%
Diabetes	10	5%
Mental illness/depression	9	5%
Behavioural problems/hyperactivity	12	5%
Other hormone deficiencies/dysfunctions	7	4%
Hearing problem	7	4%
Autism, Asperger's syndrome or autistic spectrum disorder	7	3%
Sight problem	3	2%
Seizure disorders	3	2%
Progressive illness not included elsewhere	3	1%
ME or chronic fatigue syndrome	3	1%
Brain problems/injury	2	1%
Genetic syndromes not included elsewhere	1	0%
Speech or language problem	1	0%
Total Conditions	**253**	**130%**
Total YP with a condition that impacts school + NO SEN	**195**	**100%**

Source: LSYPE2: waves 1,2, and 4 (unweighted Ns and %s)

Together these five groups make up our SEN population and are then compared in all the analysis presented with their peers without any identified SEN. Table 2 provides details of the sample size and SEN status (unweighted numbers and weighted percentages) of the LSYPE2 cohort in terms of the provision received and indicates that 18.9% of the age 16/17 (wave 4) sample had SEN, rising to just over 1 in 5 (21.1%) with the inclusion of the LSID (NSP) group.

Table 2: SEN groups and sample sizes, by wave

Wave	**4**		**5**		**6**		**7**	
Calendar Year	**2016**		**2017**		**2018**		**2019**	
Age	**16/17**		**17/18**		**18/19**		**19/20**	
N / %	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
No SEN or LSID	6,333	78.9	5,762	78.9	5,052	78.6	4,436	78.5
LSID (NSP)	195	2.3	170	2.2	140	2.1	118	2
School Action	903	9.7	771	9.8	644	9.9	527	9.7
School Action Plus	532	5.4	431	5.3	358	5.4	293	5.5
Sub-total: School Action + School Action Plus	1,435	15.1	1,202	15.1	1,002	15.3	820	15.2
Statement	196	2.2	169	2.2	155	2.4	135	2.6
SEN School	112	1.6	91	1.6	74	1.6	63	1.8
Total SEN	1,743	18.9	1,462	18.9	1,231	19.3	1,018	19.6
Total SEN + LSID	1,938	21.1	1,632	21.1	1,371	21.4	1,136	21.5
Total	**8,271**	**100**	**7,394**	**100**	**6,423**	**100**	**5,572**	**100**

Source: NPD; LSYPE2: waves 4 to 7 (unweighted Ns; weighted %s)

Attrition amongst SEN groups

Young people with SEN were oversampled along with other disadvantaged groups where the expectation of attrition is higher. As Table 2 shows, the sampling weights have been very effective in maintaining the distribution of the SEN groups across four waves. However, higher attrition across our SEN groups means that our sample is unlikely to be fully representative of *all* young people with SEN.

Seventy percent of young people with no SEN who responded at age 16/17 remained in the study at age 19/20. This compares to 55% to 61% of the LSID (NSP), School Action, School Action Plus groups, and those who had attended a SEN School. The retention of young people with a statement (69%) was similar to those without SEN.

A note on survey response data amongst the SEN population

Defining SEN is not always a straightforward endeavour, and neither is analysing it: missed or mis-specified SEN identification; concerns around the measures used and their appropriateness across young people with diverse needs given the original population-based sampling frame; as well as difficulties engaging with the survey itself, particularly for those with higher support needs all present possible caveats for our study.

Types of SEN are varied and cover a range of needs including speech, language and communication needs; learning difficulties; ASD; and social, emotional, and mental health needs (DFE, 2024a), some of which might make it more challenging for young people with SEN to accurately complete the surveys.

For example, many measures of mental health and wellbeing, including those in the LSYPE2, have been primarily developed for use with neurotypical populations. However, there are several reasons why these instruments are less appropriate for those with intellectual disabilities and/or neurodiverse groups, such as potential difficulties understanding the language used or with reading; challenges with social skills, communication, emotional understanding and reflexive thinking; and high levels of co-occurrence between types of SEN need. Young people with speech, language and communication needs may also find it harder to describe negative events, such as bullying (Hobson, et al., 2022). In addition, measuring anxiety in individuals with intellectual disabilities can be complicated because some of its indicators can overlap with the presence of other needs, such as social, emotional or mental health diagnoses or ASD, making it hard to disentangle one from the other (Oliver, et al., 2020, 2022).

Other measures may be more suitable for individuals with certain needs. A recent study of autistic adults, for example, reports that GHQ-12 has good psychometric properties amongst this population at least (Mayhew, Stuttard and Beresford, 2020) suggesting that our indicator of psychological distress should operate adequately for some pupils. Some with more moderate needs, physical disabilities or those who had assistance while completing the survey might equally have no or very few challenges engaging with its questions.

Some readers might also be concerned about the methodological and/or ethical issues relating to research on children and young people with additional needs in terms of the appropriateness of certain measures and / or the potential for social desirability in responses.

We recognise there are methodological limitations within the current study and attempt to counter the complex interplay between studying young people with SEN and our outcomes of interest in a number of ways. This includes using the complex sampling weights to adjust for any attrition between waves ensuring that results are representative of the initial LSYPE2 cohort, which oversampled young people with SEN, and control for the method used for data collection (see Figure 1 and related commentary for further discussion).

We also conducted a number of sensitivity analyses and robustness checks to identify potential differences in interpretation or difficulties some respondents might have answering particular questions across many of the more subjective items used in our analyses. These are presented in Appendix A and suggest that while some caution is to be recommended for interpretations in relation to the life satisfaction score and the measure of anxiety for those who attended special schools, the other single-item ONS measures of subjective wellbeing broadly operate adequately across our different groups.

Furthermore, our report uses longitudinal analysis to explore change over time and examine whether any differences observed between the different SEN groups identified reflect differential developmental patterns amongst young people with varying levels of additional need (Chapter 6: Change over time).

The analysis of young people's perceptions of how COVID-19 has impacted their lives also includes robustness checks to assess whether measures of more subjective mental health and wellbeing questions are being answered in line with more objective and well-validated assessments (Chapter 7: Perceptions of COVID-19).

Data and methods

Overview of the LSYPE2

We use data from the second cohort of the Longitudinal Study of Young People in England (LSYPE2), a large-scale panel study which follows a sample of young people born in 1999/2000. Pupils were first sampled when they aged 13/14 in Year 9, across schools in England, in the academic year 2012/13 and they turned 16 and took their GCSEs at the end of wave 3, the academic year 2014/15.

In wave 1, LSYPE2 achieved a response rate of 71 per cent, representing an achieved sample of 13,100 young people (Baker, Dawson, Thair and Youngs, 2014). To date, data have been collected annually resulting in nine waves. In parallel with our other recent reports, this report focuses predominantly on data gathered to wave 7, collected in in 2018/19, when the cohort were aged 19/20; four years after completing compulsory education. Our final analytic chapter does, however, present some preliminary findings from the two most recent waves of data and explores the impact young people perceived the COVID-19 pandemic had on their lives.

Table 3 provides an overview of timings in the LSYPE2, detailing the age, calendar and academic year (or equivalent) of the cohort, by wave.

Table 3: Age and timing of the LSYPE2 cohort

Wave	Academic Year	Actual Age (Years)	School Year and Equivalent
4	2015/16	16 / 17	Year 12 / Post-16 + 1
5	2016/17	17 / 18	Year 13 / Post-16 + 2
6	2017/18	18 / 19	Possible first year of university / Post-16 +3
7	2018/19	19 / 20	Post 16 + 4
8	*2019/20*	*20 / 21*	*(COVID-19 pandemic)*
9	*2020/21*	*21 / 22*	*(COVID-19 pandemic)*

The data collected as part of the LSYPE2 are very rich and enable a very broad range of individual and family background characteristics, attitudes and experiences, as well as early adult outcomes to be considered.

Data collected through individual interviews in the LSYPE2 are also further supplemented by linkage to the National Pupil Database (NPD), providing information on attainment at GCSE/KS4 and, vitally, indicators of SEN provision. As such, and more so than many

other datasets, the LSYPE2 allows an unprecedented look at the sub-groups within the SEN population alongside a non-SEN general population against which to compare.

Analysis

The analysis comprises four chapters that explore variation between four sub-groups of the SEN population (School Action, School Action Plus, Statement, SEN School), as well as those with no formally identified need but whose schooling is reportedly affected by a longstanding illness or disability, LSID (NSP), and compares them against young people with no SEN (see section on Identifying the SEN sample and Table 2 for sample sizes).

1. Describing differences in young people with SEN

The first stage in our analysis examines the characteristics of young people in each of the six categories, describing their main activity transitions between ages 16 and 20 and reporting the absolute, or face value, differences between the groups across a range of individual and family-level factors, as well as a range of measures capturing educational attitudes and experiences at school, positive activities and social engagement.

The analysis focuses on simple descriptive statistics and appropriate statistical tests where relevant.

2. Early adult outcomes

The next set of analyses examines variation in a wide range of early adult outcomes at age 19/20. Differences in the outcomes of our SEN provision groups were estimated using multivariate regression analysis, with 'no SEN' young people as the reference, or comparison group. Young people with no SEN is a very large group (81.1%) and therefore most outcomes for this group were similar (although not identical) to the population average. Unless stated otherwise, all reported differences are statistically significant at $p < .05$, meaning the chance of an identified difference not existing in the population from which our sample was drawn was 5% or less.

Three regression models were estimated for each outcome: (1) an unadjusted model; (2) a model adjusted for a pre-defined set of controls that might otherwise account for the differences found; and (3) a model further adjusting for differences in KS4 attainment.

As our descriptive analysis shows, there are some important correlates of SEN, which if left unaccounted for might suggest an association with SEN where none exists or mask an association where there is one. As reported in the literature and presented in our report: SEN is more common among boys than girls, a little higher among certain ethnic minorities, and more prevalent among socially disadvantaged young people. Our model 2 estimates therefore include controls for gender, ethnicity, eligibility for free school meals

(FSM) in the last 6 years[18], and parental education. By adjusting for these controls, we get a more accurate estimate of the true association between level of SEN Provision and the outcome being examined.

In our final model, we further adjusted for differences in young people's KS4 attainment. Unlike our other controls, which help to reduce any bias in the estimation of the association between SEN and an outcome, attainment at age 16 is considered a 'mediator', because it is often on the pathway between having a special educational need and early adult outcomes. By adjusting for KS4 attainment we get a better understanding of the extent to which the differences in outcomes that are associated with level of SEN provision, are a consequence of these young people having low levels of attainment. Differences that remain after adjustment are then interpreted as the effect of level of SEN provision over and above them having lower attainment.

For ease of interpretation, post-regression marginal effects were estimated so that we could plot the results as mean scores or prevalences.

Understanding mode of assessment

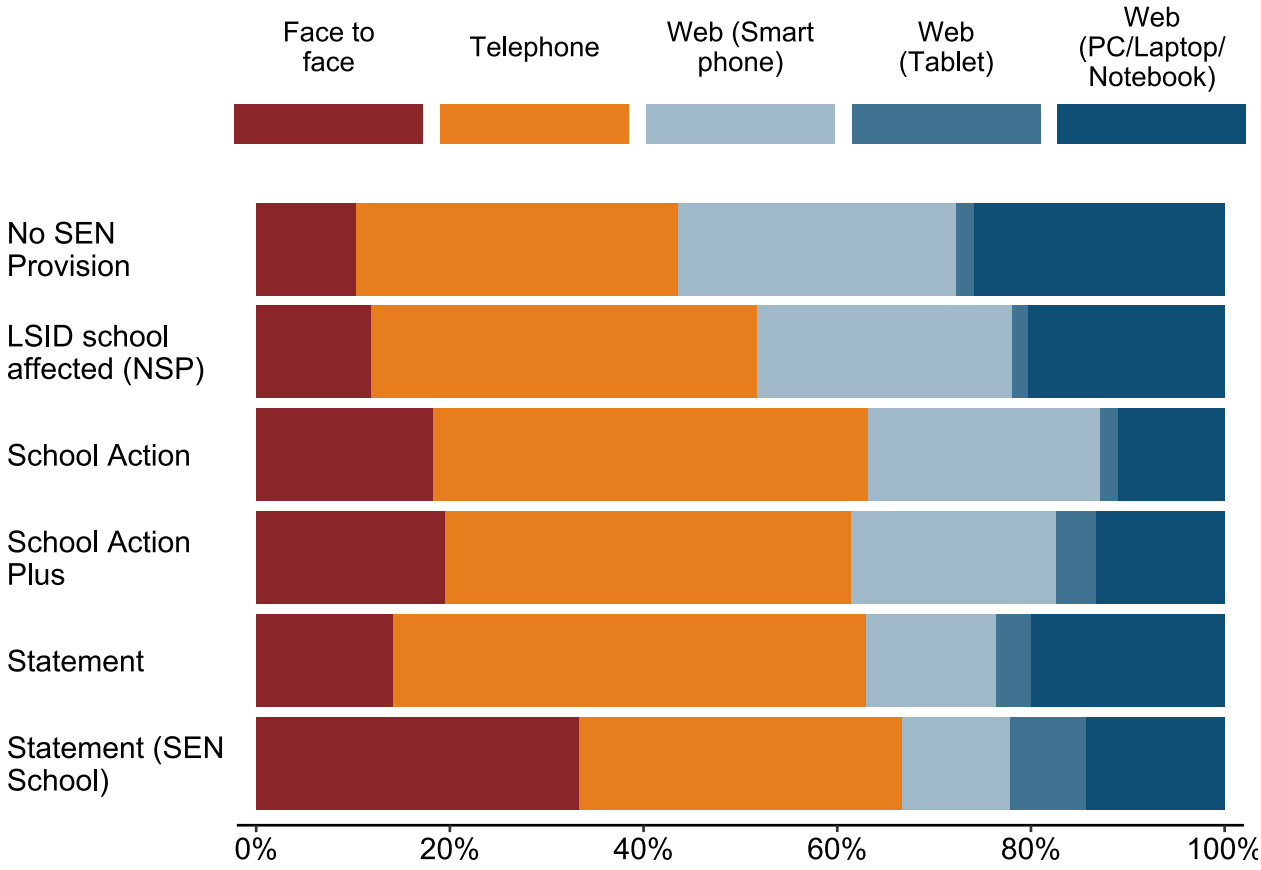
We also adjust for differences in mode of data collection, that is the method used for collecting young people's responses to the survey, at age 19/20. Three main modes of data collection were used: (1) Online via the web; (2) Telephone interviews; and (3) Face-to-face. Online responses were either via a personal computer, tablet, or mobile phone.

Mode of data collection can have its own effect on people's responses to a survey. For example, respondents are generally more candid in their responses to sensitive questions when the survey is conducted through self-completion, such as online, where the question appears on a screen and a response selected without any interaction with another individual, than they are in a face-to-face interview or over the telephone (Kreuter, Presser and Tourangeau, 2008).

Figure 1 shows the distribution of the different modes of data collection across our SEN provision groups and show clear disparities in data collection mode. Young people who attended a special school in Year 10, for example, were far more likely to have a face-to-face interview at age 19/20 (33.3%) than those with no SEN (10.3%). Furthermore, all young people with some level of SEN need, were more likely to have either a face-to-face or telephone interview (61.4 to 66.7%) when compared to those without any identified SEN (43.5%).

[18] Controls were sourced from LSYPE2 Wave 2 when young people were in Year 10. FSM eligibility in the last 6 years relates free school eligibility at any time between Year 4 and Year 10.

Figure 1: Interview mode, by SEN status



Source: NPD; LSYPE2: waves 1, 2 and 7, weighted

It is therefore likely that some of the differences we see reflect the mode of data collection rather than actual differences between groups. For example, in some initial analysis we found that mode of assessment accounted for some of the differences in young people's self-reported mental health between SEN groups, measured using the GHQ-12. Other sensitivity checks showed that among those who were interviewed face-to-face, the likelihood of having a parent, guardian or other relative present during the interview increased with the level of support needs of the young person. As such, we adjust for mode of data collection in all our models in addition to the other controls mentioned.

One of the issues with this approach is that we may be unknowingly adjusting for factors simply because they are associated with mode of data collection. For example, young women, who were also more likely to report symptoms of mental ill health, were more likely than young men to respond online using their smart phone, whereas young men were more likely than young women to conduct a telephone or face-to-face interview. In this instance the issue is unproblematic because we adjust for both mode and gender in our models. However, it is possible that in some cases we might be adjusting for other, unknown, but nevertheless important factors related to our outcome.

3. Change over time: Mental health and wellbeing

The rich, longitudinal nature of the LSYPE2 also allows for analysis of trends in measures which are repeatedly assessed. Young people's mental health (assessed using the General Health Questionnaires, GHQ-12 tool) was measured repeatedly throughout the survey. This analysis examines changes in young people's GHQ-12 scores between ages 14/15 (Year 10) and age 19/20, which was collected annually except for age 15/16 (Year 11). We use all five points of measurement to enable more complex patterns of change to be explored using more advanced statistical methods. We use two latent class modelling approaches, Latent Growth Curve Modelling (LCGM), and Growth Mixture Modelling (GMM). Further detail describing these methods are presented in the relevant chapters alongside their results.

Young people's responses to four personal wellbeing items (ONS4) were recorded twice, at ages 15/16 (in Year 11) and again at ages 19/20. Change in wellbeing was calculated by subtracting the score young people gave at age 15/16 from the score given at age 19/20: an individual increase in wellbeing denoted by a positive change score, a decrease indicated by a negative one. This score was then regressed on our SEN groups, which enabled us to assess differences in young people's changing wellbeing across levels of SEN provision.

4. Perceptions of COVID-19

Our final analytic chapter provides a descriptive overview of young people's perceptions of how the coronavirus pandemic has impacted their lives using data collected from the two most recent waves of the LSYPE2 study when cohort members were aged 20/21 (2020) and 21/22 (2021).

Variables

Key individual and family-level characteristics

Our descriptive analysis explores variation in the different SEN groups across a rich set of measures from across the first two waves of the LSYPE2:

- **Main activity:** Current main economic activity reported at 16/17 and 19/20.
- **Individual characteristics:** Gender; Term of birth; Ethnicity.
- **Family background:** Household education; Receipt of FSM; Single parent household.
- **Local area deprivation:** The Income Deprivation Affecting Children Index (IDACI)

- **Prior achievement**: KS4 ‘Best 8’ score; Whether young person achieved good (A* - C) passes in English and maths.

- **Educational attitudes and school experiences:** Attitudes towards school and teachers; Whether bullied; Whether truanted; Engagement in risky behaviours; Time spent on homework; Parental involvement in child’s school; Educational plans for post-16; Likelihood of applying to university; Main parent educational plans for their child; Locus of control; Attitudes towards the link between hard work and success.

- **Positive activities and social engagement:** Engagement in positive activities (sports; reading); Frequency of engagement; How young person spends their free time; Frequency of time spent with friends

Outcomes

With a remit encompassing the ‘preparation for adulthood’ and gaps in knowledge for this population, particularly in areas beyond attainment and employment outcomes, our analysis covers the following young adult outcomes:

- **Mental health and wellbeing:** GHQ-12 psychological distress; ONS4[19] wellbeing measures.

- **Health-related behaviours:** Alcohol and drug use; Loneliness; Longstanding illness or disability.

- **Post-16 attainment outcomes:** Highest level of attainment at age 19/20; Type of attainment at age 19/20; Whether they achieved a Level 2 in both English and maths.

- **Early adult material circumstances:** lives outside parental home; tenure; debt; type of debt, and ease/difficulty in managing that debt; receipt of state benefits; type of benefits; parental financial support.

- **Early adult employment experiences (for those in paid work):** contract type; usual hours, level of pay; occupational class; training; subjective evaluations their employment (its extrinsic and intrinsic benefits, and the sense of belonging work gives them).

[19] Office for National Statistics (ONS) 4 includes: Life satisfaction, Satisfaction with what they are currently doing with their lives, self-reported happiness, self-reported anxiety.

Attrition

All analyses were weighted[20] to take account of sample attrition: the loss of sample members between survey waves. Using information on the characteristics of 'dropouts' collected earlier in the study, the data was recalibrated to ensure it continues to represent the characteristics of the original sample (Kantar Public, 2015).

[20] The non-response weights used are specific to the wave of the outcome being examined and are calibrated to ensure each wave of data collected represents the characteristics of the original sample (see Kantar Public, 2015, for further detail).

Describing differences in young people with SEN

This chapter describes the characteristics of young people in the six different SEN groups outlined in the section on Identify the SEN sample, namely:

- No SEN
- LSID (No SEN Provision (NSP))
- School Action
- School Action Plus
- Statement
- SEN School

We report the main economic activities of young people across the SEN provision groups and then present descriptive, face value differences for a number of key individual and family characteristics, as well as a range of measures capturing educational attitudes and experiences at school, positive activities and social engagement.

The aim of the analysis is to help understand which characteristics are more and/or less associated with different types of SEN provision, as well as aid the interpretation of findings in later chapters that explore how these factors operate together in multivariate analysis.

Main Activity

Table 4 gives the proportions of young people in each of the main activity categories individuals self-report being in at age 16/17, that is, their first year of post-compulsory education. It shows that, across all young people, the majority (85.2%) remained in full-time education. This proportion varies across each of the SEN provision groups and is highest for those in the No SEN group (86.7%) as well as those with Statements (86.4%) and in SEN schools (87.2%), and lowest among the School Action (77.1%) and School Action Plus (76.7%) groups.

The proportions of young people making an early transition into the labour market, either in terms of full-time employment or via apprenticeships and other forms of training, are greater amongst those in the School Action and School Action Plus groups, and lowest amongst the SEN School group. Young people in receipt of Statement provision appear more likely to enter apprenticeship or training routes (7.6%) than beginning work (2.0%). The highest proportions of 16/17 year olds who are unemployed and looking for work, the

so-called NEET[21] group, are in the School Action Plus (5.6%) and SEN School (6.4%) groups.

Table 4: Young person's main activity at age 16/17

Main Activity:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School	All
Full-time Education	86.7	84.2	77.1	76.7	86.4	87.2	**85.2**
Working	4.6	5.1	8.2	7.4	2.0	1.0	**5.0**
Apprenticeship / Training	6.7	6.8	9.3	7.9	7.6	4.0	**7.0**
Unemployed	1.2	2.4	3.0	5.6	3.0	6.4	**1.8**
Volunteering	0.1	0.6	0.0	0.4	0.0	0.0	**0.1**
Looking after family	0.1	0.0	0.4	0.6	0.3	0.0	**0.2**
Other [22]	0.6	0.9	2.1	1.5	0.8	1.4	**0.8**
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**
N	**6,333**	**195**	**903**	**532**	**196**	**112**	**8,271**

Source: NPD; LSYPE2, waves 1,2 and 4: %s weighted; Ns unweighted.

Four years later, when young people were aged 19/20, half (49.4%) of the overall LSYPE2 cohort remained in education: 5.5% still report being in full-time non-HE, educational settings, with the majority moving into university (43.9%;Table 5). Note, however, this pattern is almost reversed for those formerly in SEN schools where nearly half (45.4%%) remain in full-time non-HE, education and just 4.1% report being in university.[23]

A third of the cohort (33.4%) have now moved into the labour market. As at age 16/17, those in the School Action and School Action Plus groups are more likely to be working, 46.5% and 46.9% respectively, than those in the No SEN (31.7%) or LSID (32.1%), with the highest proportions of young people on apprenticeships and other forms of training found amongst those from School Action (10.0%) and Statement (8.0%) provision types.

[21] Not in Education, Employment or Training.
[22] The "Other" transitions category includes the young person's self-report of the following main activity responses: Waiting for a course or job to start; Waiting for exam/course results; Travelling; and Taking a break from work and study.
[23] In our parallel report using the LSYPE2 cohort to explore the post-16 transitions of all young people, and particularly those who do not go to university immediately after completing A-levels / Year 13, we similarly show that young people with SEN are most likely to remain in full-time, non-HE education for three to four years post-16.

Higher than average proportions of both young people in the Statement group and those from SEN Schools are also observed volunteering at age 19/20, 4.9% and 7.3%, respectively compared to less than 1% of the overall cohort.

Notably, higher than average numbers of young people from both the School Action Plus and SEN Schools groups represented in the unemployed category: around 1 in 5 in each of these groups – 18.6% and 21.4%, respectively – compared with just 4.7% of the cohort as a whole.

Table 5: Young person's main activity at age 19/20

Main Activity:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School	Total
Full-time Education	3.8	6.6	6.6	8.2	17.7	45.4	**5.5**
University	50.7	40.4	21.4	12.3	19.4	4.1	**43.9**
Working	31.7	32.1	46.5	46.9	29.3	2.4	**33.4**
Apprenticeship / Training	6.4	6.5	10.0	5.8	8.0	6.6	**6.7**
Unemployed	2.8	4.3	8.3	18.6	7.4	21.4	**4.7**
Volunteering	0.2	1.9	0.3	0.8	4.9	7.3	**0.5**
Looking after family	1.1	3.1	1.7	2.8	0.9	1.2	**1.3**
Ill or disabled	0.5	3.6	0.5	2.0	4.6	1.6	**0.8**
Other	2.9	1.5	4.7	2.7	7.9	9.9	**3.3**
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**
N	**4,436**	**118**	**527**	**293**	**135**	**63**	**5,572**

Source: NPD; LSYPE2, waves 1,2 and 7: %s weighted; Ns unweighted.

Tables 4 and 5 show static, annual snapshots of young people's activity status. Sankey charts allow for an understanding of how young people move between different states over time and so their early, post-16 activities at 16/17 and then separately at age 19/20.

Sankey charts

Sankey charts are a form of flow diagram which show movement between different “nodes” or activity states and are useful tools to help distil and visually convey complex information over time.

Like transition matrices, Sankey charts are read from left to right, with the blocks on either side of the chart proportional to the size of each group represented at the two different time points. Essentially, for each of Figures 2 to 7, the left-hand blocks are the figures from the relevant group column in Table 4 and the right-hand ones those from Table 5, based on those present at both time points. The transition lines between these two ‘bookends’ then shows, proportionately, movement between one activity state and another for the different SEN provision groups. The detail in each chart is described in the commentary and the figures are for illustrative purposes only.

We show separate figures of the age 16/17 to age 19/20 transitions for each SEN group outlined, noting that some of the sample sizes do become small as part of this analysis. Interested readers can contact the authors for more detail on category sizes and these analyses.

Figure 2 illustrates how the No SEN group move over the four-year period captured cross-sectionally in Tables 4 and 5, with age 16/17 on the left-hand side and age 19/20 on the right.

As in Table 4 and 5, the transitions of young people with no identified SEN are broadly into either education or employment and are in line with the national picture of post-16 destinations:

- The majority of those in full-time non-HE education, at age 16/17 (88% of the No SEN group) move into university at age 19/20, with many others making the transition into the labour market:
    - At age 19/20 over half (51%) of the No SEN group are in university, nearly all moving there from full-time education.
    - A third (32%) are in work at age 19/20. Again, the majority move there from full-time education at age 16/17, but higher proportions do so from earlier apprenticeships or training or from earlier employment.
- A small proportion of the full-time non-HE group remain there at age 19/20 (see also Table 5), with a handful of individuals from early working and apprenticeship/training activities joining them.

- Most of the early starters in the workplace remain in employment four years later, with a small proportion moving into university.

- The 6% of young people in the No SEN group undertaking apprenticeships at age 19/20 are a different group to those who started on this track at age 16/17, with the vast majority of those starting earlier apprenticeships (6%) moving into employment. Only a small proportion are undertaking apprenticeships at both time points and a very small number (n = 5, weighted) have moved into university.

- By age 19/20, the unemployed group has increased from 1% to 3%, and while there are some who are unemployed at both times, most of this group come from the age 16/17 full-time non-HE education group. There is also evidence of movement from the early unemployed category into the working one at age 19/20.

- At age 19/20, 3% of the No SEN group report their main activity as “other” activities, mainly travelling, waiting for results or a job to start, or taking a break from work and study. The majority of this “other” group come from those previously in full-time non-HE education.

Figure 3 shows a very similar pattern of results for the LSID (NSP) group despite being a considerably smaller group (n = 118):

- Most of the large full-time non-HE education group at age 16/17 (92% of the LSID (NSP) group) move into university by age 19/20, with a slightly smaller proportion entering the labour force. The difference in the size between these two transitions is smaller for those with LSID (NSP) than for those in the No SEN group, but so too is the proportion in university at age 19/20.

    - At age 19/20, 40% of the LSID (NSP) group are in university, all coming from full-time education a age 16.17.

    - A third (32%) are employed at age 19/20, mostly coming from full-time education at age 16/17with small numbers from both age 16/17 apprenticeships and training routes or earlier work.

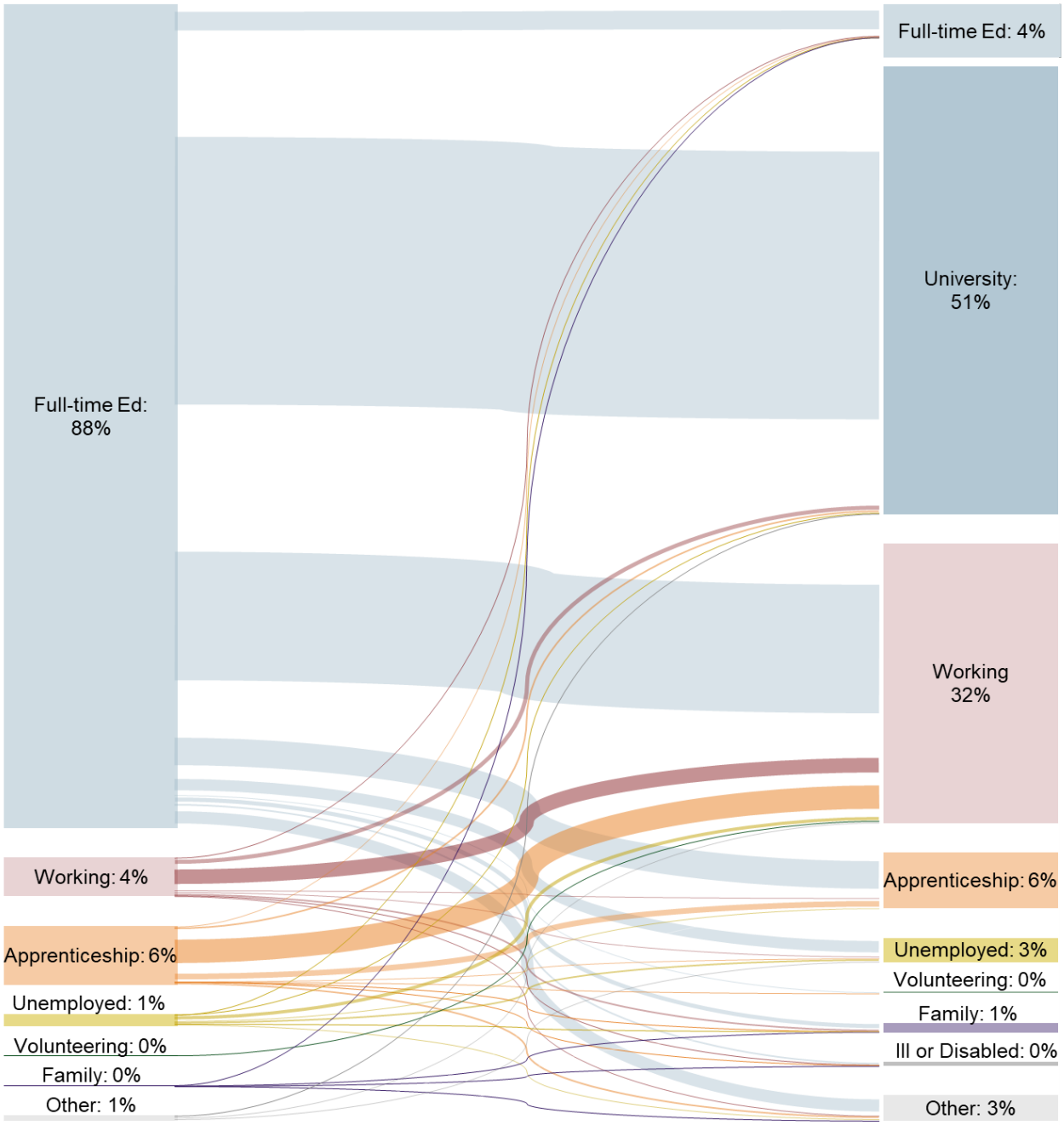
- Some (7%) are still observed in full-time non-HE education at age19/20, again with evidence of small amounts of movement into this category from those who entered the workplace immediately after finishing school.

- Smaller proportions of the full-time non-HE education group move into apprenticeship/training activities and each of the other main activity categories.

- The majority of the small, early employed group (2%) still report working at age 19/20.

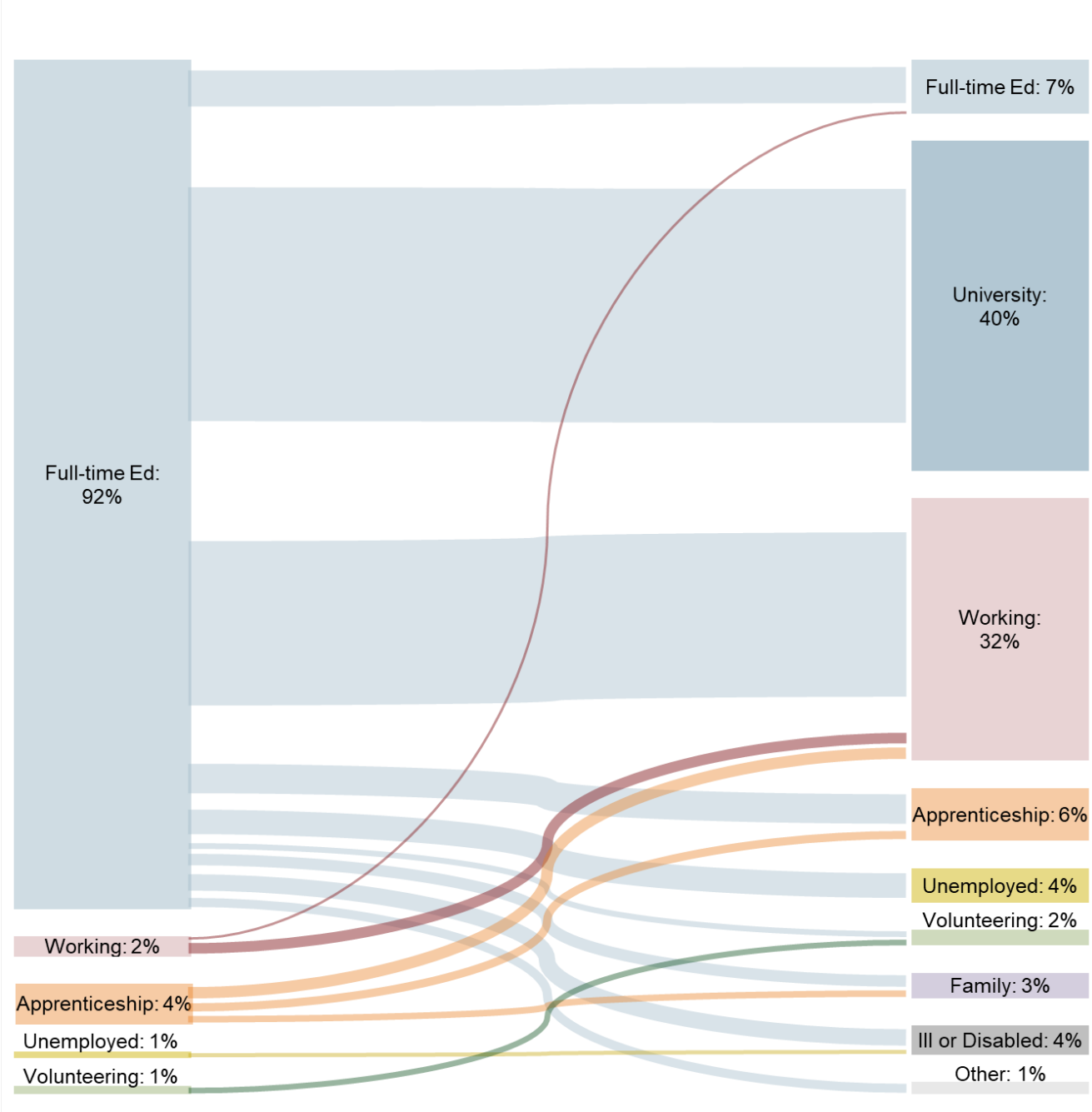
- Early apprenticeship activities have routes into the workplace, continued apprenticeship training, as well as caring roles.
- Perhaps unsurprisingly given the nature of the group, a key difference of those in the LSID (NSP) category compared with the No SEN, School Action and School Action Plus groups is the higher incidence of 19/20 year olds reporting illness or disability as their main economic activity (4%).
- Other remaining categories are particularly small, containing only one or two individuals, making commentary here difficult.

Figure 2: Main activity transitions: No SEN provision



Notes: Apprenticeship includes other forms of training. Source: NPD; LSYPE2, waves1, 2, 4 and 7, weighted.

Figure 3: Main activity transitions: LSID (NSP)



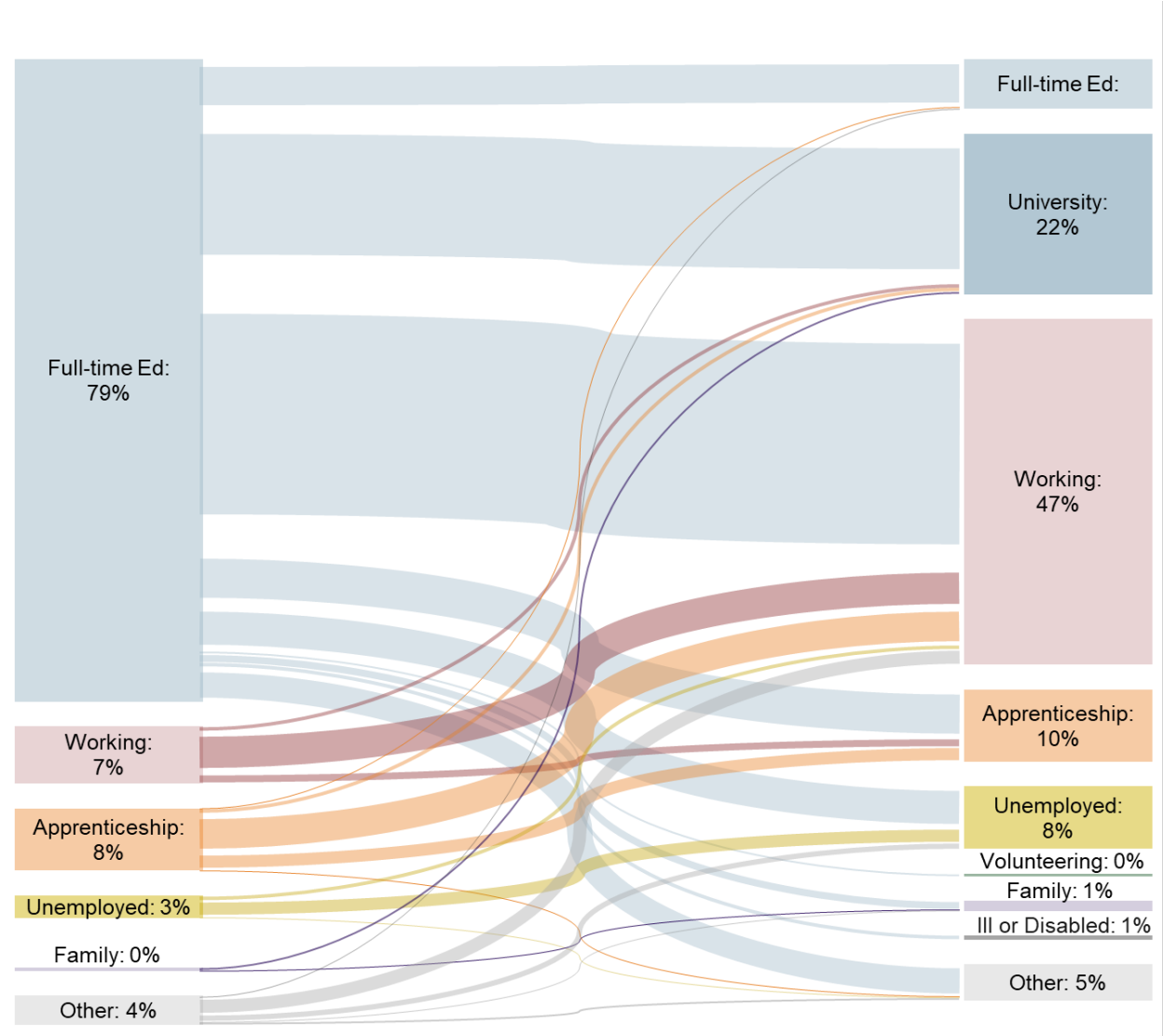
Notes: Apprenticeship includes other forms of training. Source: NPD; LSYPE2, waves1, 2, 4 and 7, weighted.

Transitions for young people in receipt of School Action provision at school are reported in Figure 4 and, in comparison to the two previous charts, show an uptick in the proportion in employment at age 19/20 (47%), now the dominant track for those who were in full-time non-HE education at age 16/17 (79%). A smaller proportion than for the No SEN and LSID groups move from full-time non-HE education into university, but just over 1 in 5 of the School Action group (22%) make the transition into university by age 19/20, again with very low numbers showing routes into HE from early employment,

apprenticeship and training activities, as well as those with caring responsibilities. Figure 4 also shows:

- Continuity in employment pathways, as well as positive shifts for those undertaking early apprenticeships into the workplace.
- An increase in the size of the age 19/20 unemployed group (8%) here also echoes the data shown in Table 5.

Figure 4: Main activity transitions: School Action

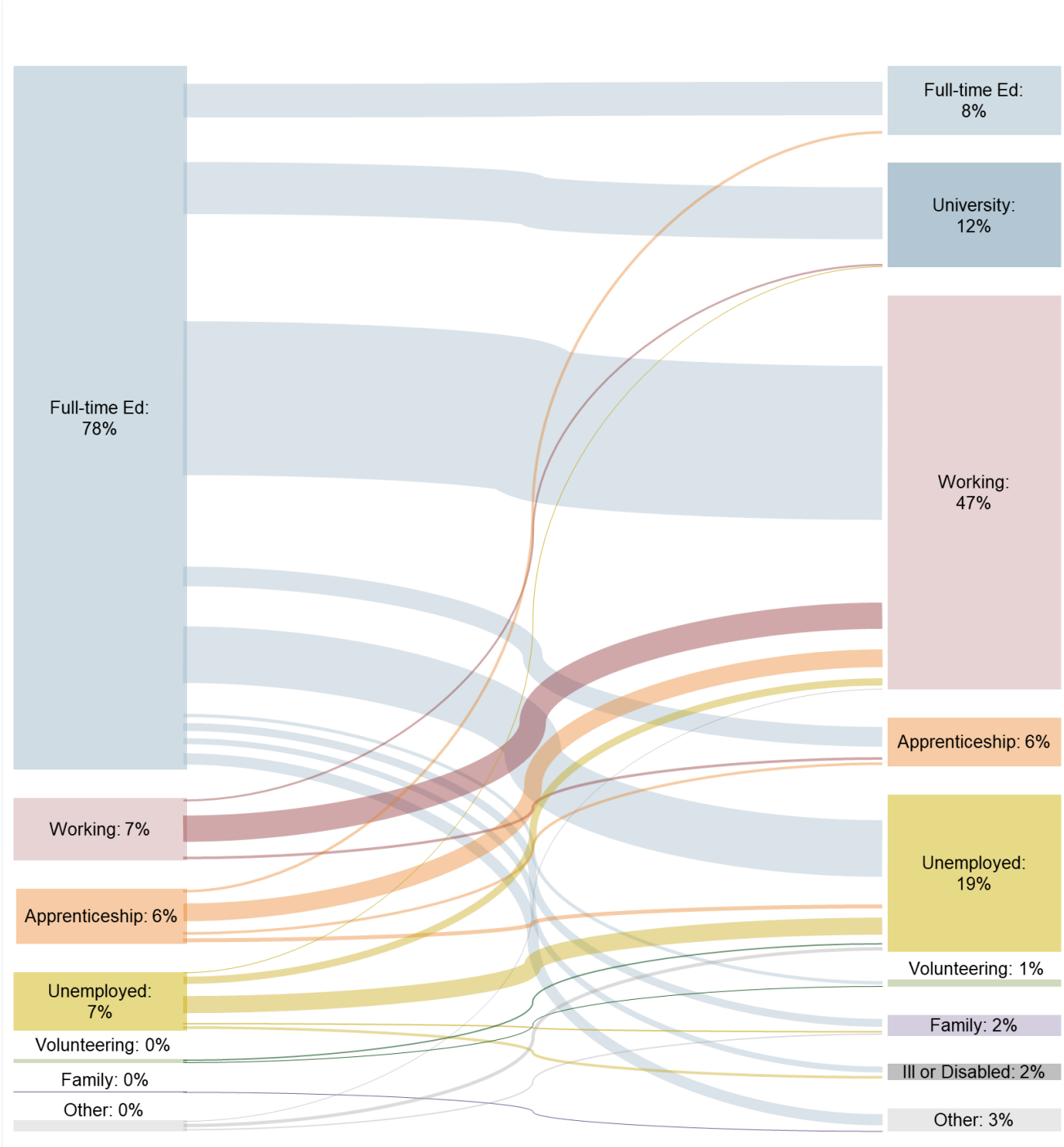


Notes: Apprenticeship includes other forms of training. Source: NPD; LSYPE2, waves1, 2, 4 and 7, weighted.

The size of the age 16/17 full-time non-HE education group for the School Action Plus group is comparable in size (78%) to that of the School Action group (Figure 4), so too are the proportions in early employment activities (7%) and those in apprenticeship and training programmes (6%). Similar proportions remain in full-time non-HE education four years later (8%) with around half (47%) moving into the labour market, but far fewer

make the transition into university: 12% compared to 22% of those who received School Action support.

Figure 5: Main activity transitions: School Action Plus



Notes: Apprenticeship includes other forms of training. Source: NPD; LSYPE2, waves1, 2, 4 and 7, weighted.

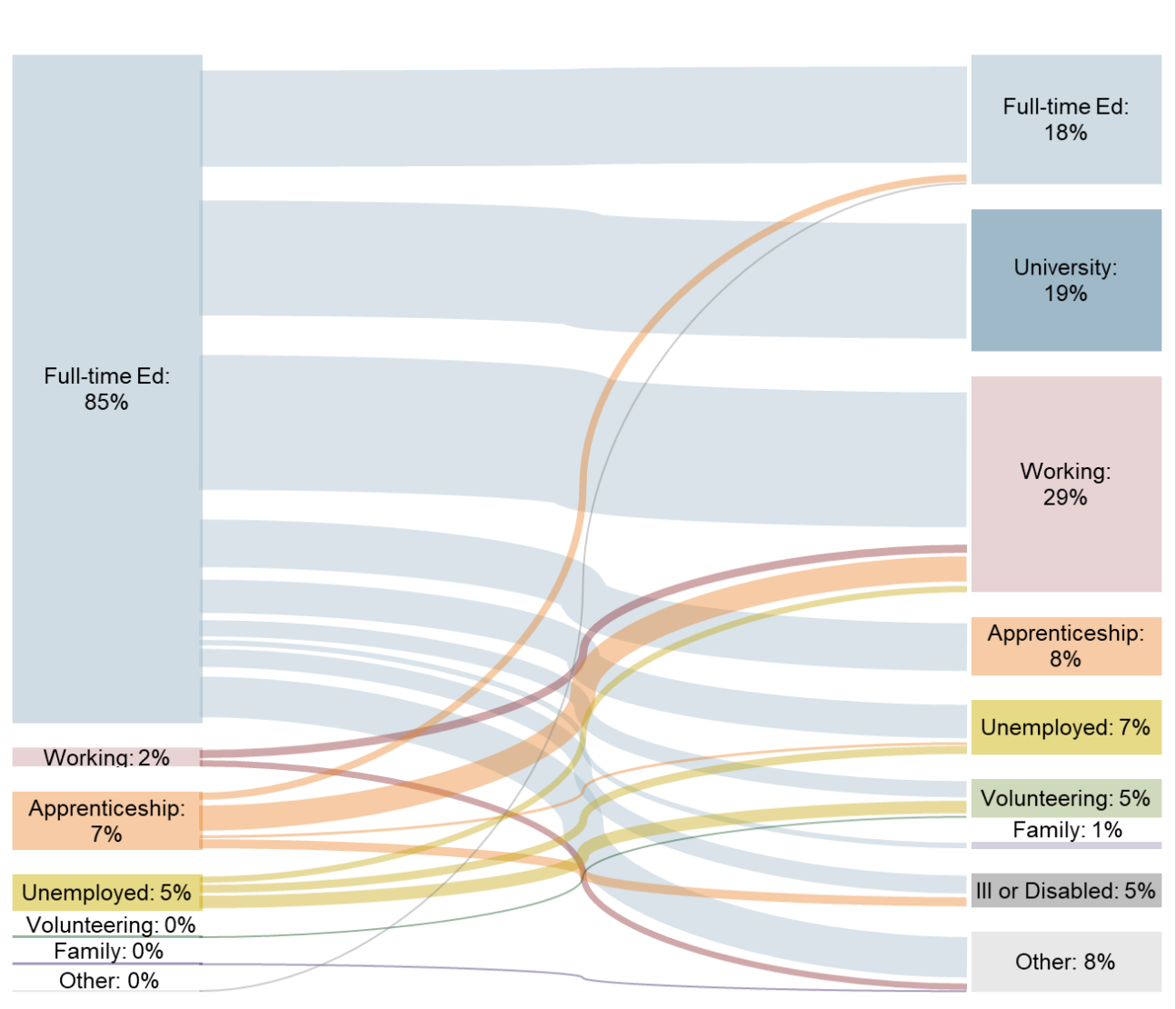
Again, the majority of those doing apprenticeships at age 19/20 (6%) are different to those who started out on such a track, with most of those completing earlier apprenticeship and training activities moving into employment. The early group of unemployed young people in the School Action Plus category, however, is more than

double that of the School Action group, increasing to nearly 1 in 5 by age 19/20 (19% from 7% at age 16/17). Some of these later unemployed young people started the period there, but a sizeable number moved there from full-time non-HE education at age 16/17.

Figure 6 shows that young people who received Statements at age 14/15 have the second largest proportion of 19/20 year olds remaining in full-time non-HE education (18%). They also have a higher proportion than those in both the School Action Plus and SEN School groups reaching university (19%).

Just under a third (29%) of the Statement group are working at age 19/20, the majority coming from the full-time non-HE education activities at age 16/17 (85% of those in the Statement group), but some again from earlier apprenticeships and employment categories, as well as a small proportion who were initially unemployed. A further 5% are volunteering at age 19/20. The same proportion, 5%, report being unable to work or study due to illness or disability, the highest of any of the SEN groups likely reflecting their higher level of need from counterparts in both School Action and School Action Plus groups. Note, however, this figure is more than double that of the proportion classified as “ill or disabled” at age 19/20 of those who were in SEN Schools (see Figure 7), possibly suggestive of quite different sets of needs faced by these two SEN types. Around 1 in 12 young people (8%) in the Statement group report “other” activities at age 19/20, this figure is more comparable with the SEN Schools group than those in the School Action or School Action Plus groups.

Figure 6: Main activity transitions: Statement



Notes: Apprenticeship includes other forms of training. Source: NPD; LSYPE2, waves1, 2, 4 and 7, weighted.

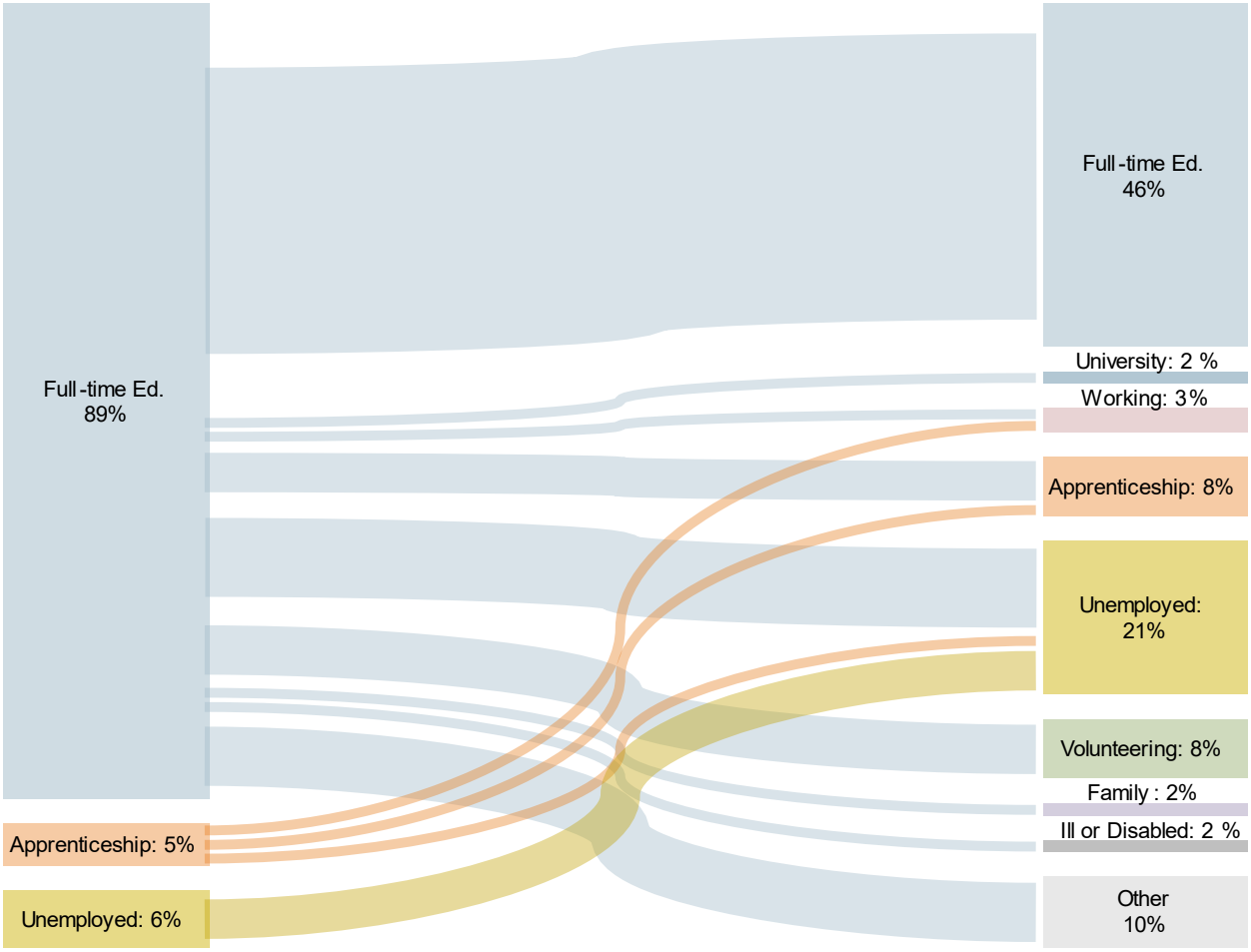
At age 19/20, the group of young people who were in SEN schools has fallen to just n=63 (unweighted, see Table 2 and notes on attrition) making commentary on their transitions somewhat harder than for some of the other groups. Nevertheless, it is interesting to observe the transitions that emerge for these individuals over the four years post-16.

As noted, nearly half of this group remain in full-time non-HE education (45%), with only a handful (4%) moving into university. There is evidence of early apprenticeships (4% of the SEN school group at age 16/17) translating into both employment as well continued training. Young people in this group have the largest proportion of any of the SEN groups reporting volunteering at age 19/20 (7%).

However, after remaining in full-time non-HE education, the next most reported activity for the SEN School group is into unemployment: 1 in 5 of those aged 19/20 are unemployed (20%), mostly moving here from age 16/17 full-time education activities, but

some from apprenticeships and training routes, and a significant minority from earlier economic inactivity.

Figure 7: Main activity transitions: Special Schools



Notes: Apprenticeship includes other forms of training. Source: NPD; LSYPE2, waves1, 2, 4 and 7, weighted.

Having outlined the main activities and the broad post-16 transitions across the six SEN types, our analysis now describes the key characteristics of young people in each of the groups, indicating where there are any significant differences from the main reference group, namely those without any identified SEN, the No SEN group.

Visualising differences across SEN groups

For the majority of the remaining analyses, each of the six SEN groups is assigned a particular colour, the No SEN group are blue, the LSID (NSP) group red, and so on. In the figures that follow, the legend given corresponds with the No SEN reference group, but any graded shading (light to dark) or patterning within the bars applies equally across each of the SEN types.

Individual and family characteristics

Gender

Research comparing children and young people with and without SEN consistently finds a higher prevalence amongst boys than girls. This gendered profile in SEN identification does in part exists because some needs are more common in boys, such as speech, language and communication needs, but is also likely to reflect bias in the assessment practices, referrals and female masking (Daniel and Wang, 2023).

In 2014, the year our SEN measure was captured for the LSYPE2, across all age groups and school types, 19.2% of boys were identified as SEN without statements compared to 11.4% of girls, and 4.0% of boys were reported as having statements of SEN compared to 1.6% of girls (DfE, 2014).

Data for the LSYPE2 cohort similarly show higher incidence of special educational needs amongst boys across all types of provision: 17.6% of boys compared with 11.2% of girls are identified as SEN without statement (School Action and School Action Plus); 3.2% of boys have a statement compared to 1.0% of girls; and a further 2.3% of boys and 0.8% of girls are in special SEN schools.

Table 6: Gender and SEN status

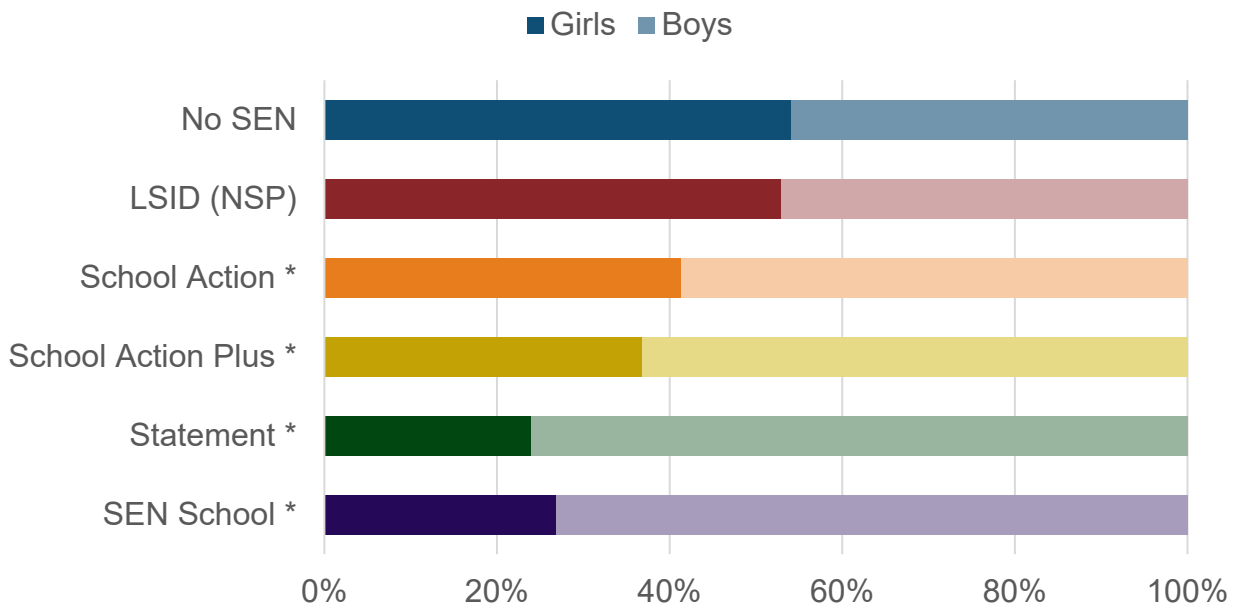
SEN status:	Girls (%)	Boys (%)	Total (N)
No SEN	84.7	74.7	6,333
LSID (NSP)	2.3	2.2	195
School Action	7.6	11.1	903
School Action Plus	3.6	6.5	532
Statement	1.0	3.2	196
SEN School	0.8	2.3	112
N	**4,268**	**4,003**	**8,271**

Source: NPD; LSYPE2 waves 1 and 2: weighted %s; unweighted Ns.

The most recent statistics for special educational needs in England, again across all ages and school types, report that 72.0% of pupils with an EHC plan in the academic year 2023/24 are boys, and 62.0% of pupils with SEN support are boys (DfE, 2024a). This gendered pattern is also evident looking within each of the SEN types (Figure 8):

- Boys make up less than half (45.9%) of the No SEN and LSID (47.1%) groups, thought these differences are not statistically significant.
- Across the other SEN types, the proportion of boys is significantly higher than girls, making up between 58.6% (School Action) and 76.1% (Statement) of each group.

Figure 8: SEN status, by gender



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

In addition to being associated with achievement (Crawford, Dearden & Greaves, 2013) and a range of non-academic outcomes (Crawford, Dearden & Greaves, 2014), term of birth has also been linked to the likelihood of receiving special educational services. Dhuey and Liscomb (2010), for example, find that an additional month of relative age decreases the likelihood of receiving special education services by 2-5 percent, particularly in relation to learning disabilities, arguing that some assessments may not screen for the possibility that younger pupils are over-referred for evaluation.

Results here indicate that, compared to those with no identified SEN, young people receiving School Action and School Action Plus provision are more likely to be born in the summer term.

Table 7: SEN status, by term of birth

Term of Birth:	No SEN	LSID (NSP)	School Action *	School Action Plus *	Statement	SEN School
Autumn	25.9	26.8	20.8	21.6	23.8	29.1
Winter	24.1	25.8	23.8	24.0	23.6	26.3
Spring	25.0	21.8	26.2	25.1	27.6	17.9
Summer	25.0	25.6	29.3	29.3	25.0	26.7
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group: More likely to be born in the summer term. Source: NPD; LSYPE2 waves 1 and 2: weighted.

Socioeconomic status

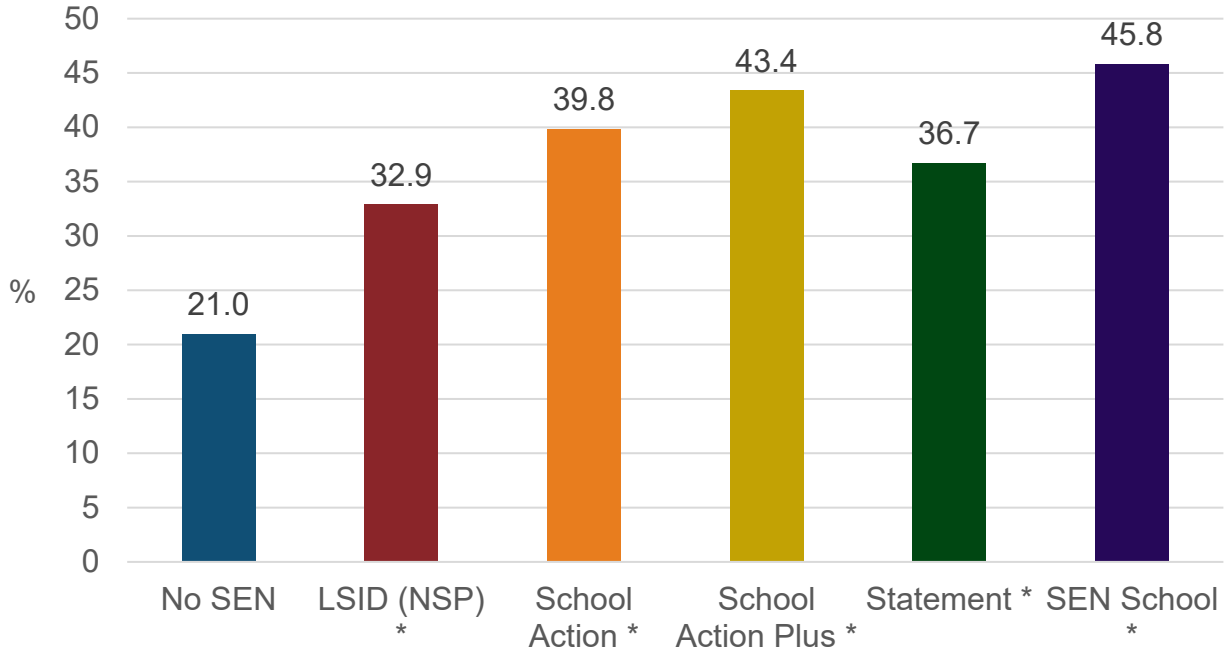
Children with SEN appear slightly more likely to come from families with greater levels of disadvantage. For example, pupils with SEN are more likely to be eligible for free school meals (FSM) than those without SEN: recently published figures show that 42.2% of those with an EHC plan and 38.3% with SEN support were eligible for FSM compared to 21.4% of those without (DfE, 2024a). Similarly, those with SEN are more likely to have parents with lower levels of education than their peers without any identified SEN and to come from single parent families (Barnes & Harrison, 2017).

In the LSYPE2 data, SEN type is similarly associated with each of the indicators of socioeconomic status examined. We note, however, that these average associations are likely to be correlated and reflect differing elements of disadvantage rather than causal in any way.

FSM is an indicator of household income captured in the NPD data and measures whether, up to the year 2014 when the LSYPE2 cohort were in Year 9, the young person had ever been eligible to receive free school meals.

Figure 9 gives the average proportion of young people in each SEN group eligible for FSM and shows that compared to those in the reference category, the No SEN group, young people in each of the SEN groups have higher FSM eligibility, i.e. lower household incomes. Those in the School Action Plus and SEN Schools have the highest proportion eligible for FSM – 43.4% and 45.8%, respectively – both more than double the figure for the No SEN group.

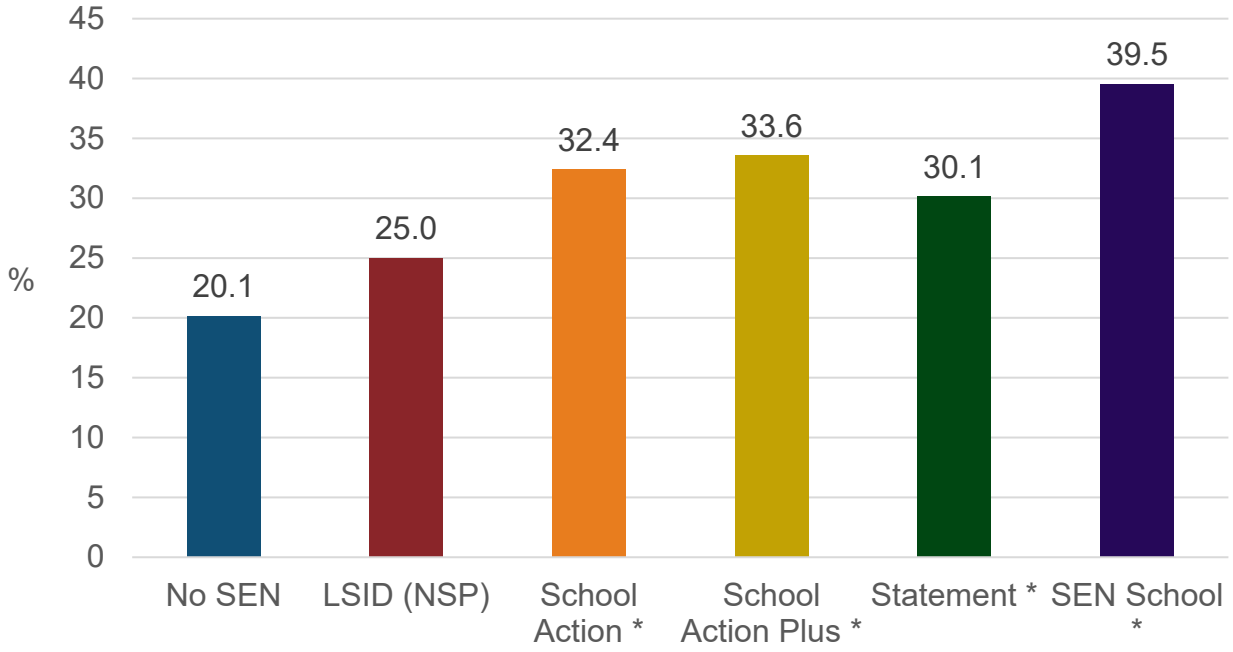
Figure 9: SEN status, by "Ever eligible for Free School Meals"



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

Young people in receipt of SEN provision are also more likely to come from households with lower levels of education compared to their No SEN peers: around a third of young people in the School Action (32.4%), School Action Plus (33.6%) and Statement (30.1%) groups have parents with no qualifications, compared to just 1 in 5 of those without any identified SEN. Note the difference between the No SEN and LSID groups is not statistically significant.

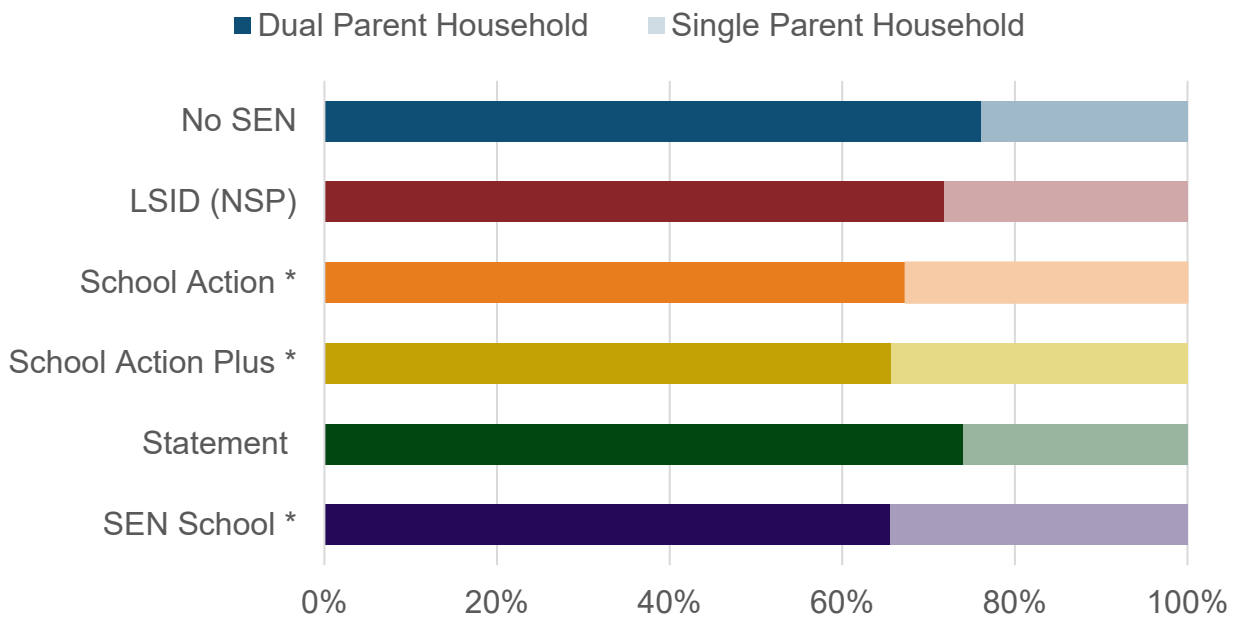
Figure 10: SEN status, by household education (% with no qualifications)



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

Figure 11 indicates that young people in the School Action and School Action Plus groups, as well as those in SEN Schools, are more likely than those with No SEN to come from single parent households.

Figure 11: SEN status, by family type

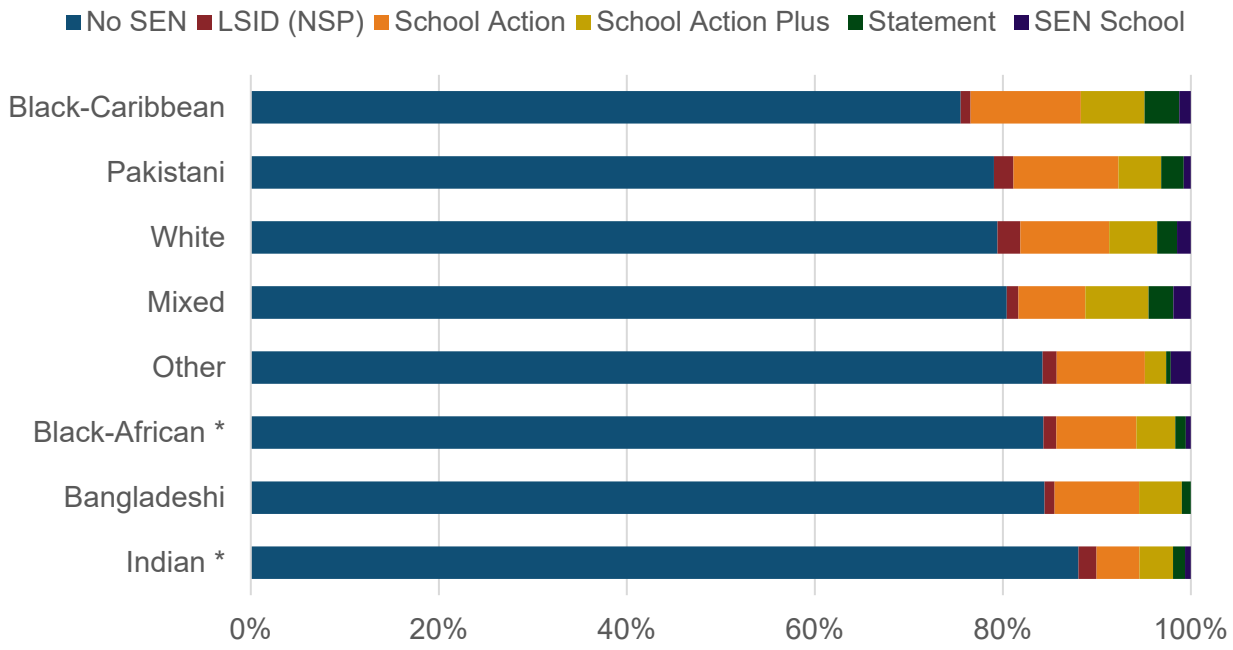


Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

SEN status has also been shown to vary by ethnicity, with white-British and Black-Caribbean pupils shown to have higher proportions identified with SEN compared to other ethnic pupils (DFE, 2024a; see also Strand & Lindorff, 2018; 2021). [24]

Figure 12, reports SEN type within each broad ethnic group recorded in the LSYPE2 and similarly shows higher incidence of SEN amongst Black-Caribbean and white-British groups, as well as Pakistani young people.

Figure 12: Ethnicity, by SEN status



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

Within each of the different SEN groups, there is also evidence of variation by ethnicity, with a significantly higher proportion of white young people in the LSID group compared to those with No SEN.

[24] Research by Strand & Lindorff (2018; 2021) indicates the Black-Caribbean over-representation can be statistically accounted for by higher levels of poverty and economic deprivation, alongside complex interplays between sex, class and ethnicity.

Table 8: SEN status, by young person's ethnicity

Young Person's Ethnic Group:	No SEN	LSID (NSP) *	School Action	School Action Plus	Statement	SEN School
White	81.4	87.9	83.4	83.4	84.4	85.5
Mixed	3.9	2.1	3.0	5.2	5.0	5.1
Indian	2.7	2.1	1.2	1.8	1.5	1.1
Pakistani	3.3	3.0	4.0	3.0	3.9	1.8
Bangladeshi	1.4	0.6	1.3	1.2	0.6	0.0
African	3.1	1.8	2.7	2.5	1.6	1.1
Caribbean	1.2	0.6	1.7	1.8	2.4	1.1
Other	2.9	1.8	2.8	1.2	0.6	4.2
Total	**100**	**100**	**100**	**100**	**100**	**100**

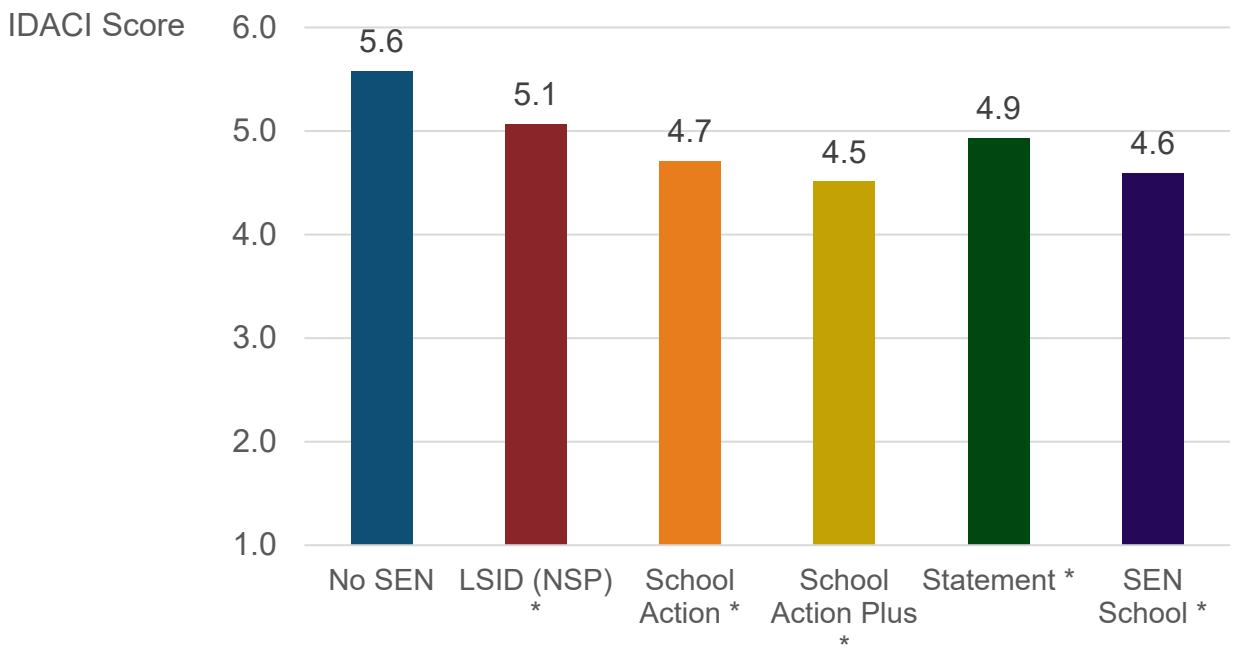
Notes: * Indicates differences are significant at, at least, $p<0.05$, from the No SEN reference group: Young person is more likely to be white than in the No SEN group. Source: NPD; LSYPE2 waves 1 and 2: weighted.

The IDACI – the Income Deprivation Affecting Children Index - measures socioeconomic circumstances at a local area level. Collapsing the detail into a decile score, running from 1 to 10, it captures deprivation based on the proportion of children aged under 16 living in low-income households in different areas of the country. A lower score indicates higher levels of deprivation.[25]

Again, our results show that young people in each of the SEN groups live in areas of greater deprivation compared to those in the No SEN reference category.

[25] More information about the IDACI index can be found here: English indices of deprivation - GOV.UK (www.gov.uk)

Figure 13: SEN status, by local area deprivation



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group. IDACI Score: Lower score = higher deprivation. Source: NPD; LSYPE2 waves 1 and 2: weighted.

Prior achievement

The attainment gap between pupils with SEN compared to those without SEN is the largest gap across the different characteristics recorded in the official statistics for England. For example, in the year the LSYPE2 took their GCSEs – 2014/15 - across all headline measures of attainment, those with SEN perform significantly worse than pupils with no identified needs (DfE, 2016):

- 20% of pupils identified as having SEN achieved 5 or more A* - C GCSEs, including English and maths, compared to 64.2% with no identified SEN, a gap of 44.2 percentage points.
- 4.8% of pupils with SEN achieved the EBacc, compared to 28.0% of those with no identified SEN, a gap of 23.2 percentage points.

Here, we consider two different indicators of KS4 attainment which between them provide a good summary of academic performance at 16. They have also been used in previous analysis of the LSYPE2 cohort (see, for example, Lessof, et al., 2018) and so build on what we already know about achievement patterns:

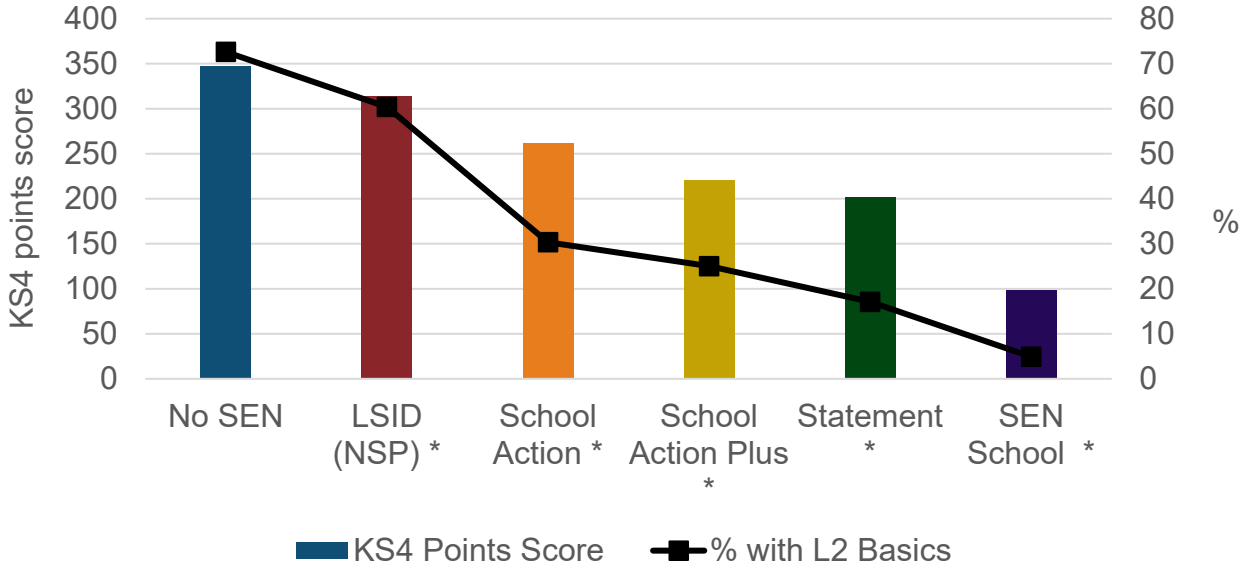
- **"The Best 8"**: the young person's capped total points score based on their highest eight GCSE grades, including equivalents (left-hand axis in Figure 14), and
- **Level 2 (L2) English and maths threshold**: whether the young person achieved an A* - C pass in English and maths, or equivalent (right-hand axis in Figure 14).

Across both indicators, Figure 14 shows a similar pattern emerging in the LSYPE2 data as in the extant literature, as well as a clear linear relationship between increasing level of need and attainment at age 16:

- Young people in the No SEN group had the highest KS4 achievement of all the groups: 72.6% achieved the Level 2 threshold pass rate, with a Best 8 score of 347.
- Next are those in the LSID group with 60.4% achieving the L2 threshold and an average Best 8 score of 314.
- There is a further drop in average achievement for those in receipt of SEN provision: 262 for pupils in the School Action group; 220 for the School Action Plus group; and 201 for those with Statements.
- The fall in the L2 English and maths threshold also drops considerably for pupils with SEN: 30.3% for those in the School Action group; 25.0% for those in the School Action Plus group; and 17.1% for those with Statements
- For the small group of pupils in SEN schools who took part in the KS4 assessments, their average score is 98 with just 4.9% achieving the L2 threshold. [26]

[26] Pupils in SEN schools with a 0 recorded for their KS4 Best 8 score (58% of this group) are excluded from this analysis as many will not actually have sat their GCSE exams but still have an entry in the National Pupil Database.

Figure 14: KS4 achievement, by SEN status



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

Educational attitudes and school experiences

One of the aims of this report is to try and understand possible variation in the educational experience of different SEN groups more broadly than just in terms of achievement outcomes. The next set of analyses uses the rich data from the LSYPE2 to explore young people's attitudes towards both their schools and teachers, their experiences in school, and overall engagement in terms of homework and parental involvement, as well as post-16 aspirations and expectations measured at age 13/14 (Year 9).

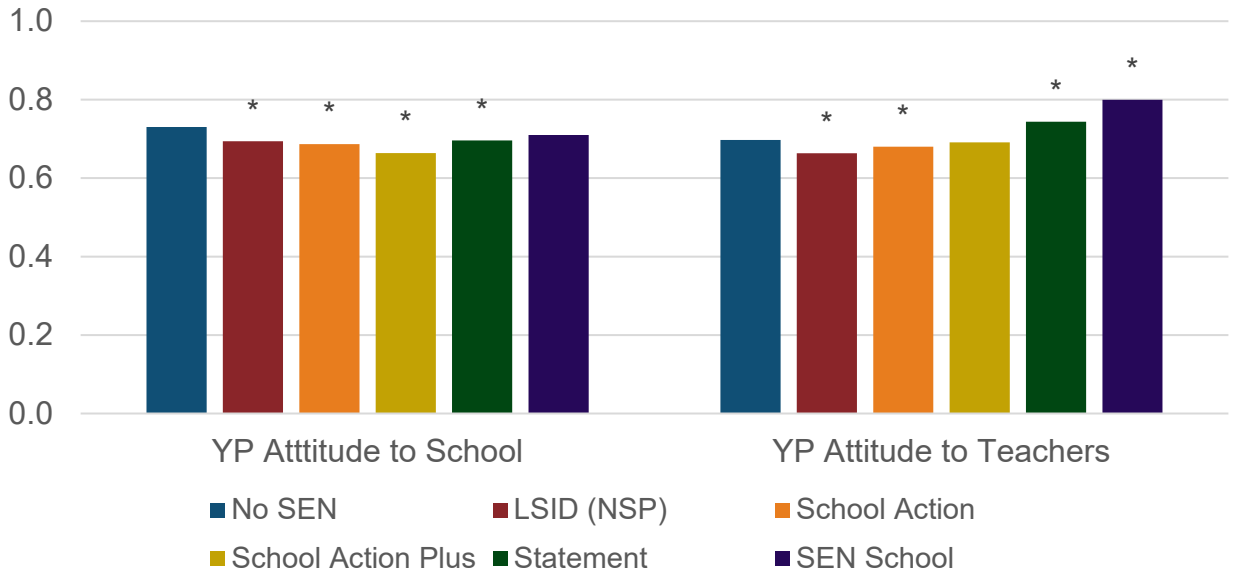
Educational attitudes

Attitude towards school is made up from a number of individual measures covering how young people value school and feel about their school, work and lessons, a higher score indicating a more positive attitude to school measured on a scale of 0 to 1. The attitude towards teachers measures the level of positive feelings in relation to teachers, based on six indicators including how many teachers the young person likes, how many praise them when they work well, how many teachers are clear about behaviour expectations and how many can keep order in class. The score is again measured on a scale from 0 to 1, with a higher score indicating a more positive attitude.

Figure 15 shows small, but significant differences, with those in LSID, School Action, School Action Plus and Statement groups reporting less positive attitudes towards school than those in the No SEN group. Those in the LSID and School Action groups also

indicate less positive attitudes in relation to their teachers, while those in the Statement group and young people in SEN Schools have more positive feelings towards their teachers.

Figure 15: Attitudes towards school & teachers, by SEN status



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

School Experiences

Children and young people with SEN are more likely than those with no identified SEN to experience bullying (Barnes & Harrison, 2017, see also findings from the National Behaviour Survey, 2024) and are at greater risk of being excluded from friendship groups (Chatzitheochari, et al., 2014).

Pupils with SEN are also more likely to have unauthorised absences from school, with attendance below national averages and exclusion rates high. For example, in 2022/23, the overall absence rate for pupils across all schools was 7.4% (see National Statistics, 2024). For young people with SEN support this figure is 10.2%, rising to 12.3% for those with an EHC plan, compared to 6.6% for those with no identified SEN. For context, the absence rate for pupils eligible for FSM is 11.1% against 6.1% of those who were not eligible.

Research using the Understanding Society survey finds that young people with SEN are more likely to have smoked than their peers but no more likely to have drunk alcohol (Barnes & Harrison, 2017).

Table 9 shows the proportions of the LSYPE2 who report ever having been bullied or truanted as well as the number of risky behaviours – drinking, smoking, taking drugs,

fighting, antisocial behaviours - engaged in, a score ranging from 0 to 10, with data from the LSYPE2 again supporting findings from the existing literature:

- Young people in the LSID group and those with School Action, School Action, and Statement provision are more likely to have been bullied than their No SEN counterparts.
- Those in SEN Schools are no more likely to report having been bullied than those without SEN.
    - Crowley et al. (2023) also found no significant differences in the prevalence of bullying by SEN status or school type. However, these authors do note that young people with certain types of needs, such as those with autism or social, emotional and mental health difficulties were more likely to report having experienced bullying in the last year than those with other types of primary SEN.
    - Notionally, our finding in relation to those in special schools is also in line with Barnes and Harrison (2017) who report that parents of young people who attended special schools or Alternative Provision were more likely to report their child got on well with peers than those in mainstream settings. However, we again note that other research indicates that some children with SEN, such as those with language disorders, may be more vulnerable to bullying and victimisation (for example, van den Bedem, et al., 2018) and so are cautious in drawing any firm conclusions here.
- All SEN groups are more likely than those in the No SEN group to report having ever truanted.
- The number of risky behaviours young people report engaging in are fairly low across all groups, but significantly higher than indicated by No SEN peers.

Table 9: Ever bullied or truanted and number of risky behaviours, by SEN status

School Experiences:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
% Ever Bullied	37.4	47.8 *	46.4 *	55.6 *	53.0 *	36.9
% Ever Truanted	7.2	13.3 *	16.6 *	20.7 *	12.0 *	18.8 *
Number of risky behaviours	0.5	0.7 *	0.9 *	1.2 *	0.8 *	1.3 *

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

Educational Engagement

We also explored possible differences in relation to indicators of educational engagement, namely the young person's reports of hours spent on homework at age 14/15 and in Year 10 and main parent reports of their own level of involvement in their child's school life and whether or not they attended parents' evenings.

Table 10 shows the relationship between SEN group and the number of hours young people typically spend on homework per week and indicates a broadly linear pattern, with the number of hours highest amongst those in the No SEN group and reducing with increasing level of SEN provision: all SEN groups report fewer hours than their No SEN counterparts. We note that this finding may also reflect variation in the amount of homework young people are being set. For example, just over 40% of young people in SEN schools report not getting any homework.

Table 10: Time spent on homework, per week (%), by SEND status

Hours of homework:	No SEN	LSID (NSP) *	School Action *	School Action Plus *	Statement *	SEN School *
No Homework	1.4	2.5	4.6	9.8	7.3	40.8
None	1.4	3.5	5.9	8.2	6.0	6.8
Less than 1 hour	13.8	18.3	23.8	24.8	29.0	28.7
1 - 2 hours	34.0	31.1	35.1	34.9	34.2	17.2
3 - 5 hours	35.0	33.6	20.8	14.7	15.3	3.5
6 - 10 hours	11.4	9.1	5.6	5.3	5.6	3.0
11 + hours	3.0	1.9	4.2	2.3	2.6	0.0
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, $p<0.05$, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

In terms of other information about homework and extra tuition available in the LSYPE2, results, not shown here, indicate that:

- There are no significant differences between the different SEN categories and whether or not the young person has someone at home who can help with homework.

- Parents of young people in SEN schools are less likely to have paid for extra tuition in core educational areas than in the No SEN group (2% vs 11%) but otherwise there are no significant differences between the SEN categories.

- There are also no differences with respect to extra tuition in non-core areas.

Table 11 shows that, in terms of parental involvement in their child's school, parents of children with LSID and in receipt of any kind of SEN provision are more likely to feel "very involved" compared to those in the No SEN group. Nearly half (45.2%) of parents with a child in a SEN School report feeling "very involved" in their child's education.

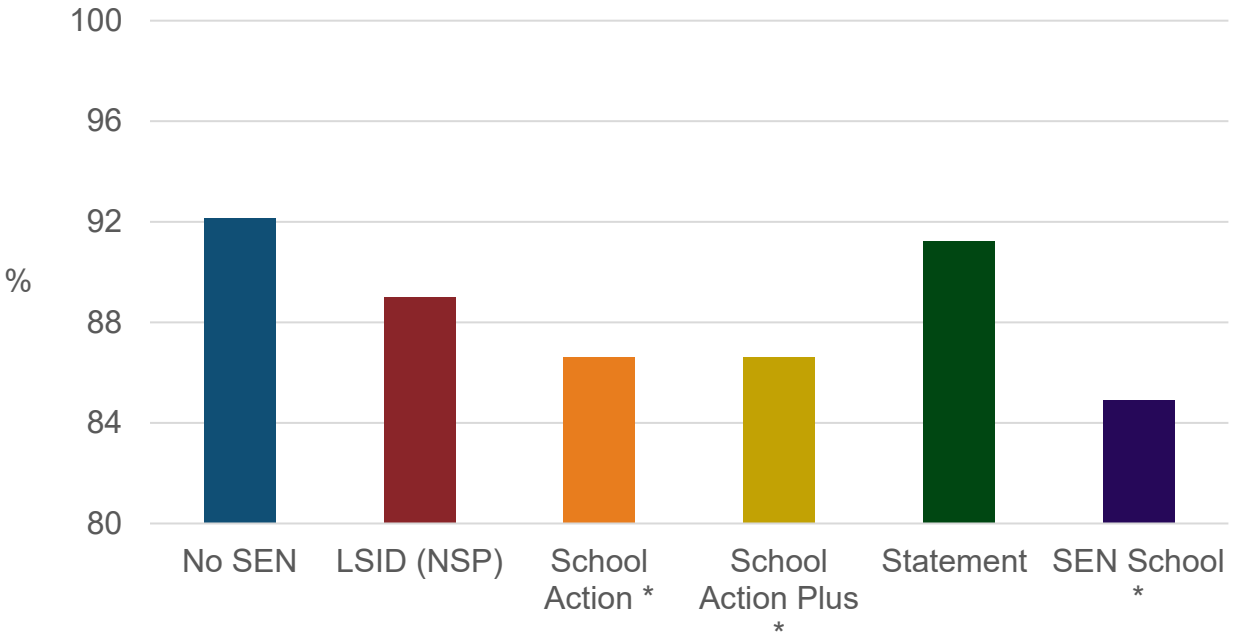
Table 11: Main parent: "How involved are you with your child's school?" (%), by SEND status

Level of involvement:	No SEN	LSID (NSP) *	School Action *	School Action Plus *	Statement *	SEN School *
Very involved	26.7	28.5	33.0	32.9	36.9	45.2
Fairly involved	48.7	45.4	46.6	46.1	44.1	42.1
Not very involved	21.3	21.0	17.5	17.8	16.1	12.2
Not at all involved	3.3	5.0	2.9	3.3	2.9	0.5
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, $p<0.05$, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted.

Conversely, parents with children who received School Action and School Action Plus provision and those in SEN Schools are less likely to have attended a recent parents' evening than those with children in the No SEN category. Lower levels of parent evening attendance here could reflect higher levels of regular involvement, for example, but we are unable to unpack the direction of this relationship in these data.

Figure 16: Percentage of parents who attended Parents' Evening, by SEN status



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Post-16 educational aspirations and expectations

Young people's educational attitudes and aspirations have repeatedly been shown as predictive of both attainment (Schoon, 2010; Strand, 2007) and post-16 transitions (Crawford, et al., 2011; Dickerson, et al., 2020). Work by Gutman and Schoon (2017) using the earlier born LSYPE1 focussing on career aspirations finds that higher aspirations were more predictive of later educational and employment outcomes for young people with SEN compared to those without and argue that high aspirations are particularly important for those with additional needs.

In Year 9, aged 13/14, the LSYPE2 cohort were asked about their plans for when they reached aged 16. Table 12 shows that young people with LSID and SEN had significantly lower educational aspirations than those without any identified SEN: those in our SEN categories are less likely to want to stay on in full-time education post-16 compared with young people in the No SEN group, though across all groups at least 4 in every 5 pupils does plan to stay on. The proportions who think it likely they will one day apply to go to HE are lower: 74.6% of those in the LSID (NSP) think it likely they will apply to go to university, falling to around 60% of those in the School Action (61.3%) and School Action Plus (60.7%) groups, less than half of those with a Statement, and just 30.3% of those in SEN Schools.

Table 12: Young person wants to stay on at 16 and thinks applying to university is a possibility, by SEN status

Post-16 Plans:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
% wants to stay on	95.2	90.7 *	85.4 *	87.3 *	81.1 *	82.7 *
% thinks will apply to HE	81.6	74.6 *	61.3 *	60.7 *	49.9 *	30.3 *

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Unpacking these post-16 plans further, Table 13 again shows that across all groups, the proportion of young people who wanted to stay on at 16 is very high, with a lean towards school sixth forms for the No SEN group and a greater inclination for colleges and other post-16 institutions for those in LSID (NSP) and SEN categories. Those in the School Action and Statement groups are more likely to report wanting undertake apprenticeships, results which echo their higher relative participation in these actual activities at age 19/20 (see Figure 4 and Figure 6). Similarly, those in the LSID (NSP) group and young people in SEN Schools indicate higher levels of intention to leave education and not enter training or work activities at 16: 3.2% of young people in the LSID (NSP) group and 4.4% of those in SEN Schools say they plan on leaving after their compulsory schooling ends. We also note that the finding that those with statements report the highest propensity of any group to go into apprenticeship or work parallels results from the recent analysis of the SEND Futures study which finds that when asked at age 12-13, young people with an EHC plan were less likely to want to continue in education and more likely to say they wanted to go directly into work (Crowley, et al., 2023).

Table 13: Young person's plans for age 16, by SEN status

YP: Age 16 plans:	No SEN	LSID (NSP) *	School Action *	School Action Plus *	Statement *	SEN School *
School sixth form	68.6	54.4	52.9	54.5	45.5	50.6
College / Other Institution	24.6	32.6	29.7	30.7	31.7	31.5
Apprenticeship	4.6	6.9	10.3	7.3	12.3	5.2
Work	1.9	2.9	5.1	5.9	9.8	8.3
Leave	0.4	3.2	2.0	1.7	0.7	4.4
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group. "College / Other Institution" includes "Stay on but don't know where"; "Leave" includes: Be unemployed; Start a family; Don't know. Source: NPD; LSYPE2 waves 1 and 2: weighted..

The pattern of young people's plans is in line with their parents: parents of young people without SEN are more likely to want their children to stay-on in full-time education; those with children in receipt of SEN provision more likely to expect a future for their child in an apprenticeship or employment. Parents of pupils in SEN Schools also appear more likely to expect their children to leave school at 16.

Table 14: Main parent educational expectations, by SEN status

Main Parent: Age 16 plans:	No SEN	LSID (NSP) *	School Action *	School Action Plus *	Statement *	SEN School *
Full-time Education	89.2	80.6	75.2	69.5	70.1	76.2
Apprenticeship	5.5	5.1	12.4	14.2	14.9	11.3
Work	4.9	12.3	10.7	13.8	12.2	5.7
Leave	0.4	2.0	1.7	2.5	2.8	6.8
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group. "Leave" includes: Be unemployed; Start a family; Don't know. Source: NPD; LSYPE2 waves 1 and 2: weighted..

Sense of self

Locus of control refers to the extent to which individuals believe they, as opposed to external forces beyond their influence, have control over the events that affect them (Rotter, 1954). It is measured by statements such as, “People like me don’t have much of a chance in life” and “How well you get on in this world is mostly a matter of luck”. It is measured on a scale of 0-9 with higher scores representing a higher, more internalised locus of control.

Equates hard work with success measures the extent to which a young person believes in the value of working hard at school and elsewhere in order to succeed and is measured by statements such as, “Working hard at school will help me get on later in life” and “If you work hard at something you’ll usually succeed”, on a scale of 0-9; the higher the score, the more strongly the young person equates working hard with success.

Both measures have been shown in other work using the LSYPE2 data as being strongly related to KS4 attainment. For example, Lessof et al. (2018) show that a one unit increase in either self-concept indicator was associated with an increase of two GCSE grades (on one subject) on average. These relationships attenuate when other factors are controlled for, but even in the fully conditional model, locus of control remains a significant predictor of attainment with an increase of half a GCSE grade.

Table 15 shows that young people in receipt of SEN provision have lower locus of control scores than those in the No SEN group, indicating a more externalised sense of control, that is a greater belief that external factors or luck dictate one’s fate. Young people in these same four SEN groups – School Action, School Action Plus, Statement and SEN Schools – are also less likely to believe that working hard is the key to success than those without any identified SEN.

Table 15: Locus of Control and “Equates hard work with success”, by SEN status

Sense of self:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
Locus of control	5.73	5.79	5.15 *	4.91 *	5.02 *	4.48 *
Hard work = success	7.35	7.23	7.03 *	7.03 *	6.98 *	6.97 *

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Positive activities and social engagement

The richness of the LSYPE2 data also enables a more detailed insight in the lives of young people outside of school, how they spend their time and how often they spend time with friends and family.

Table 16 indicates that, in comparison with the No SEN reference group, fewer young people across all SEN groups, except for those in SEN Schools, have taken part in any kind of sport in the last 4 weeks: just under half of the No SEN group (48.9%) report recently taking part in sport, compared with 40.3% of those with LSID (NSP), 37.7% in the School Action group, 34.7% in School Action Plus, and less than a third (29.8%) of those with Statements.

Fewer young people report playing a musical instrument in the last 4 weeks than had played sport, but again the incidence is significantly lower amongst those with SEN provision, while, at the same time, young people with SEN are more likely than their peers without any identified SEN to report having engaged in "none of the activities listed". [27]

Table 16: Percentage engaged in certain activities over the last 4 weeks, by SEN status

Activity:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
Taken part in sport (%)	48.9	40.3 *	37.7 *	34.7 *	29.8 *	41.7
Musical instrument (%)	16.9	16.0	9.0 *	10.3 *	6.8 *	7.2 *
None of the activities listed	14.4	17.3	27.1 *	27.2 *	26.9 *	23.1 *

Notes: * Indicates differences are significant at, at least, $p<0.05$, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Table 17 further highlights that in terms of the frequency of doing and playing sports, those in SEN provision groups, again with the exception of young people in SEN Schools, take part less frequently.

[27] Other activities asked about include: "Played snooker, darts or pool"; "Gone to a football match or other sports event"; "Gone to an amusement arcade"; "Gone to a party, dance, nightclub or disco"; "Gone to a pub or bar"; and "Gone to the cinema, theatre or concert".

Table 17: "How often do you do sports?" (%), by SEN status

Frequency plays sports:	No SEN	LSID (NSP)	School Action *	School Action Plus *	Statement *	SEN School
Most days	29.6	23.7	27.6	25.9	18.0	33.5
More than once a week	29.9	24.0	28.1	26.0	17.9	14.7
Once a week	17.3	16.6	17.5	16.4	21.2	31.7
Less than once a week	4.7	6.7	3.8	5.3	9.9	3.8
Hardly ever	10.0	18.1	10.6	11.1	14.4	5.5
Never	8.5	10.9	12.4	15.4	18.6	10.7
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Evidence here also indicates that young people in School Action, School Action Plus and those with Statements read less often than their counterparts without SEN (Table 18).

Table 18: How often young person reads, by SEN status

Frequency reads:	No SEN	LSID (NSP)	School Action *	School Action Plus *	Statement *	SEN School
Most days	22.1	27.4	16.6	17.1	15.9	16.4
More than once a week	17.6	18.1	11.6	12.4	12.6	14.7
Once a week	14.6	12.7	13.5	12.6	15.1	15.5
Less than once a week	11.4	9.3	9.3	9.7	12.8	3.9
Hardly ever	19.7	14.9	22.4	24.6	20.4	15.0
Never	14.7	17.5	26.5	23.6	23.2	34.5
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Finally, we explored how young people chose to spend their free time. Table 19 shows a pattern of results which suggest that those the Statements and in SEN Schools socialise more with their families and spend time alone than those in the No SEN group.

There are no significant differences between how young people in the No SEN reference group and the LSID (NSP), School Action and School Action Plus group spend their free time.

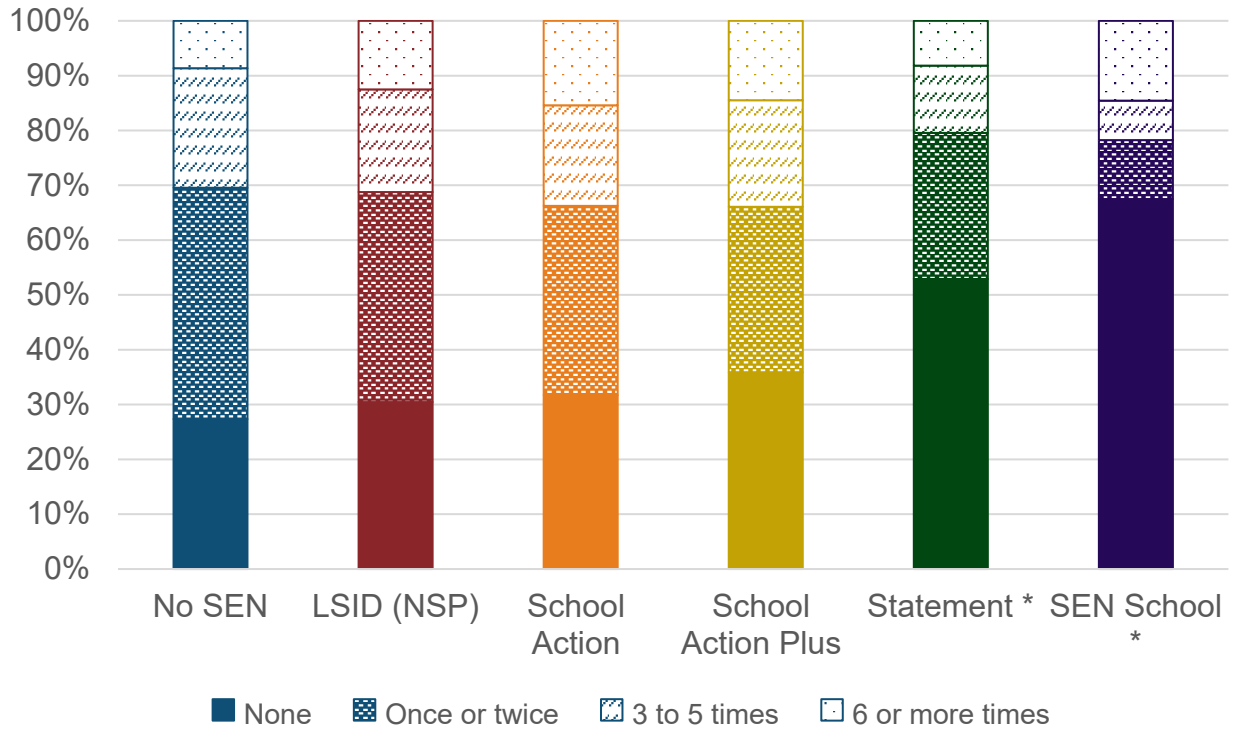
Table 19: "When you have free time, what do you mainly do?" (%), by SEN status

Who spend free time with:	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
Go out somewhere with friends	40.0	37.0	39.8	41.1	20.5	19.5
Go to each other's houses	13.9	12.0	13.1	10.4	13.1	5.0
Talk with friends on the phone or online	18.0	21.2	16.4	14.4	15.1	12.6
Spend time with their family	14.1	14.2	15.8	16.4	25.2 *	38.4 *
Spend time by themselves	13.4	13.9	13.9	17.4	26.1 *	24.5 *
None of these	0.6	1.7	1.0	0.3	0.0	0.0
Total	**100**	**100**	**100**	**100**	**100**	**100**

Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

In line with this, Figure 17 indicates that young people in these two groups – Statement and SEN Schools – are less likely to have spent time going out with friends in the last week than peers in the No SEN group. Again, there are no significant differences between the other SEN types and those without any identified SEN.

Figure 17: "Over the last 7 days, how many times have you gone out with friends?", by SEN status



Notes: * Indicates differences are significant at, at least, p<0.05, from the No SEN reference group.
Source: NPD; LSYPE2 waves 1 and 2: weighted..

Early adult outcomes

Building on the previous chapter in which we described the differences across the SEN groups in terms of their main activity, individual and family-level background characteristics, in this section of the report we explore a range of early adult outcomes available in the LSYPE2 which capture different dimensions of young people's preparation for happy, healthy and productive adulthoods.

Different models and identifying statistically significant effects

Differences in the outcomes of our SEN groups were estimated using multivariate regression analysis, with young people without SEN – "No SEN" - as the reference, or comparison, group.

For each outcome, three regression models were estimated:

- an unadjusted model;
- a model adjusted for a pre-defined set of controls that might otherwise account for the differences found; and
- a model further adjusting for differences Key Stage 4 attainment.

Again, for the majority of the analyses, each of the six SEN groups is assigned the same colour – typically the No SEN group are blue, the LSID (NSP) group red, and so on. In the figures that follow, the legend given corresponds with the No SEN reference group, but any shading or patterning within the bars applies equally across each of the SEN types, details of which are given in the legend.

For reasons of brevity, when reporting our findings, we refer to young people's SEN status in Year 10 without reminding the reader that this was their recorded status five years prior to the outcome we are examining, when they were aged 19/20. For example, where we say School Action or SEN School, we mean young people who had been in receipt of 'School Action', or who had a Statement and were attending a special needs school in Year 10.

Mental health and wellbeing

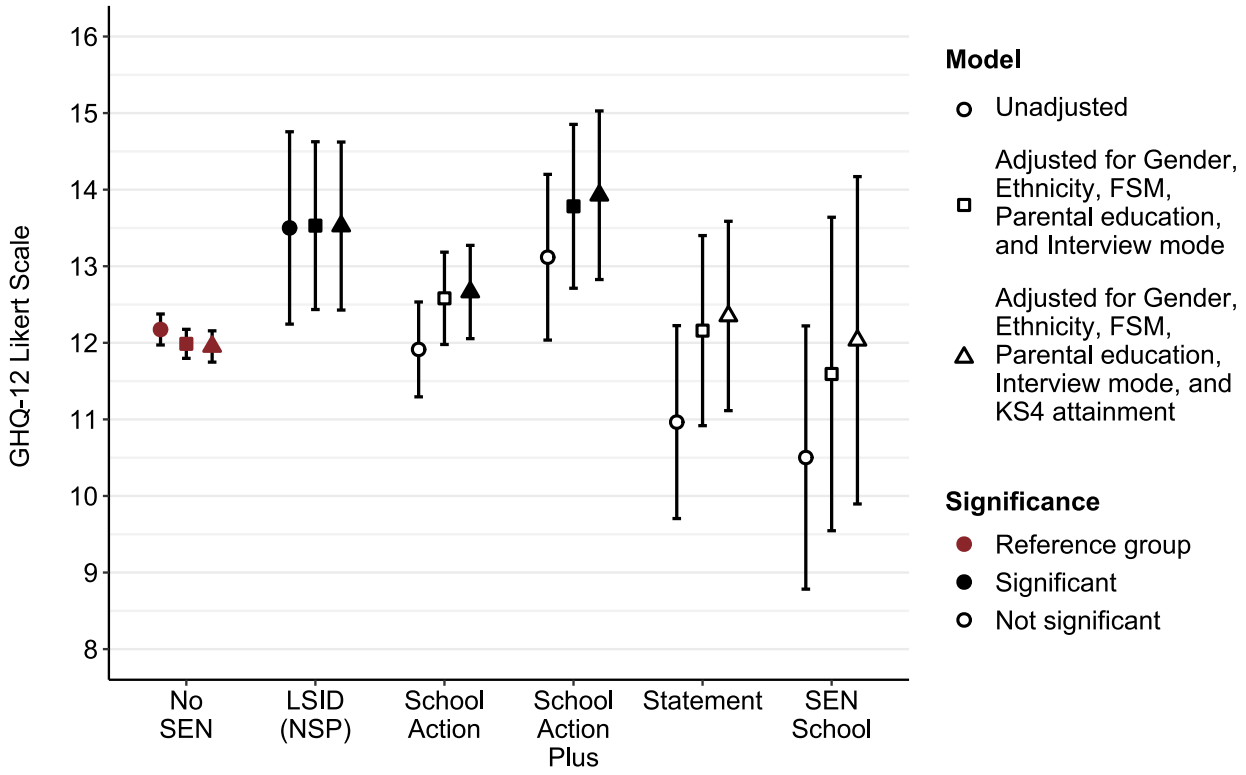
Mental health: GHQ-12

GHQ-12 was developed as a screening instrument for identifying mild to moderate psychiatric morbidity (Goldberg and Williams, 1988). It measures the presence and

frequency of set of twelve psychological and somatic symptoms considered to indicate psychological distress. Responses are converted to a scale (0 – 36) with high scores indicating higher levels of psychological distress, or a binary indicator to identify cases considered clinically significant (3 or more symptoms). Figures 18 and 19 present mean psychological distress and the prevalence of GHQ-12 Caseness across our six SEN groups, respectively.

GHQ-12 mean scores were a little higher, on average, among LSID (NSP) young people (13.5), compared to those with no recorded needs (12.2). Whereas young people with a Statement (11.0) and those who attended SEN Schools (10.5), had lower scores on average, although these differences were borderline significant (p = 0.06).

Figure 18: GHQ-12, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls led to a small increase in scores for young people with SEN: scores for School Action Plus (13.8) were now significantly higher, and borderline significantly higher for School Action (12.6; p = 0.07), compared to those with no recorded needs (12.0). Other characteristics associated with psychological distress – being female[28], having higher educated parents, and even responding to the survey online – are more prevalent in our no SEN comparison group, which masks some of the association

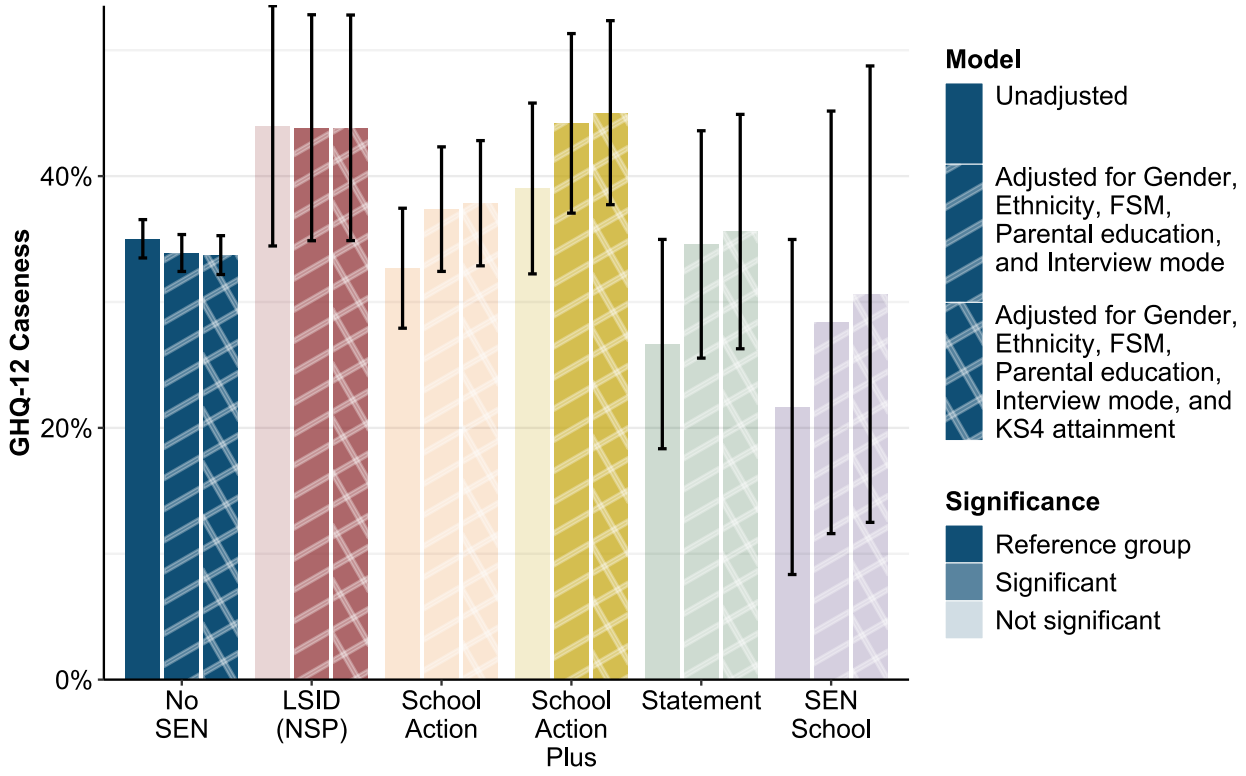
[28] For example, in our sample, GHQ-12 mean scores were 13.6 for young women and 10.7 for young men.

between SEN and psychological distress. Once we adjust for this, we get a more accurate understanding of the relationship.[29]

Further adjustment for KS4 attainment saw a further, slight increase in average scores for SEN groups, with the difference for School Action (12.7) also statistically significant. Again, this is because higher attainment is also associated with psychological distress, which serves to mask some of the association with SEN.

Figure 19 shows the proportion of young people reporting a level of psychological distress considered clinically significance (three symptoms or more), meaning that some kind of intervention (counselling, for example) might be appropriate. Our results show that quite a sizeable proportion of all young people reported having three or more symptoms (34.9%). Differences were evident across SEN groups, which were again statistically significant after adjusting for controls: LSID (NSP) (43.8%) and School Action Plus (44.2%) young people were more likely to report three or more symptoms compared to those with no SEN (33.9%). Whilst there was a slight increase in differences after further adjustment for KS4 attainment, the overall pattern remained unchanged.

Figure 19: GHQ-12 caseness, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

[29] Young people eligible for free school meals (more likely to receive SEN provision) were also more likely report symptoms of psychological distress. Adjustment for FSM therefore slightly reduced scores for SEN young people.

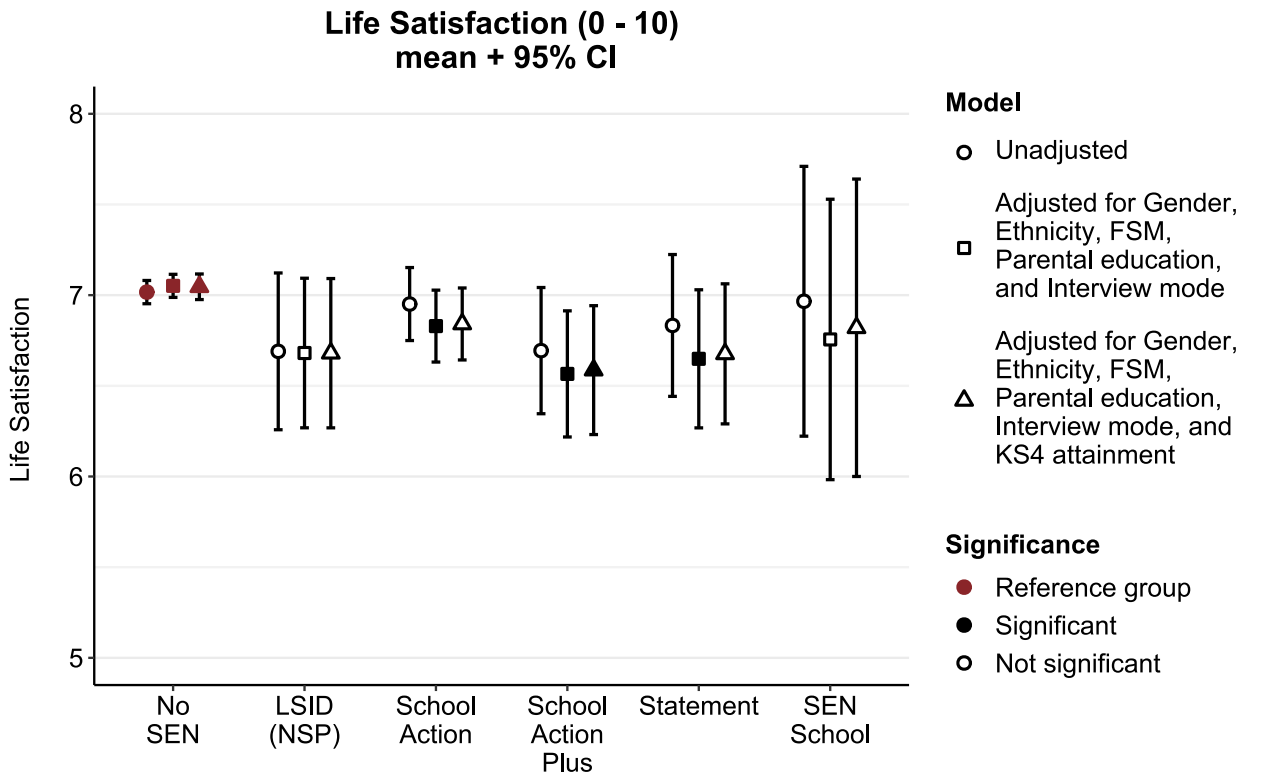
Wellbeing: ONS4

The ONS4 is a set of four personal wellbeing measures put together by the Office for National Statistics (ONS) for the purpose of developing an accepted and trusted set of measures which help people understand and monitor wellbeing across social surveys (ONS). They capture young people's personal ratings of their: life satisfaction; whether they feel that the things they were doing in their life were worthwhile; level of happiness; and level of anxiety. All measures are recorded on a scale from 0 – 10. The mean scores for each SEN group are reported in Figures 20 to 23.

Life Satisfaction

Most young people (and in fact individuals of all ages) report a life satisfaction score of 7 or 8. However, some individuals report 9 or 10, whilst others report much lower scores. The population mean therefore tends to be around 7, as it is here. Life satisfaction was very similar across the SEN groups. Whilst estimates were slightly lower for LSID (NSP) (6.7) and School Action (6.7) young people compared to those with no SEN (7.0), these differences were not statistically significant.

Figure 20: Life satisfaction, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Once we adjust for controls, differences increased slightly: School Action (6.8), School Action Plus (6.6), and young people with a Statement (6.7) had slightly lower levels of life satisfaction on average, compared to those with no SEN (7.1). This is because young women and those who responded to the survey via the web[30] were less likely to have SEN and more likely to report low life satisfaction, which masked some of the association. Once we adjusted for, average life satisfaction of young people with SEN decreased relative to those with no SEN. LSID (NSP) and young people in SEN schools also had slightly lower Life Satisfaction, but these differences were non-significant.

There was very little change in the estimates after further adjustment for KS4 attainment, nevertheless, only the difference for School Action Plus (6.6) remained statistically significant, with differences for both School Action and Statement becoming borderline significant (p-value: 0.07).

On a measurement scale of 0 – 10 these differences appear very small. It is important to note, however, that most respondents score within a far narrower range, and therefore the figures that define a 'good' or 'poor' score are also much narrower. The standard deviation - a measure of the actual spread of scores – was 2.0 for life satisfaction for our sample. Following the laws of probability, we know that around two thirds (68.3%) of young people will score within one standard deviation above and below the mean score, meaning that for most young people, they will score between 5 and 9.

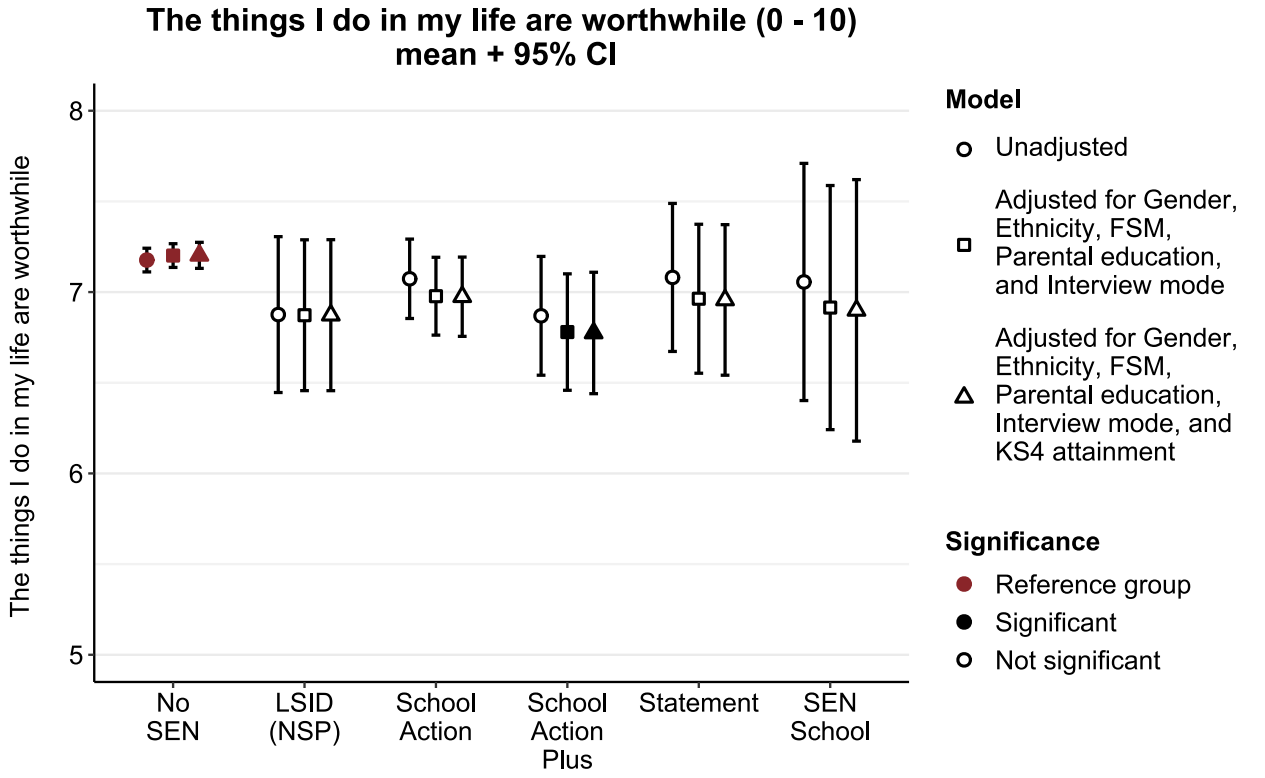
This also informs us, that even within this much narrower range, that these differences in life satisfaction, whilst statistically significant, are still very small, suggesting that, in practice there was little difference in young people's reported life satisfaction irrespective of their SEN provision group. This might be surprising, given some of the challenges pupils with SEN are likely to face, however previous research examining the relationship between long term health conditions and life satisfaction provides some further insight here. Whilst there were often large differences in life satisfaction initially, these tended to diminish and even disappear as individuals adapted to their new circumstances (Donovan and Halpern, 2002).

The things I do in my life are worthwhile

The mean scores for whether young people felt the things they were doing in their lives were worthwhile were very similar across our groups (around 7.1). After adjusting for controls the difference in the mean score between School Action (6.8) and young people with no SEN (7.2) increased slightly, becoming statistically significant, and remained so after further adjustment for KS4 attainment.

[30] This suggests a possible social desirability effect, whereby young people responding to a face to face or telephone interview were inclined to present a more socially desirable life satisfaction score than those responding via the web.

Figure 21: "The things I do in my life are worthwhile", by SEN status



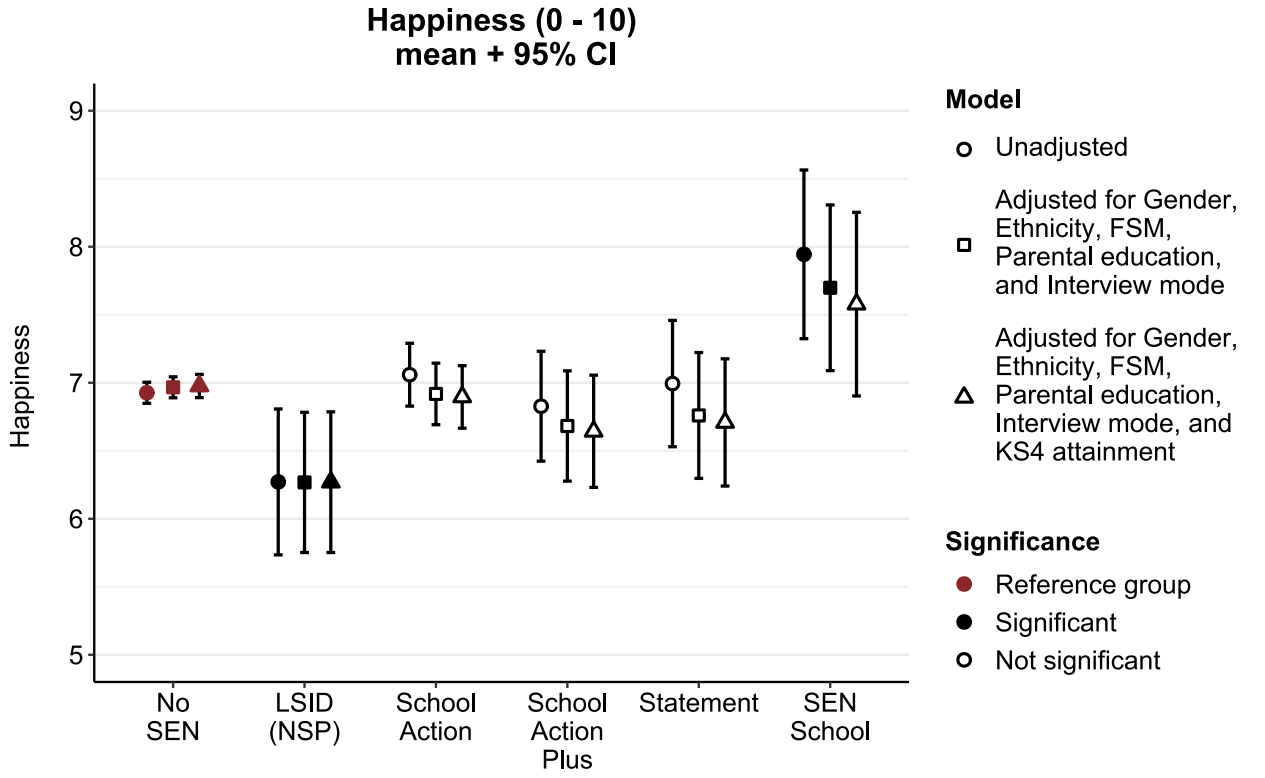
Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

However, the standard deviation for the sample was very similar to life satisfaction (2.1), again indicating that the difference was very small.

Happiness

Average happiness was very similar for School Action, School Action Plus, Statement, and those with no SEN (approximately 6.9). However, LSID (NSP) young people reported significantly lower levels of happiness on average (6.3), whilst those who had attended a SEN school (7.9) reported significantly higher levels, compared to those with no SEN (6.9).

Figure 22: Happiness, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

After adjusting for controls, the higher score for those in SEN Schools declined slightly (7.7), and then again after further adjustment for KS4 attainment, after which, it became borderline significant (7.6; p = 0.09). The lower score for LSID (NSP) remained unchanged, however.

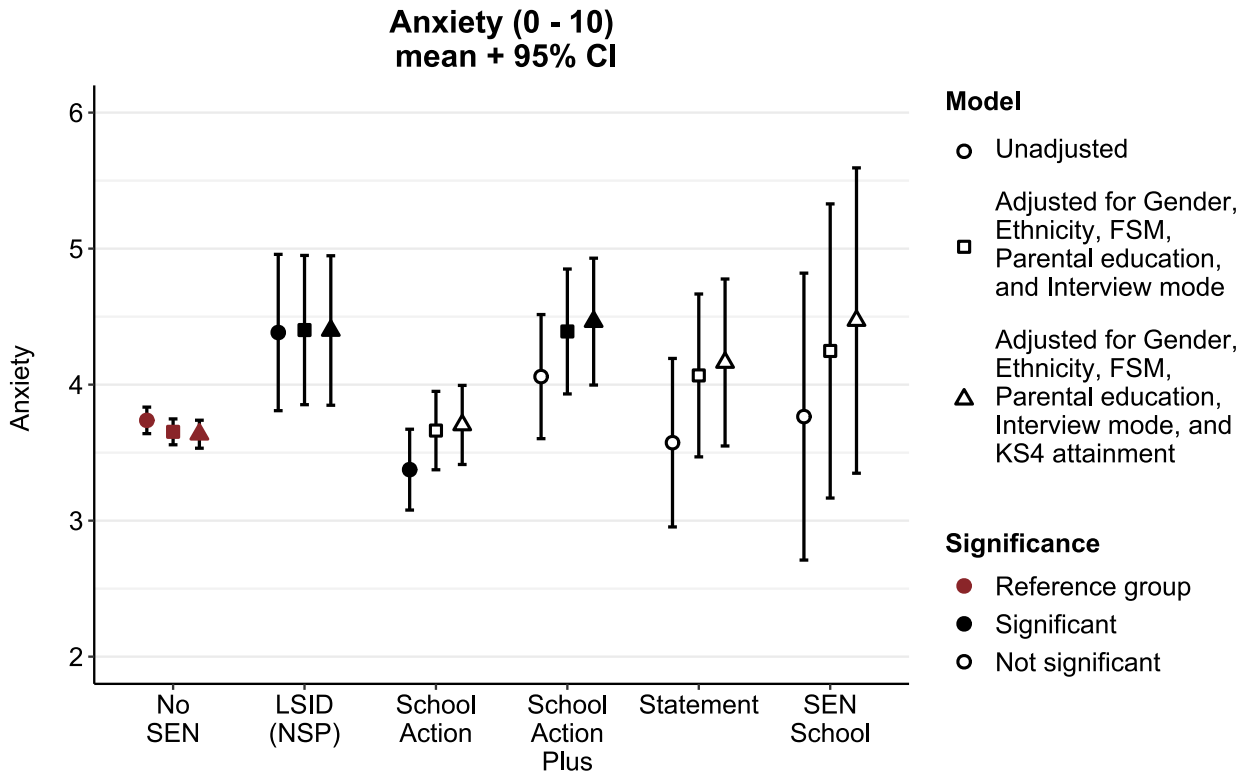
Again, this is partly because young women and those who responded to the survey via the web, both of whom were less likely to have been in a SEN school, reported lower happiness on average. Some of the original difference was therefore to do with the fact that young people in SEN schools were more likely to boys and to have had a face-to-face interview. We also noted a substantial difference in the distribution of responses for happiness among young people who had attended SEN schools, possibly reflecting that some young people with particular needs may find the level of reflection required by the measure challenging (see Appendix Figure 2 and related discussion for further detail here). LSID (NSP) were more similar to those without SEN on our control measures and KS4 attainment, meaning that the statistical adjustment for this group will have less of an effect.

The differences in scores were a little larger overall than for the previous two wellbeing measures, however the standard deviation for the sample was also slightly larger (2.4), meaning the range within which most young people respond was also a little larger (4.5 to 9.3).

Anxiety

As a measure of poor wellbeing, anxiety scores were much lower overall (mean: 3.7). However, in addition to reporting lower levels of happiness, LSID (NSP) (4.4), were also more likely to report higher levels of anxiety than those with no SEN (3.7), whereas School Action (3.4) young people were more likely to report lower levels. The results also point to slightly levels of anxiety among School Action Plus (4.1) young people, but this was not statistically significant.

Figure 23: Anxiety, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls increased the estimates for our SEN groups, again owing to greater numbers of young women, those with higher educated parents, and those responding to the web survey being in the no SEN group. Levels of anxiety were higher for School Action Plus (4.4) young people, and the score for School Action (3.7) young people was now similar to those with no SEN. Scores for young people with a Statement and those who had attended SEN schools were also higher, but the difference was non-significant.

There was a very slight increase in anxiety scores for young people with SEN after further adjustment for KS4 attainment, but the overall pattern remained the same. Previous research has shown a link between higher KS4 attainment and increased levels of anxiety (Lessof, et al., 2016).

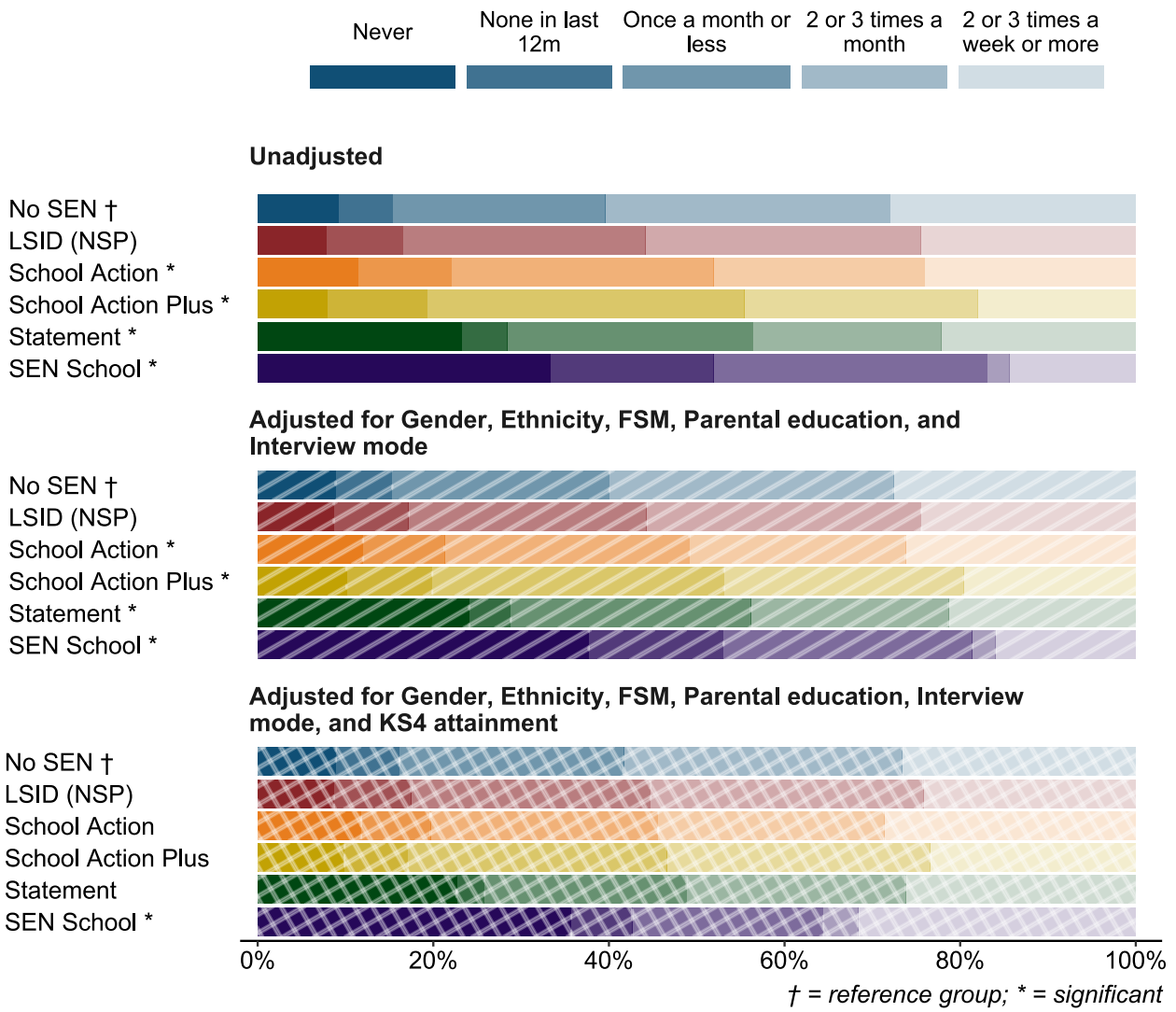
It is possible that our figures may have underestimated levels of anxiety amongst those with the greatest levels of need, as that individuals with intellectual difficulties may not easily understand the concept of “anxiety” or recognise some of their behaviours as being because they are anxious, leading to an under-reporting of anxiety symptomatology. Mingins et al. (2024), for example, highlight the particular importance of using assessments designed specifically for those with diverse and varying communications abilities when studying anxiety.

Health-related behaviours

Frequency of alcohol use

There was a visible gradient in the frequency of alcohol use across the SEN groups: young people with no SEN (60.4%) were those most likely to drink at least 2 or 3 times a month in the previous year, followed by LSID (NSP) (55.9%), and School Action (48.1%). Frequency of drinking was then similarly lower for School Action Plus (44.6%) and those with a Statement (43.6%), and then much lower among those who had attended a SEN school (16.9%).

Figure 24: Frequency of alcohol use, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls had a very small effect on our estimates. However, further adjustment for KS4 attainment explained most of the remaining differences.[31] KS4 attainment was strongly associated with frequency of drinking alcohol, which could be the consequence of young people attaining higher paid work (affordability) or attending university, where drinking alcohol is more common (context).

Our initial estimates, however, including those adjusted for controls, suggests a significant inverse relationship between alcohol consumption and severity of SEN: young people who had the severest needs (those attending SEN schools) were far more likely

[31] The slightly odd change to frequency of drinking for those who had attended SEN schools is most likely because a majority of these young people (59%) had a zero score for Key Stage 4 attainment.

to abstain (37.7%), compared to other young people, and especially those with no SEN (8.9%).

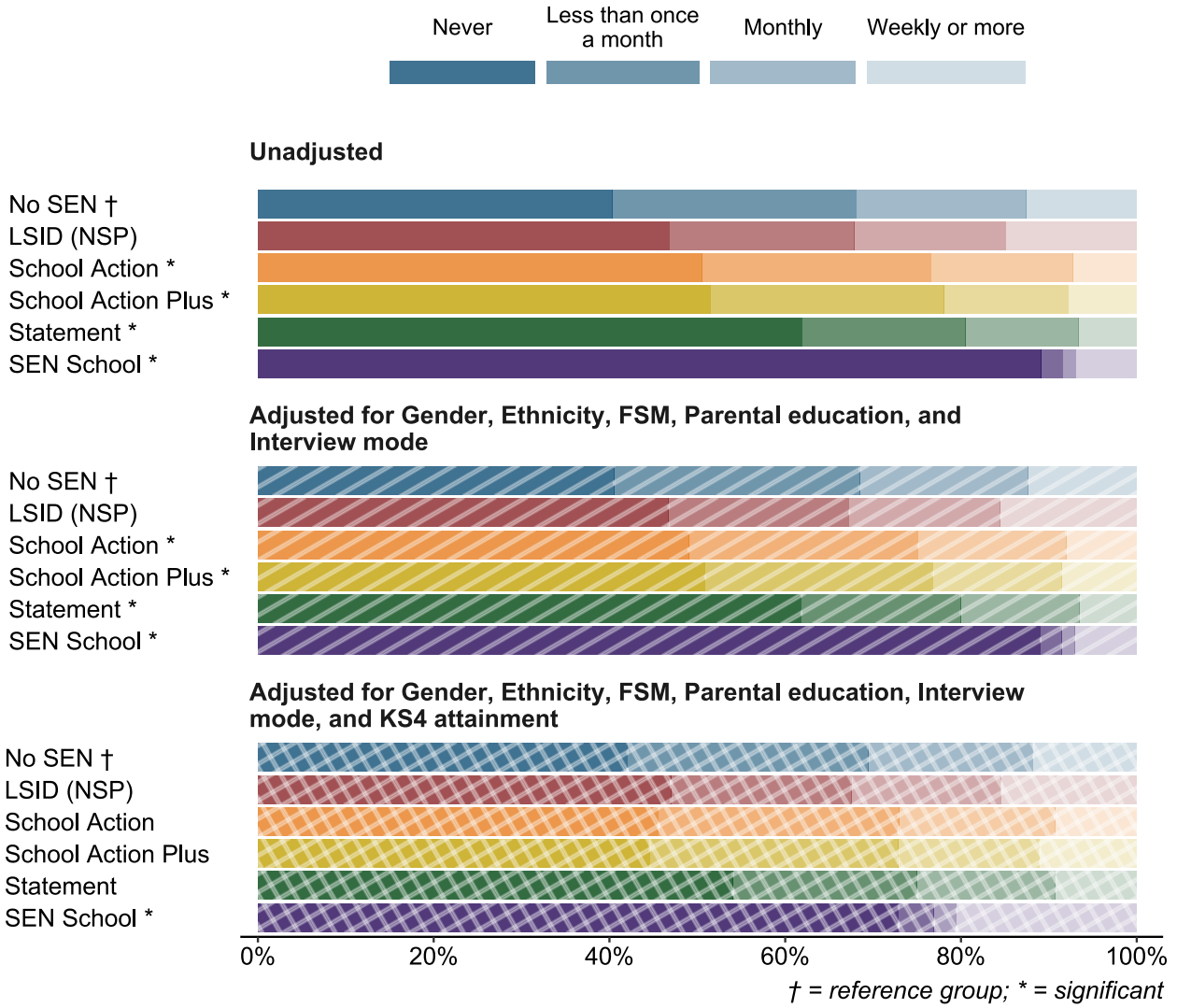
Binge drinking

Figure 25 shows a similar gradient for binge drinking, which is defined as 'getting very drunk', although the proportion of young people abstaining this behaviour was far greater. Young people with no SEN (31.9%), and LSID (NSP) (32.2%) young people were those most likely to binge drink at least once month or more. The prevalence was then smaller for School Action (23.3%), School Action Plus (21.9%), Statement (19.5%) young people, and those who had attended SEN schools (8.4%).

Again, adjusting for controls had a very small effect on our estimates, however further adjustment for KS4 attainment accounted for most of the differences identified.[32]

[32] Again, the slightly odd change to frequency of drinking for those who had attended SEN schools is most likely because many had a zero score for Key Stage 4 attainment.

Figure 25: Frequency of binge drinking, by SEN status

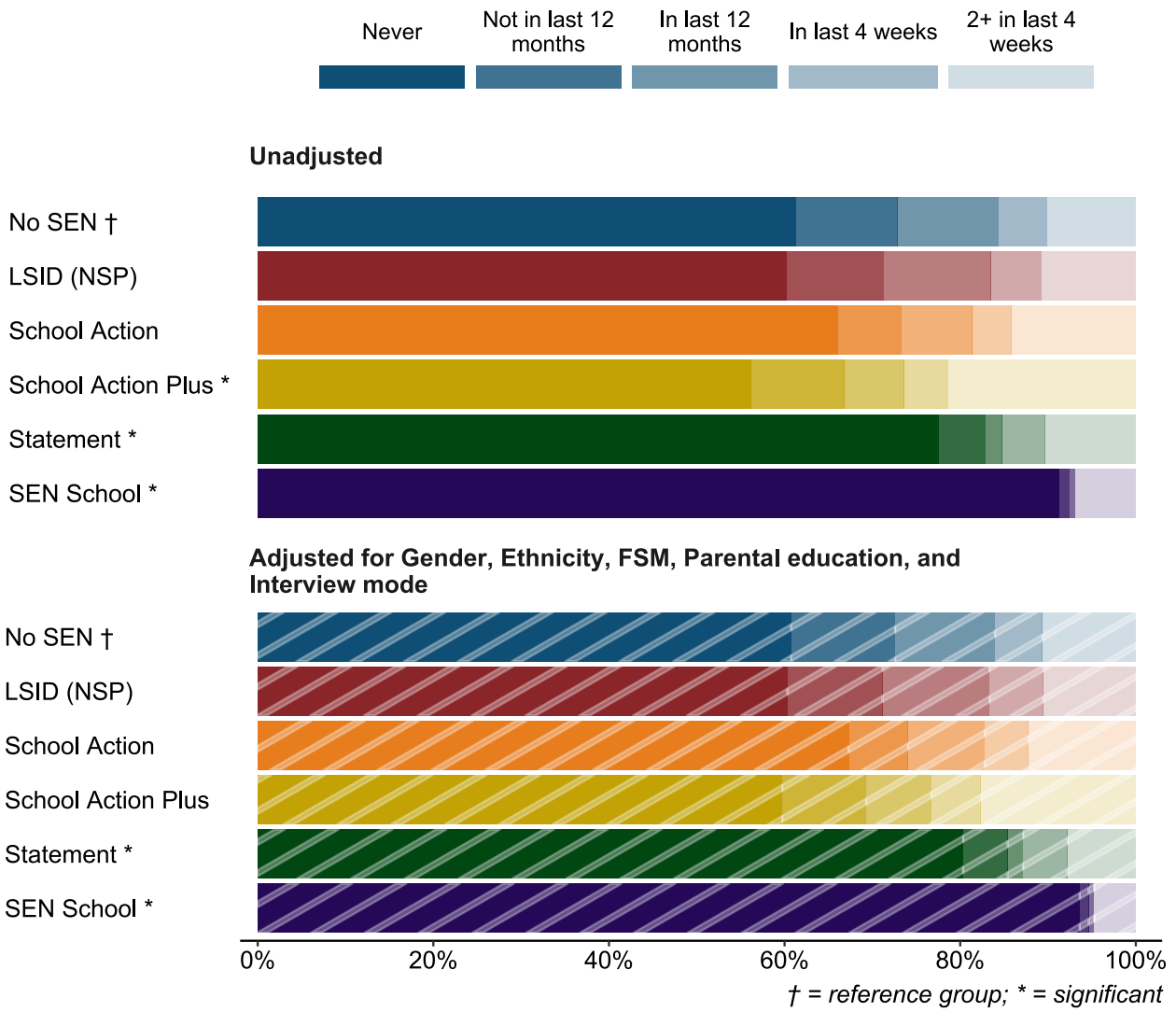


Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Cannabis use

A gradient was also evident for frequency of cannabis use. In addition, however, School Action Plus young people were those most likely to have used cannabis at all and to have used it more frequently in the last 12 months, compared to those with no SEN: 21.4% had used cannabis twice or more in the last four weeks compared to 10.1% among young people without SEN. Young people with a Statement (77.5%) and those who had attended SEN schools (91.3%) were far less likely to have ever tried cannabis compared to those with no SEN (61.3%).

Figure 26: Frequency of cannabis use, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls slightly reduced the frequency of cannabis use across the SEN groups, with the difference between School Action Plus (17.7%) and no SEN (10.6%) young people no longer statistically significant. This was primarily because of a lower frequency of cannabis use among young women, but also ethnic minority groups who were also less likely to have SEN.

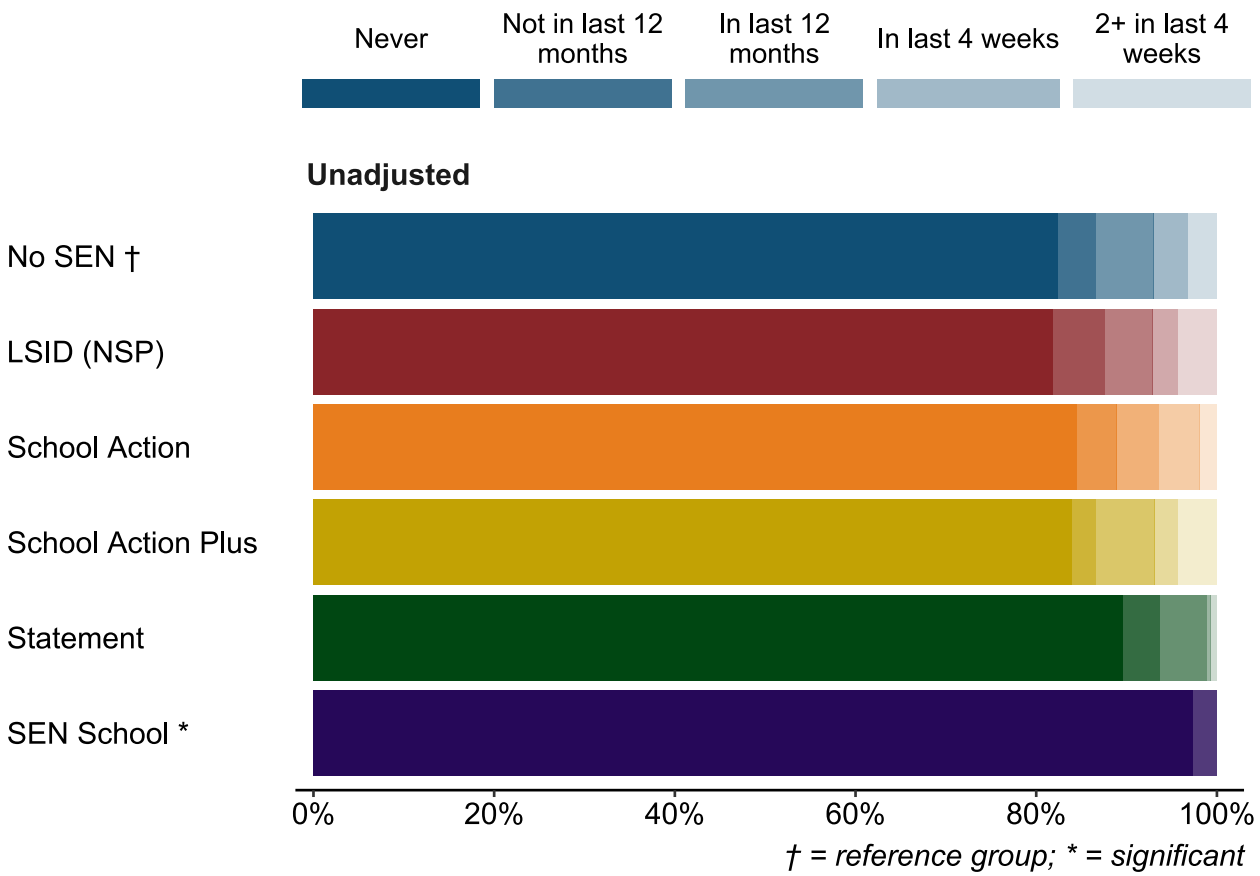
There was little change after further adjustment for KS4 attainment. However, frequency of cannabis use among Statement young people and those who had attended SEN schools remained significantly lower throughout.

Other drug use

The frequency of other drug use, which includes class A drugs such cocaine, ecstasy, and LSD, was far lower overall, with most young people having never tried them (83.1%).

Again, there is evidence of a gradient in relation to the level of SEN provision, however, low prevalence in other drug use and small SEN groups mean that few of the differences were statistically significant.

Figure 27: Frequency of other drug use, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Young people who had attended SEN schools were far less likely to have used other drugs at all (2.7%) than those with no reported needs (17.6%), and there was indication that other drug use was more frequent among LSID (NSP) young people, however this was not statistically significant.

There were very slight changes to the estimates after adjustment. Lower frequency of other drug use among Statement young people became statistically significant after adjusting for controls, but non-significant after further adjustment for KS4 attainment.

Other

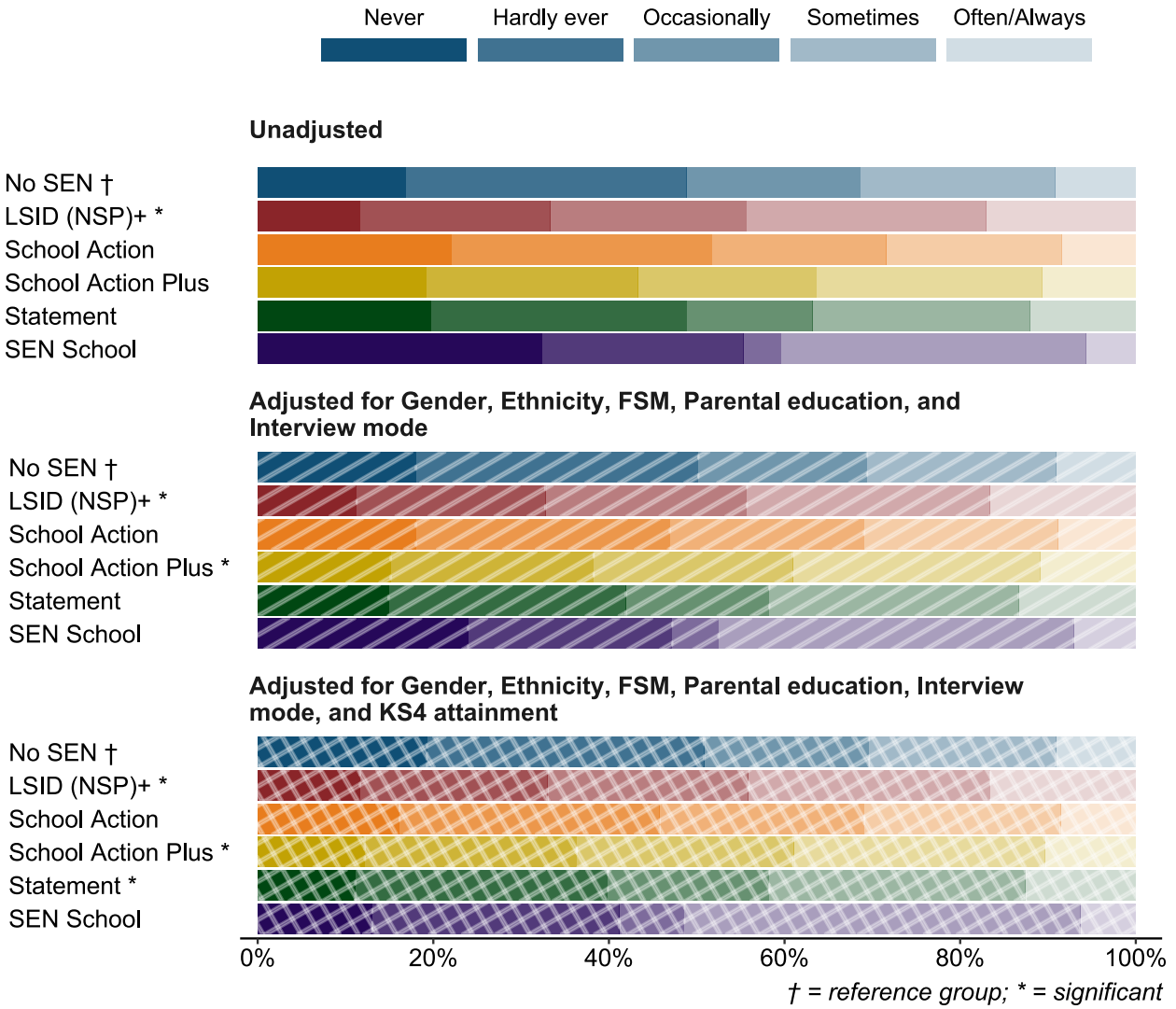
Loneliness

About one in ten young people reported that they often or always felt lonely, with a further one in five reporting that they had sometimes felt this way. LSID (NSP) young people

were those most likely to frequently feel lonely, with 17% reporting that they often or always felt this way, compared to 9.2% of those with no SEN.

For the most part, young people with SEN were closer to those with no SEN. School Action young people were a little less likely to feel lonely, and School Action Plus and Statement young people, a little more likely, however these differences were non-significant. Among young people who had attended SEN schools there was a polarisation of experiences: more of these young people had felt lonely at least sometimes (40.4% compared to 31.4% of those with no SEN) but also more of these young people had never felt lonely (32.4% compared to 16.9% of those who had no SEN). These differences were also non-significant, however.

Figure 28: "How often do you feel lonely?", by SEN status



*† = reference group; * = significant*

Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls increased the frequency of loneliness a little across SEN groups. More young people felt lonely at least sometimes among School Action Plus (39.1%) and young people with a Statement (41.7%; p = 0.07) compared to those with no SEN (30.6%), although the latter difference was only borderline significant. This was a consequence of a greater frequency of loneliness among young women and those with degree educated parents[33] both of whom were more likely to be in no SEN.

There was little change in the estimates after further adjustment for KS4 attainment, although the greater frequency of loneliness among Statement young people was now statistically significant. Frequency of loneliness increased with level of attainment, which may have been a consequence of higher attaining young people being away at university (context).

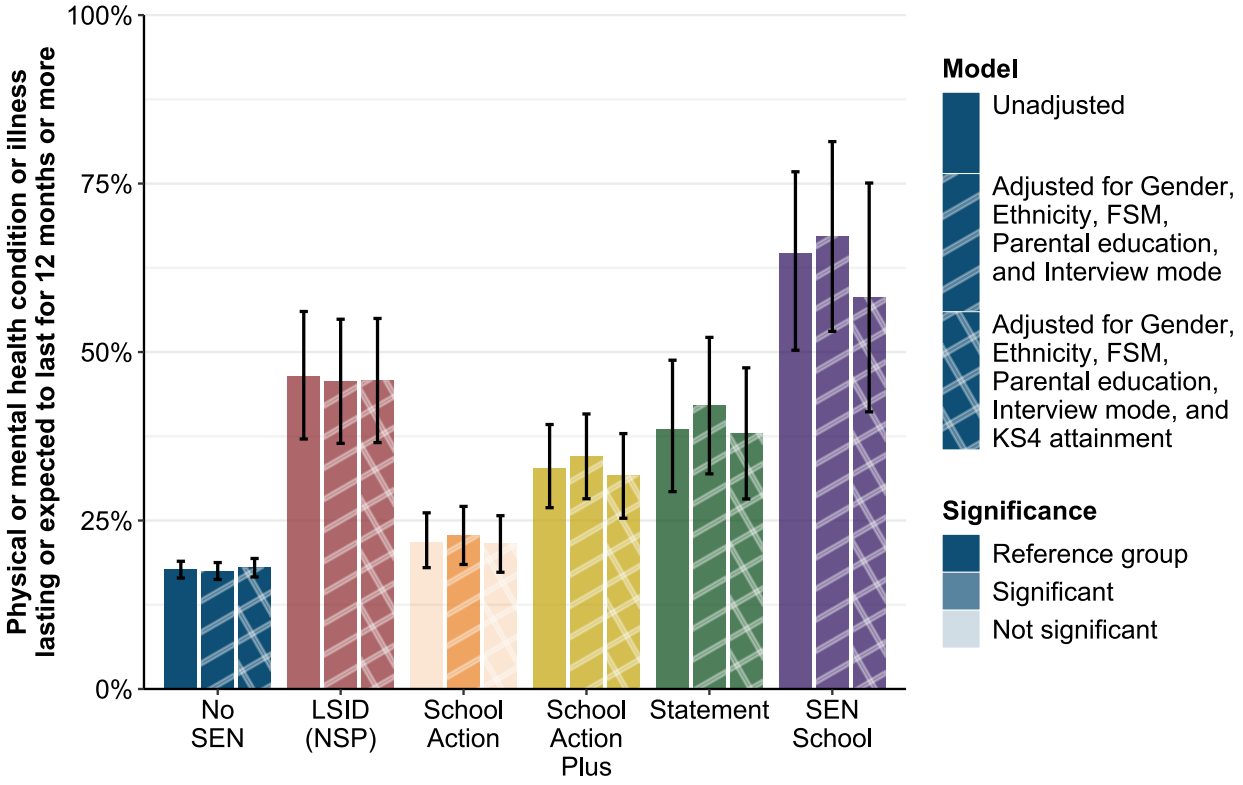
In sum, LSID (NSP) and School Action Plus young people were a little more likely to feel lonely more frequently, once we accounted for differences in other characteristics.

Physical or mental health condition or illness lasting or expected to last for 12 months or more

Young people with SEN in Year 10 were more likely to report having a physical or mental health condition, or illness lasting or expecting to last for 12 months or more, at age 19/20. There was also a gradient in relation to increasing SEN provision: School Action (21.8%, p = 0.06)[34], School Action Plus (32.8%), Statement in mainstream school (38.6%), and Statement in SEN school (64.6%), compared to 17.7% among those with no SEN. Young people whose parents had reported them as having a longstanding illness, disability or health condition that affected their schooling in Year 10, but who were not in receipt of SEN provision, were also far more likely themselves to report having a condition at age 19/20 (46.4%).

[33] It is plausible that this might *also* be a consequence of living away at university as young people with degree educated parents are more likely to attend university.
[34] Although the difference between School Action and those with no SEN was only borderline significant.

Figure 29: Longstanding illness or disability, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls slightly increased the proportion of young people with SEN with a longstanding condition at age 19/20, with the borderline significant difference for School Action becoming statistically significant. This was a consequence of higher rates of reported conditions among young women, those with degree educated parents, and those who responded to the web survey, all of whom were more likely to be in the no SEN group.

Further adjustment for KS4 attainment led to a slight *decline* in the proportion of young people with SEN reporting a condition at age 19/20, with the difference for School Action now no longer significant. Low attaining young people were more likely to have SEN and report a longstanding condition at 19/20, which had partly contributed to the original differences.

Post-16 attainment outcomes

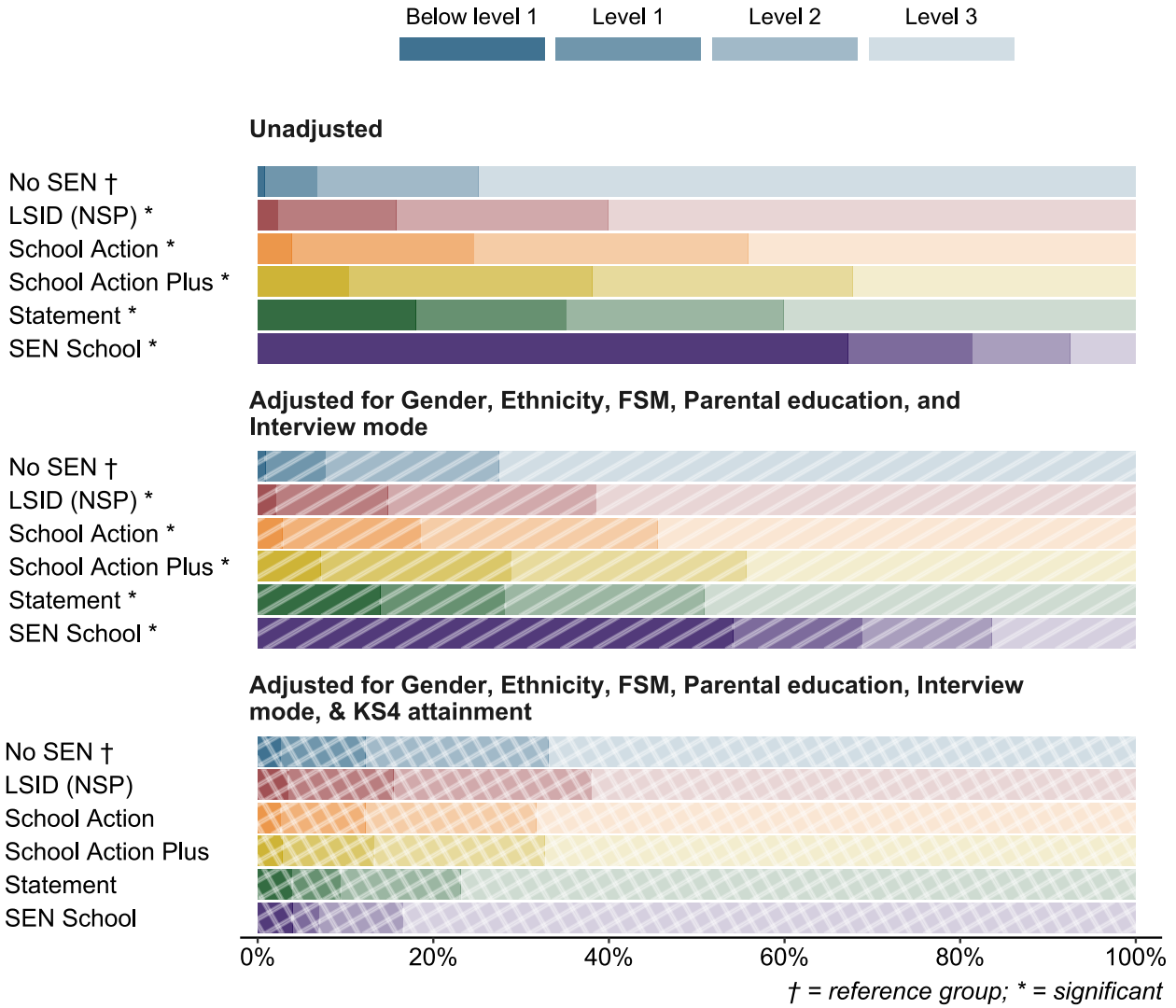
Highest NVQ level at age 19/20

The differences in young people's attainment at age 19/20 were similar to those seen for KS4, with a strong gradient in relation to level of SEN provision. Three quarters (74.8%) of young people with no SEN had achieved Level 3 by the time they were aged 19/20, compared to LSID (NSP) (60.1%), School Action (44.1%), School Action Plus (32.2%),

Statement (40.1%), and those who had attended a SEN School (7.5%). However, many more young people with SEN had achieved Level 2 or higher: No SEN (93.2%), LSID (NSP) (84.3%), School Action (75.4%), School Action Plus (61.9%), Statement (64.8%), and SEN School (18.6%).

Aside from young people who were in SEN schools, almost two thirds of young people in each of the other groups examined had therefore achieved Level 2, with fewer achieving below Level 1. Interestingly, young people with a Statement appeared to have achieved higher attainment, overall, than those with School Action Plus. This might reflect that some statements guaranteed additional hours of funded support. Therefore, whilst these young people were likely to have a greater severity of need, they may also have had a greater level of support than those in the School Action Plus group.

Figure 30: Highest NVQ level at age 19/20, by SEN status

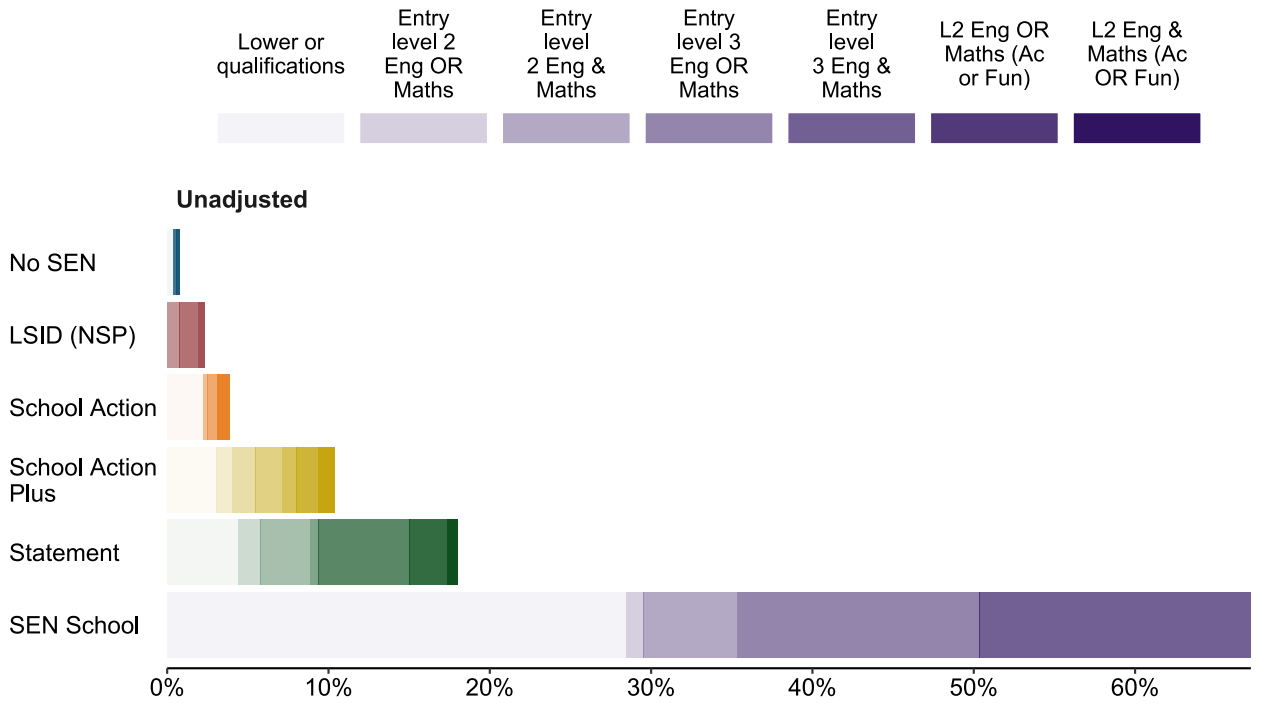


*† = reference group; * = significant*

Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Some young people who attended SEN schools had managed to attain level 3 qualifications (7.5%), or at least a level 2 (18.6%), and a third (32.8%) had achieved level 1 or higher. However, given their likely level of need, it is unsurprising that most had lower level or no qualifications (67.2%). Nevertheless, many still managed to achieve some form of formal qualifications, as Figure 30 attests: 16.8% of these young people achieved an entry level 3 in both English and maths, a further 15% had achieved this in at least one of these subjects, and a further 5.8% achieved an entry level 2 in both. Examples of below level 1 attainment were also seen across the other SEN groups, including in some cases, the achievement of a level 2 in both English and maths (academic or functional). However, it should be noted that sample sizes for those with below level 1 qualifications were particularly small, and therefore the proportions shown in Figure 31 should only be considered indicative.

Figure 31: Highest below Level 1, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Returning to levels 1 to 3 attainment presented in Figure 30, after we adjusted for controls the gradient in attainment by level of SEN provision reduced by about a half. This was mostly the result of a strong relationship between FSM eligibility and parental education, and age 19/20 attainment, both of which were associated with SEN provision. More advantaged young people were more likely to have higher attainment and less likely to receive SEN Provision. Once we account for this association, the gradient reduced.

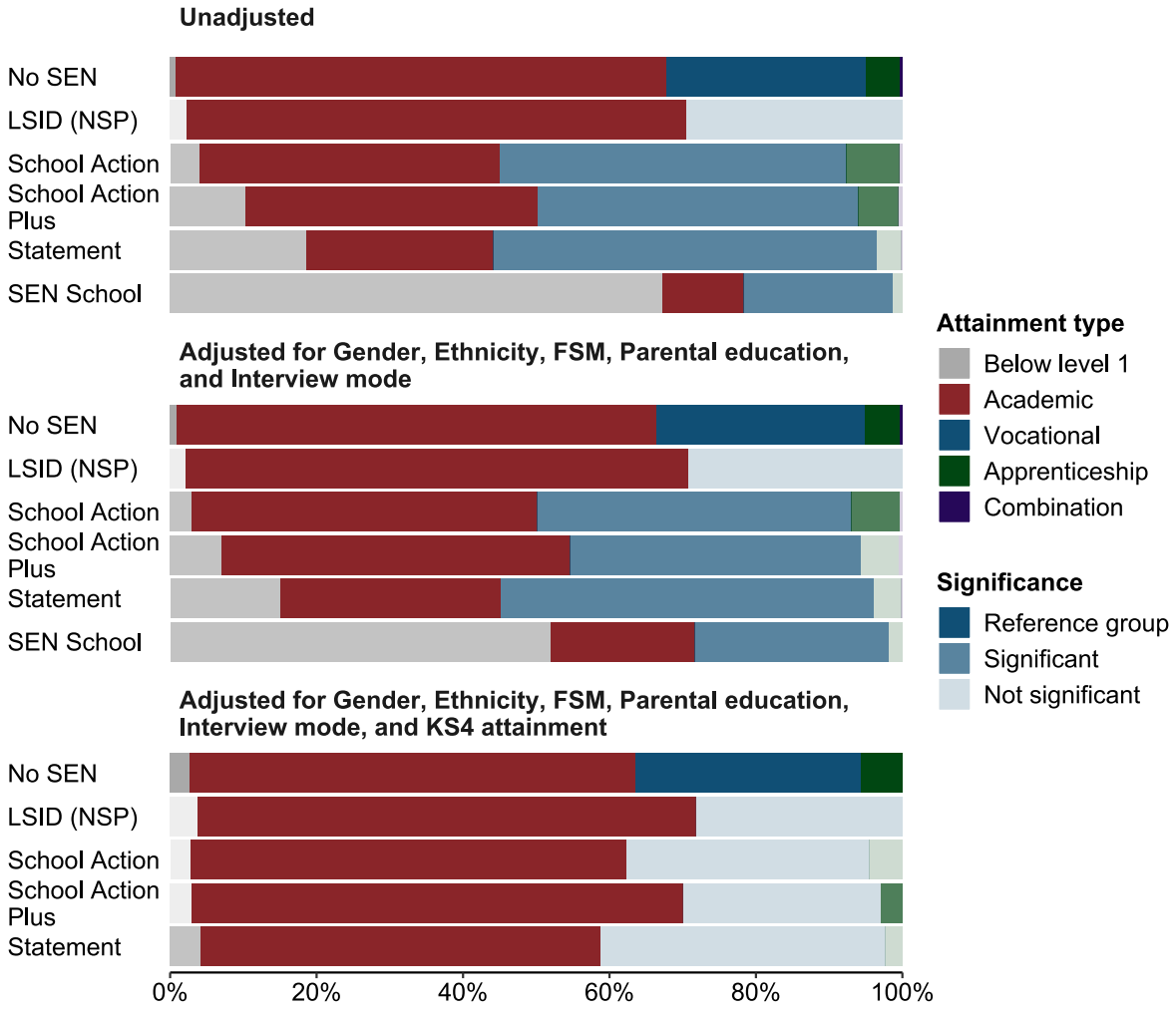
When we adjust for differences in KS4 attainment we are in effect adjusting for any prior differences in attainment up to age of 16, consequently, any remaining differences relate

to the *progress* in attainment young people made following their GCSEs. Our results suggest there was little difference in the attainment progress young people made across the SEN groups, replicating findings from a previous study (Tuckett, Robinson and Bunting, 2021), who argued that whilst young people with SEN were far more likely to have lower attainment at KS4, they did not tend to fall further behind during this next phase. Interestingly, our results also indicate that young people with a Statement, both in mainstream and SEN schools, made greater progress on average given their respective starting point. These differences are not statistically significant, however.

Highest qualification type at age 19/20

Figure 32 presents the differences in the *type* of highest qualification young people held across SEN provision groups, distinguishing between academic, vocational, apprenticeships, and combined academic/vocational qualifications. Our data does not provide the qualification type of below level 1 qualifications.

Figure 32: Highest qualification type at age 19/20, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Two thirds of young people with no SEN held academic qualifications (67%), just over a quarter (27.2%) vocational qualifications, and one in twenty (4.7%) of them had an apprenticeship. LSID (NSP) young people were very similar, whereas young people with SEN who had achieved a level 1 qualification or higher, were more likely to hold vocational qualifications. This also increased, to some extent, with level of need: School Action (Academic: 40.9%; Vocational: 47.3%), School Action Plus (Academic: 39.8%; Vocational: 43.8%), Statement (Academic: 25.5%; Vocational: 52.3%), and SEN School (Academic: 11.1%; Vocational: 20.3%). Apprenticeships were also little higher among School Action (7.2%) and School Action Plus (5.5%) young people compared to those with no SEN (4.7%) and were non-existent for LSID (NSP).

Adjusting for controls accounted for some of the differences in highest qualification type. For the most part, there was a decline in the numbers of young people with SEN attaining below level 1 qualifications and an increase in those obtaining academic qualifications, which was a consequence of adjusting for social disadvantage and gender differences. Young women and advantaged young people, who were more likely to be in the no SEN group, were more likely to follow academic pathways. Further adjustment for differences in KS4 attainment then accounted for most of the remaining differences, as higher attainment was also associated with following more academic pathways.

Level 2 attainment in English and maths (academic or functional)

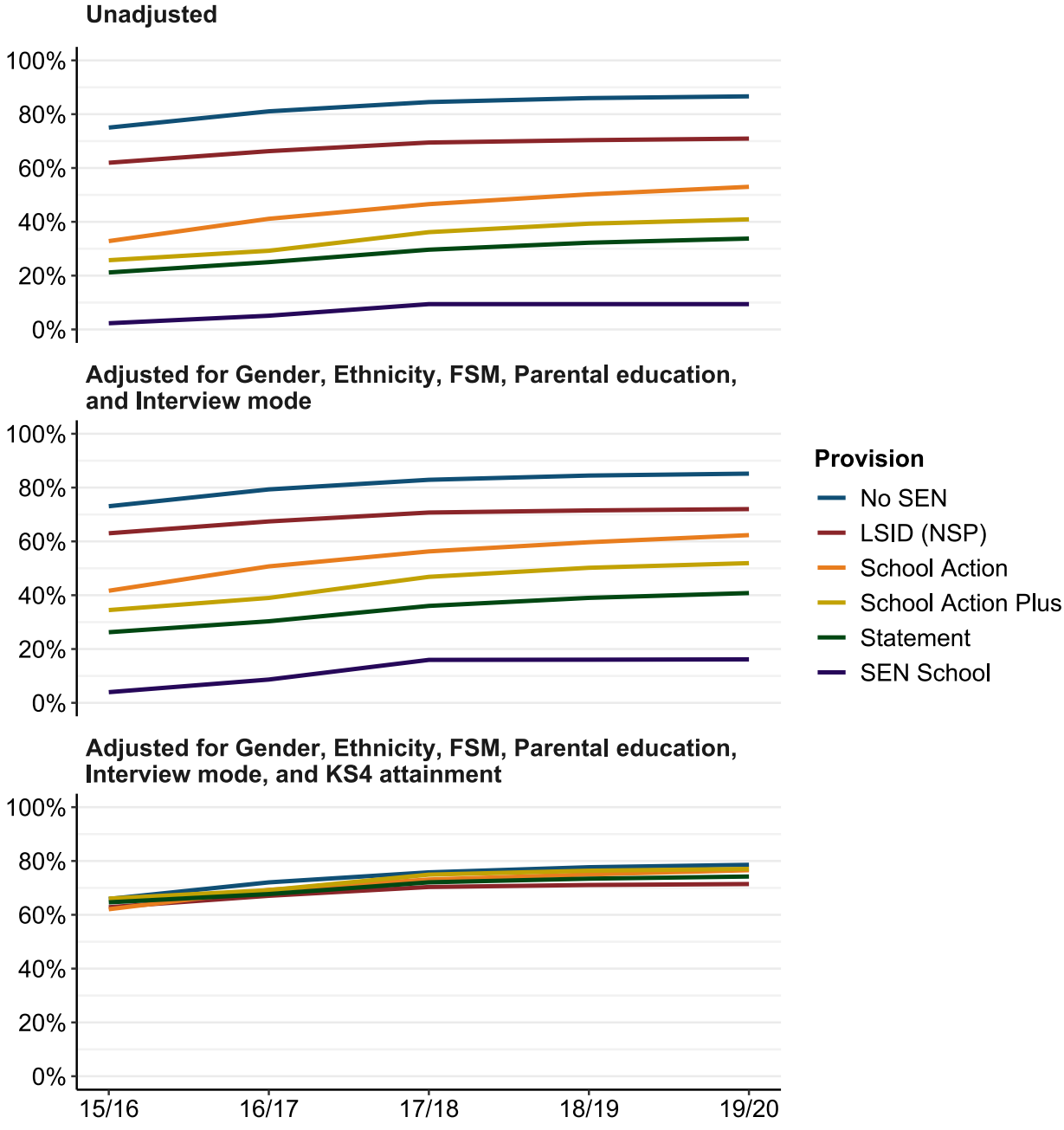
Figure 33 presents differences in young people's attainment of a level 2 in both English and maths (Academic or Functional) across time, from age 15/16 through to 19/20.

Three quarters of young people with no SEN (75.0%) had already achieved this milestone at KS4. The equivalent figure for LSID (NSP) was a little lower, at three in five young people (61.9%). There is then a significant drop in numbers among those who had received SEN Provision: School Action (32.8%), School Action Plus (25.7%), and Statement (21.2%) young people. Very few of those who had attended a SEN school had achieved this at this age (2.3%).

However, more young people gained a level 2 qualification in English and Maths over the following four years (12.5%). Furthermore, the results show that more School Action (20.2%), School Action Plus (15.2%) and young people with a Statement (12.6%) achieved this milestone over the subsequent period than those with no SEN (11.6%). Of course, part of the reason for this will be a ceiling effect: Fewer young people with no SEN had not already achieved this milestone at age 16. Nevertheless, continued education and training has clearly helped to reduce the overall gap in attainment for some groups. Furthermore, although the gap widened for those who had attended SEN schools, the numbers of young people with the highest levels of support needs achieving this milestone still quadrupled over this period.

Adjustment for controls reduces the gap in attainment, particularly for School Action and School Action Plus. Low parental education and eligibility for free school meals predicted lower attainment, both of which were more prevalent among SEN provision groups and in part accounted for the original association. Further adjustment for KS4 attainment then accounted for all the remaining difference. Once we account for the very large differences in their respective starting points, there were no differences in the average progress young people made across the SEN groups. Young people in SEN Schools were excluded from this final adjustment. A combination of a low prevalence and a small sample size distorted the estimate for this group.

Figure 33: Level 2 attainment in English and maths at age 19/20, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and, 4 to 7, weighted.

Early adult material circumstances

Learning to manage financially and financial independence, are important milestones in the transition to adulthood, which is why financial education forms an important part of the citizenship curriculum which all pupils in maintained secondary schools are required to study. However, some young people, including many of those who form the basis of this study may well need a greater level of support. Here we examine differences and similarities across a range of measures designed to capture young people's material circumstances in adulthood.

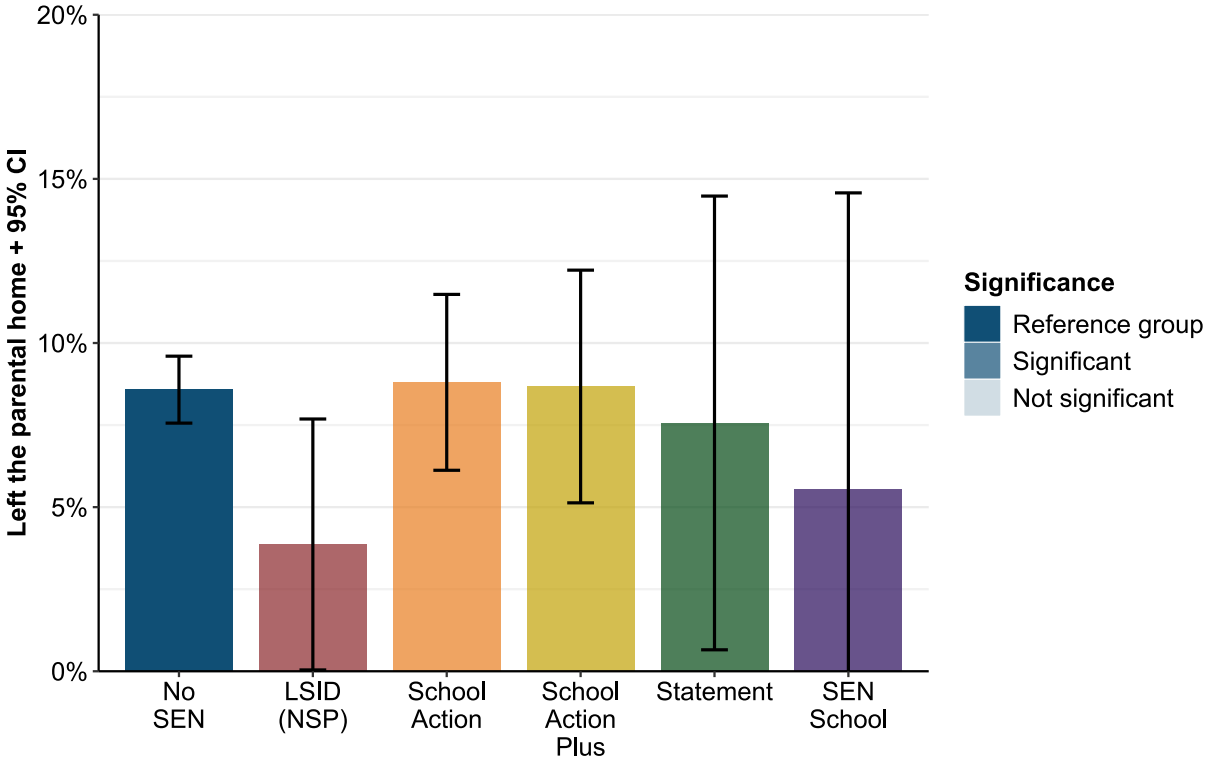
Left parental home

Except for young people who were temporarily absent for the purpose of their studies[35], most young people remained living in the parental home at age 19/20. This can help provide a secure base from which young people navigate their way through further study or training or establishing themselves in the world of work. However, others have made the transition to independent living, either through a planned move or because their circumstances helped encourage it.

Excluding those who had left to attend college or university, just 8.4% of young people had left the parental home at age 19/20. Rates were similar for School Action (8.8%), School Action Plus (8.7%), and not too dissimilar for those with a Statement (7.6%), compared young people with no SEN (8.6%). The prevalence was lower for LSID (NSP) (3.9%) young people and those who had attended SEN schools (5.5%), however, none of the differences were statistically significant.

[35] Living arrangements are derived from the young person's household address. If they lived somewhere else during term time, they were asked for their living address when term finished. We assume that young people living away at university are recorded as living with a parent or guardian, unless this represented a more permanent move.

Figure 34: Lives outside of the parental home, by SEN status



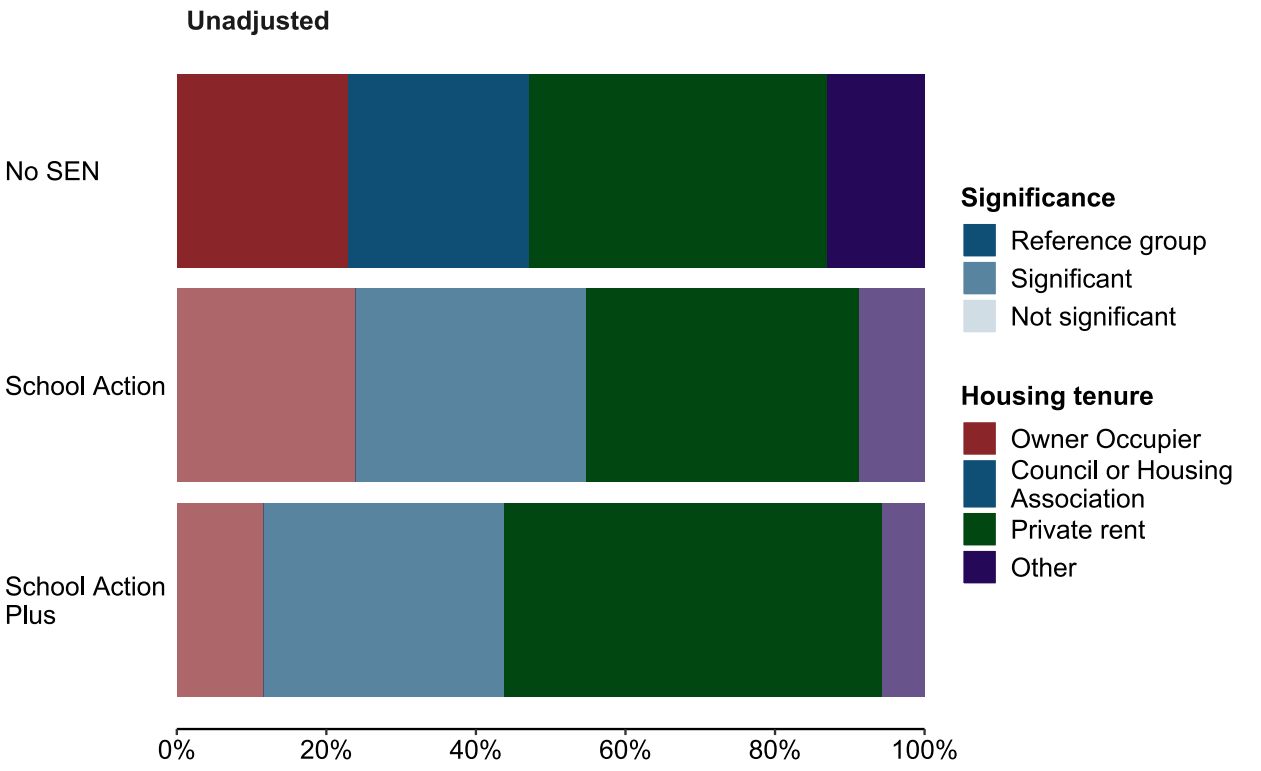
Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

There were some slight changes when adjusting for controls and KS4 attainment, however owing to low prevalences and small sample sizes, differences remained non-significant.

Tenure

Among those young people who had left home, most were renting privately (39.5%), a quarter were in council or housing association property (24.9%), and a further fifth were owner occupiers (21.8%). The remainder (13.8%) had 'other' tenancy arrangements, which included armed forces residences, college or other education residences, employer's residences, or hotel, boarding house or hostel.

Figure 35: Tenure (for young people living outside the parental home), by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

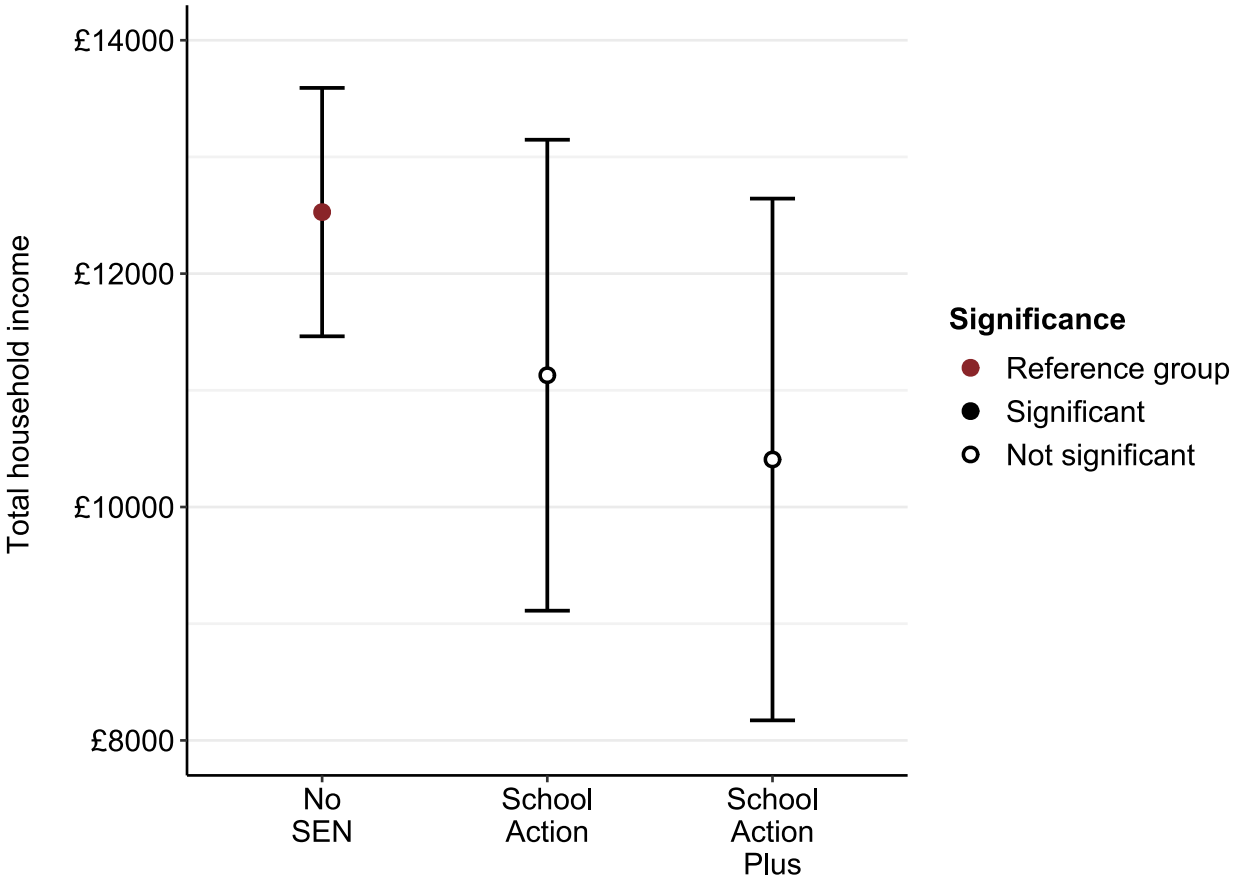
Our estimates suggest that School Action young people were a little more likely to live in Council or Housing Association accommodation than those with no SEN (30.9% vs. 24.3%), and that School Action Young people were more likely to rent privately (50.5% vs. 39.8%). However, none of the differences were statistically significant owing to small sample sizes.

Total household income

There were also suggested differences in approximate mean household income[36], with lower incomes among School Action (£11.1k) and School Action Plus (£10.4k) young people compared to those with no SEN (£12.5k), however small sample sizes again mean we cannot be confident that these differences exist in the wider population.

[36] Household income was recorded using a set of pre-defined income bands with the middle values for each band used to construct an overall average and are therefore an approximation.

Figure 36: Total household income (for young people living outside the parental home), by SEN status

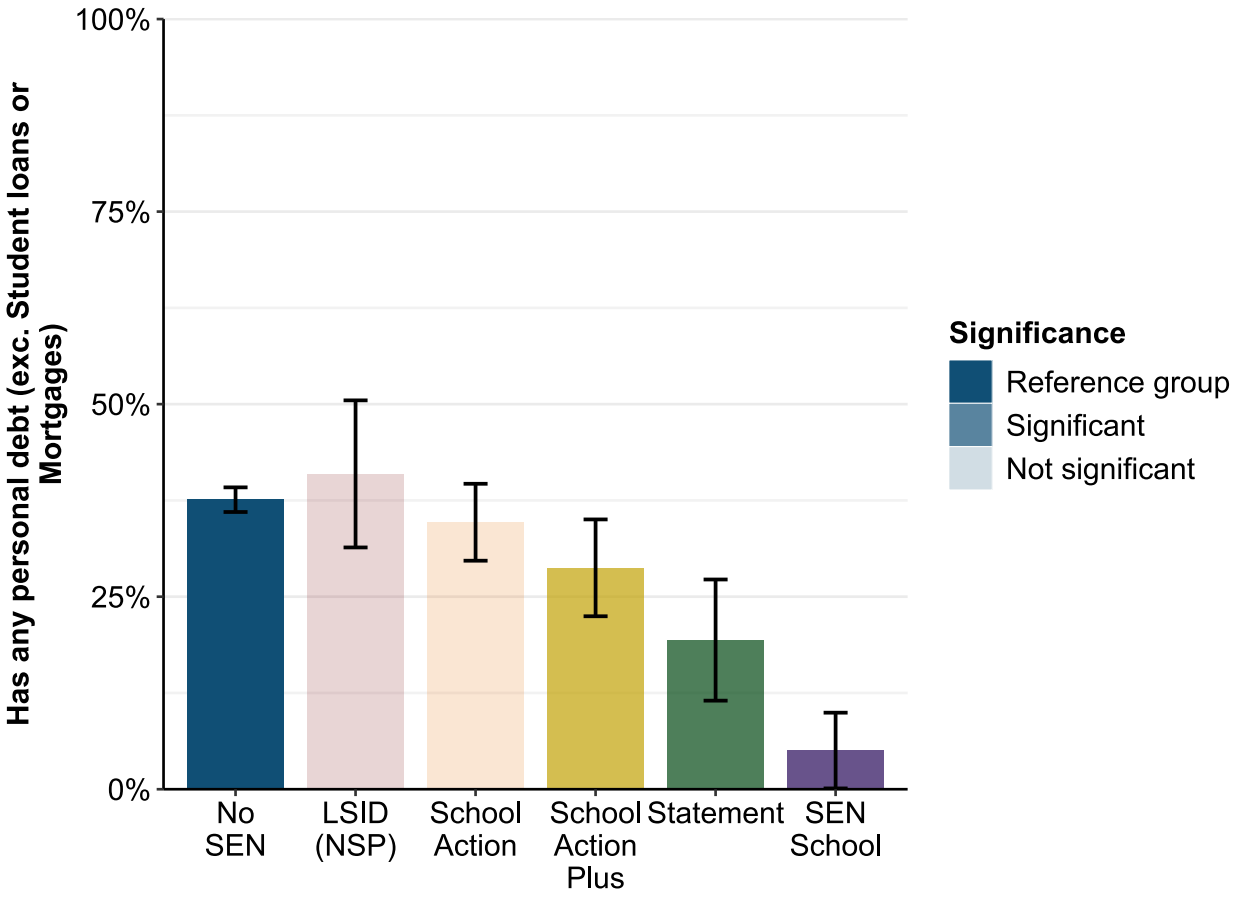


Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Debt

Figure 37 shows the proportion of young people who reported having some form of personal debt. Estimates represent the presence (or absence) of debt only, and not the amount of debt, which was not collected by the survey.

Figure 37: Has any type of financial debt, by SEN status



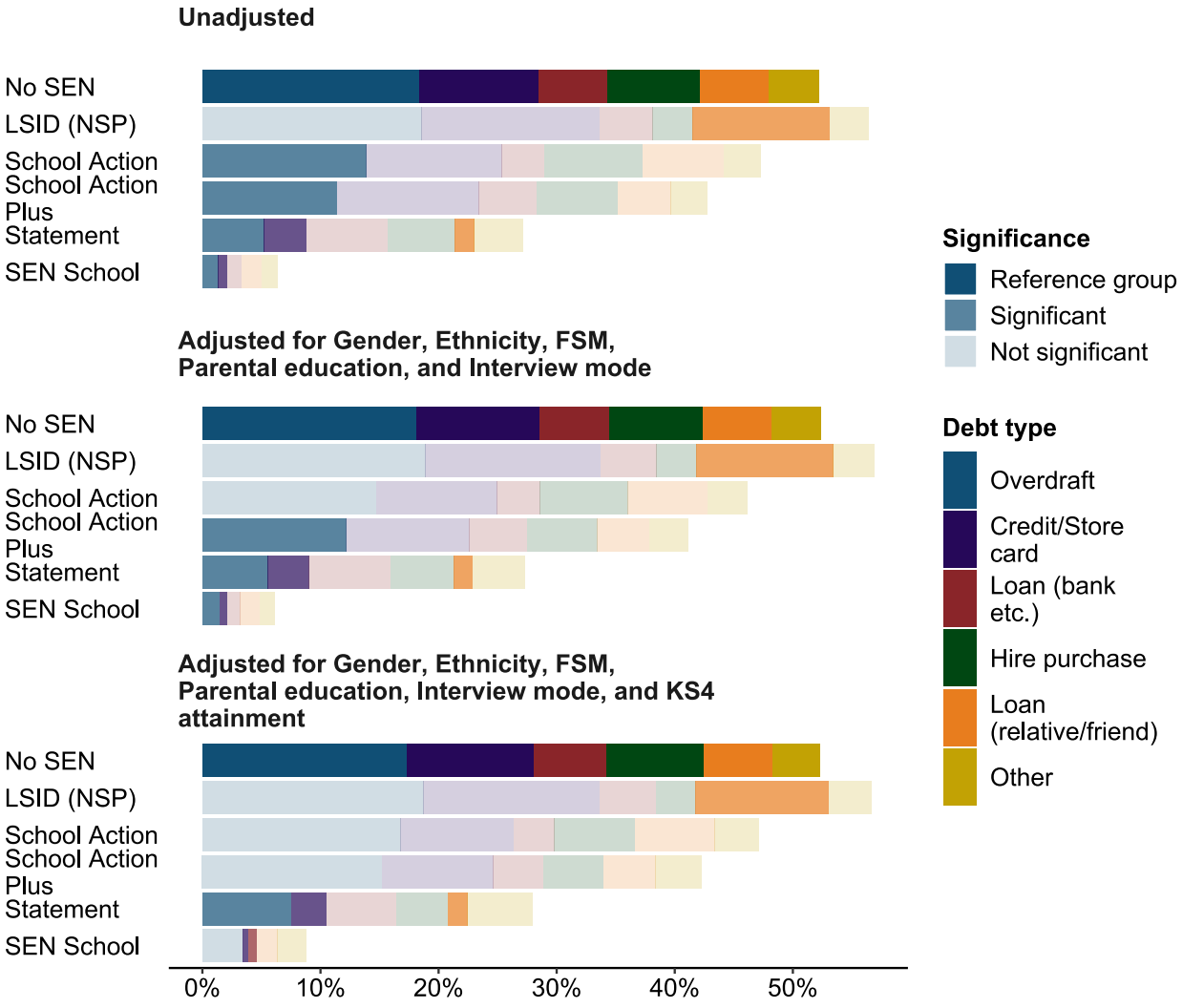
Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Over one third (35.8%) of young people reported having some form of personal debt at age 19/20. There was also evidence of a declining gradient with increasing levels of SEN provision. The prevalence of having any debt was similar for those with no SEN and LSID (NSP) (37.6% and 40.9%, respectively) but was increasingly lower for School Action young people (34.7%; although non-significant), School Action Plus (28.7%), young people with a Statement (19.4%), and those who attended SEN schools (5%). Adjusting for controls and KS4 attainment made very little difference to the estimates.

Debt Types

Figure 38 shows the (potentially multiple) types of debt young people held (including: overdraft, credit/store card, a loan from a friend/relative, and 'other') and how this also varies across SEN groups. The prevalence of overdraft debt was very similar for LSID (NSP) (18.4%) young people, and those with no SEN (18.6%). Prevalences were then lower for School Action (13.9%), School Action Plus (11.4%), Statement (5.2%), and those who had attended SEN schools (1.3%).

Figure 38: Types of financial debt, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Around one in ten School Action, School Action Plus young people, and those with no SEN reported having credit or store card debt. Whilst it was a little higher among LSID (NSP) (15.1%) young people the difference was non-significant, however credit or store card debt was much lower for Statement (3.6%) young people, and those who had attended SEN schools (1.3%).

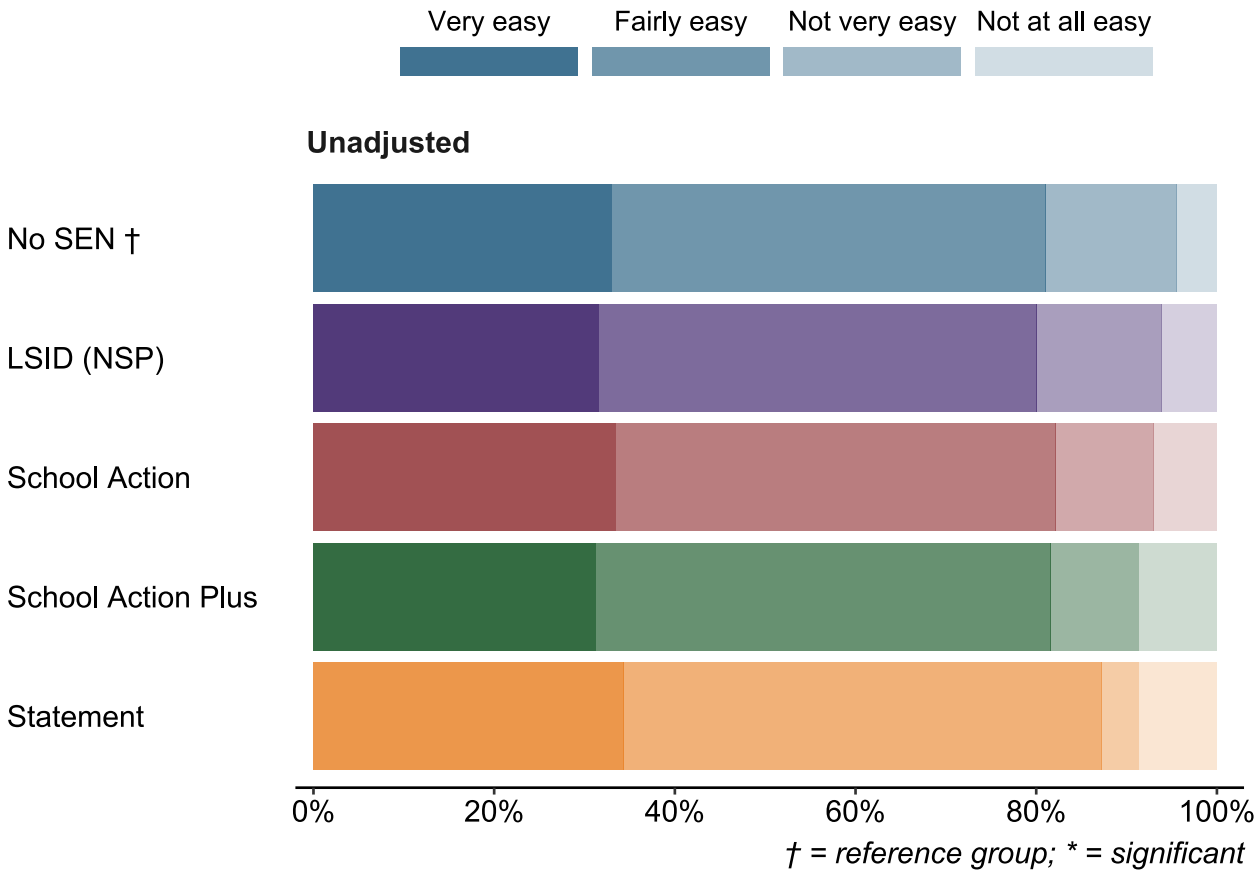
The prevalence of young people with a bank or similar types of loan, or with hire purchases, were more similar, and where differences did exist, they were non-significant. Whereas borrowing from a relative or friends was higher among LSID (NSP) (11.6%) young people compared to those with no SEN (5.8%), and much lower for those with a Statement (1.6%). The prevalence among those who had attended SEN schools was similarly low, but non-significant owing to small sample sizes. Very few young people had other types of debt (3-4%).

Adjusting for controls effected the estimates differently, depending on the type of debt examined. For the two most common forms of debt, differences in the prevalence of young people with overdraft debt reduced but increased for credit/store card debt. There was little change for other forms of debt. Further adjustment for KS4 attainment then led to a similar pattern of change. At least some of this change will relate to the differences in young people's activities, particularly attendance at university where overdraft debt is both common and interest free, and which is predicted by both their socioeconomic background and KS4 attainment.

Debt management

Among those with reported personal debt, there was little difference in the level of difficulty young people expressed in managing it across the SEN groups. About one in five reported that it was not very, or not at all easy (18.8%), compared to fairly easy (38.2%) or very easy (33.9%).

Figure 39: How easy is it to keep up with debt payments, by SEN status

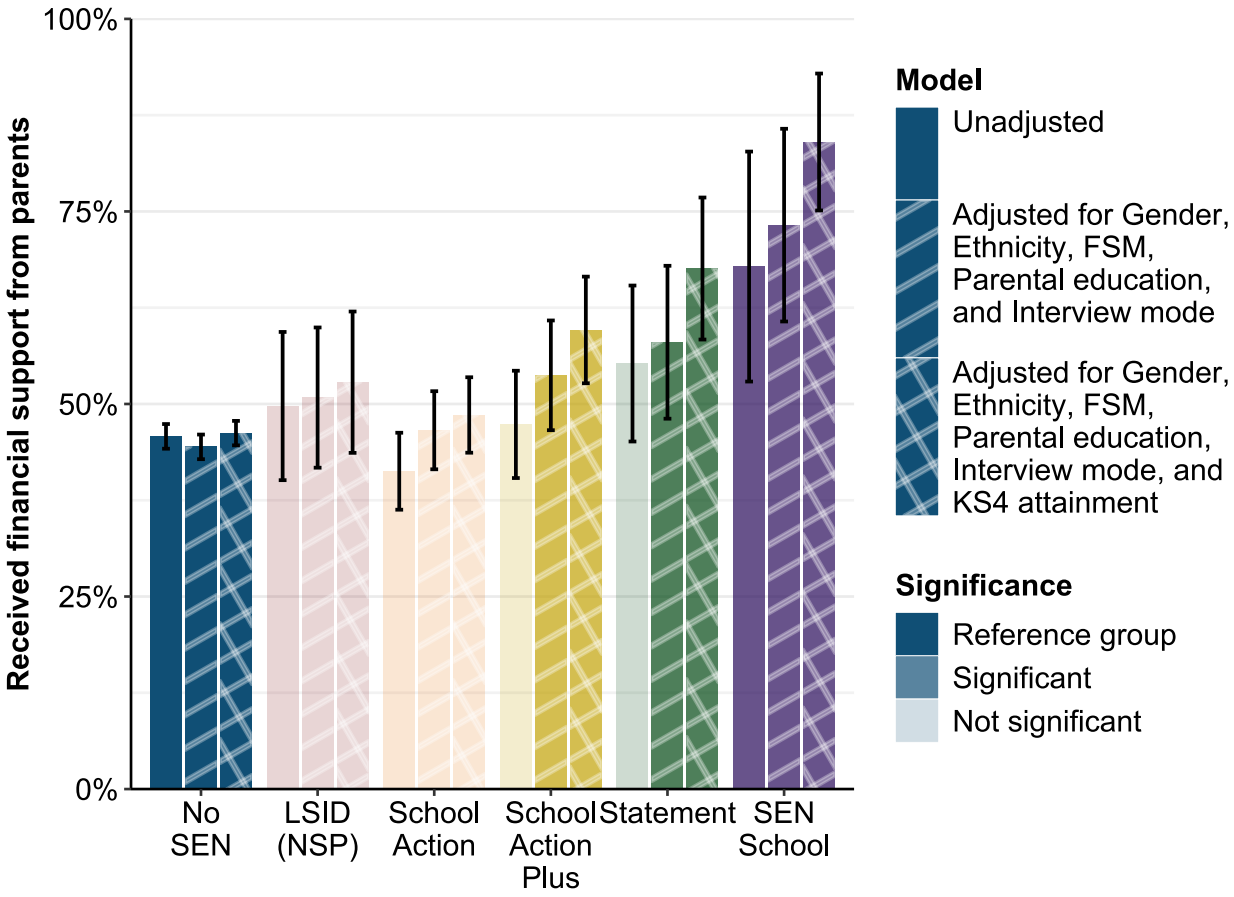


Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Parental financial support

Just under half of young people (46.2%) reported receiving parental financial support in the past 12 months. Differences across the SEN groups were small and mostly non-significant, except for Statement (55.3% p = 0.07) young people (although borderline significant) and Statement (SEN school) (67.8%), who were more likely to report receiving financial support than those with no SEN (45.8%).

Figure 40: Receives financial support from parents, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls increased differences, with School Action Plus (53.7%), Statement (mainstream) (58.0%), and Statement (SEN school) (73.2%), all more likely to have received parental financial support compared to those with no recorded need (44.4%). Further adjustment for KS4 attainment then increased these differences further still: School Action Plus (59.6%), Statement (67.6%), and SEN school (84.0%).

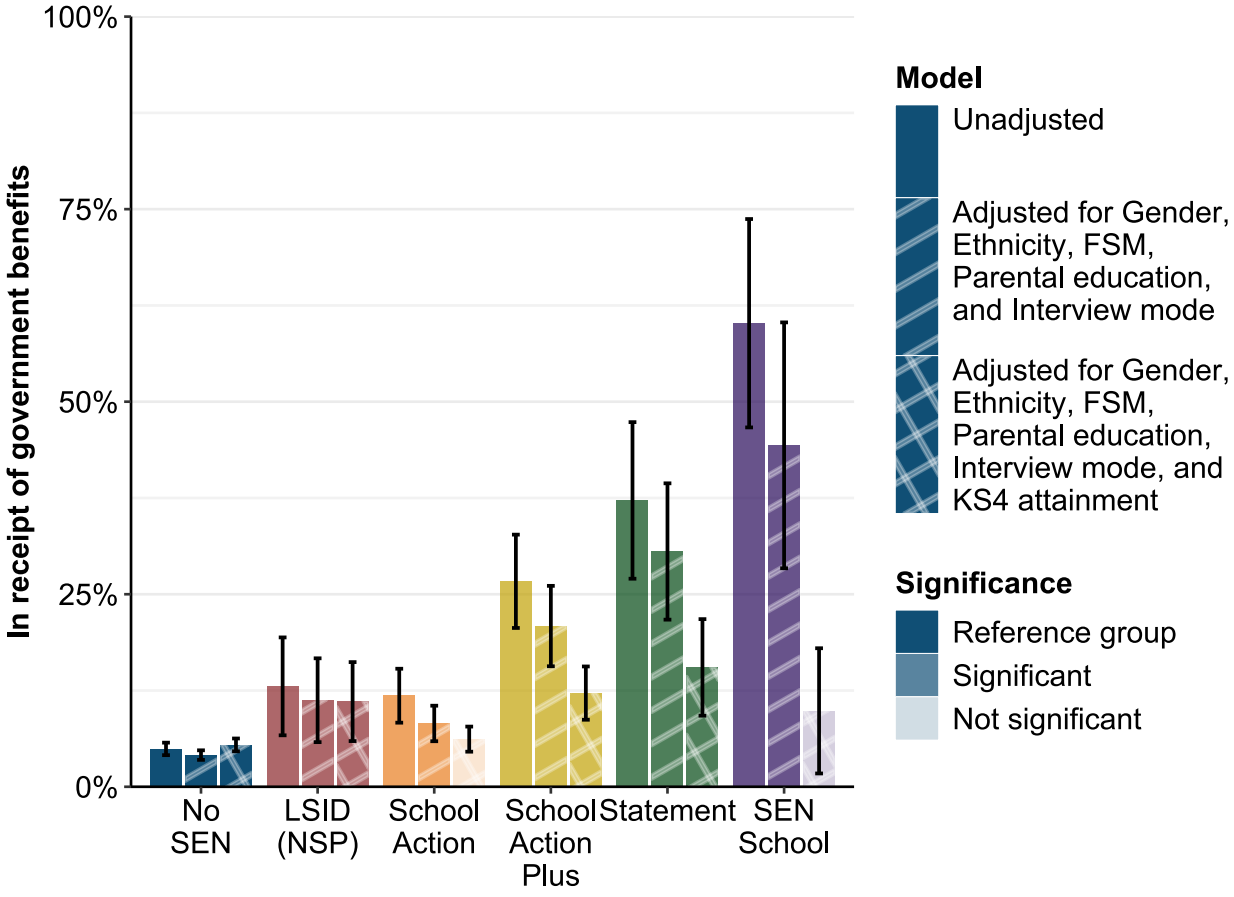
Being eligible for free school meals, having parents with lower levels of education, and having lower KS4 attainment themselves, all of which were more likely higher among young people with SEN, were associated with not receiving parental financial support. Once we adjusted for these differences between groups, the association with SEN

provision increased. Changes that occurred after adjusting for KS4 attainment was most likely to with university attendance. Higher KS4 attainers were more likely to study at university and receive parental financial support for this, which masked some of the effect associated with SEN.

Benefit receipt

There were clear differences in the prevalence of benefit receipt between young people with SEN and those without any identified need (4.9%), which increased in relation to the level of provision: School Action (11.8%), School Action Plus (26.7%), Statement (37.2%), and SEN school (60.2%). Benefit receipt among LSID (NSP) (13.0%) young people was very similar to those with School Action.

Figure 41: Receives government benefits, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Adjusting for controls led to a substantial reduction in differences (average reduction: 24%), although the overall pattern remained the same. Young people with SEN were more likely to have been eligible for free school meals and have parents with low education, which accounted for some of the original association. Further adjustment for KS4 attainment accounted for most of remaining differences (average further reduction:

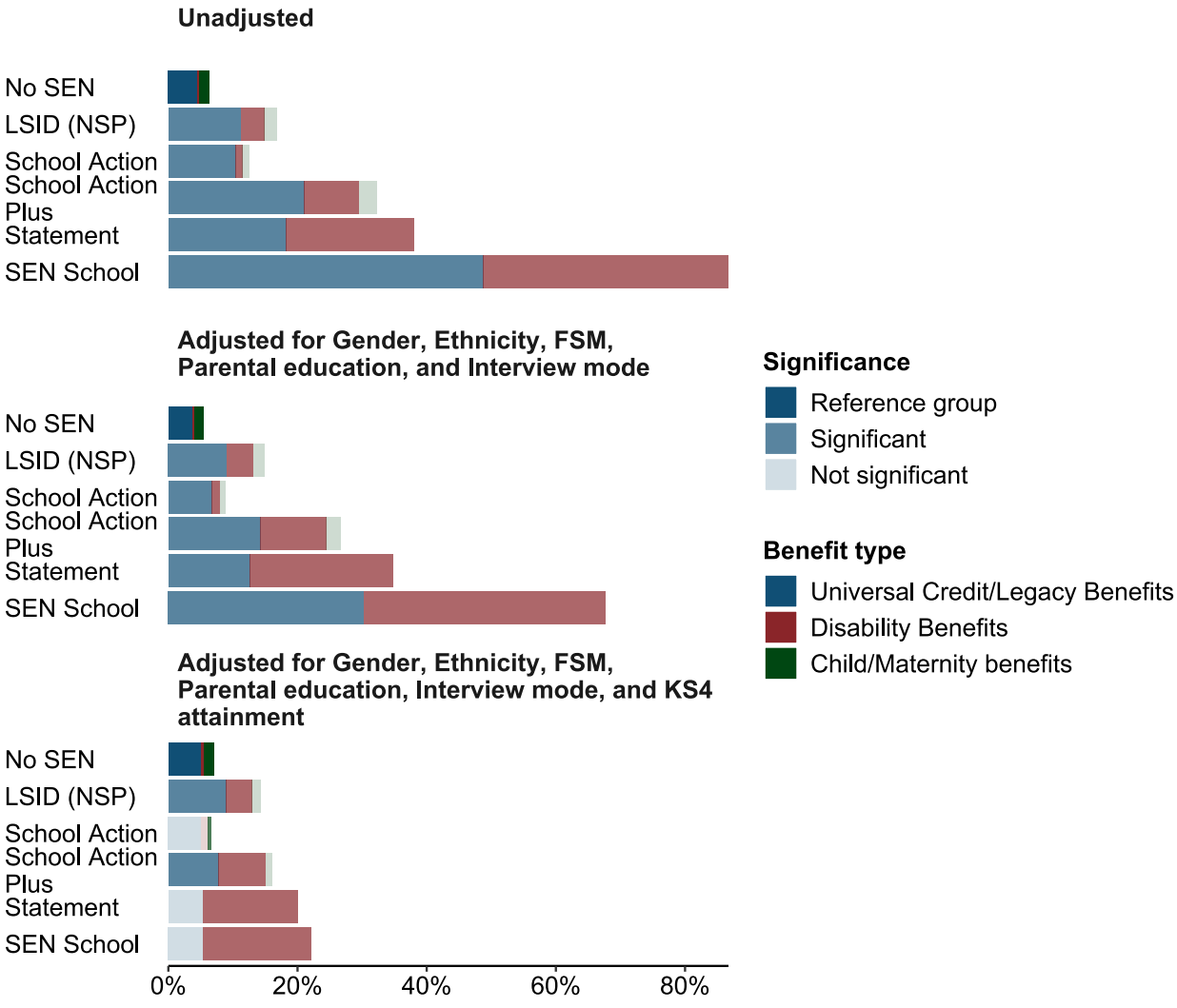
63%). Young people with SEN had lower levels of KS4 attainment on average, which is a significant risk factor for subsequent benefit receipt.

Post adjustment, benefit receipt remained higher for LSID (NSP) (11.1%), School Action plus (12.2%), and Statement mainstream (15.5%), compared to those with no reported need (5.4%).

Types of benefit

As we might expect, gradients in the different types of benefits young people received were similar. Around one in ten young people with LSID (NSP) (11.2%) or School Action (10.4%) received Universal Credit compared to one in twenty with no recorded needs (4.4%). This increased to one in five among School Action Plus (21.0%) and Statement (18.2%) young people, and almost half of those who had attended SEN schools (48.8%).

Figure 42: Type of benefits received, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Figures for the receipt of disability benefits were: LSID (NSP) (3.6%), School Action (1.1%), School Action Plus (8.5%), Statement (18.2%) young people, and those who had attended SEN schools (38%), compared to just 0.4% for no SEN. Overall, less than 2% of young people were in receipt of child or maternity benefits, and although our sample indicates a higher prevalence among School Action Plus (2.7%) young people compared to those with no SEN (1.6%), the difference was non-significant.

Adjusting for controls accounted for one third (average reduction: 36%) of the differences in Universal Credit receipt, and further adjustment for KS4 attainment accounted for almost all remaining differences (average reduction: 80%). Again, significant differences nevertheless remained, with receipt for LSID (NSP) (8.9%) and School Action Plus (7.7%) young people remaining higher compared to those with no SEN (5.1%).

Adjusting for controls made little difference to our estimates for the receipt of disability benefits, however further adjustment for KS4 attainment reduced differences by about one third (average reduction: 31%). Differences nevertheless remained, especially for those with a Statement (14.7%) and SEN school attendees (16.7%), but also LSID (NSP) (4.0%) and School Action Plus (7.3%) young people, compared to those with no SEN (0.4%).

Early adult employment experiences

Table 20 shows the proportion of young people whose main activity was in paid employment. As the numbers in employment among some SEN groups are small, the extent to which we can examine the differences in employment experiences is limited. Only two young people who had attended SEN Schools were in paid employment at age 19/20 and are therefore excluded from these analyses[37].

[37] An analysis of Longitudinal Education Outcomes (LEO), a DfE database on the labour market outcomes for learners from schools, colleges, and university would provide a perfect complement to our own analysis, because it includes data on *all* young people, and therefore sample sizes are especially large. See, for example, Anderson and Nelson (2021). It is also worth highlighting here that many young people would still have been in education or training at this age, particularly those who had attended SEN schools (see Table 5).

Table 20: Percentage in paid work at age 19/20, by SEN status

SEN status:	Total (n)	Total: In Paid Work (n)	% In Paid Work
No SEN	4,431	1,186	31.4
LSID (NSP)	118	34	31.4
School Action	527	212	46.3
School Action Plus	293	123	46.8
Statement	134	31	28.2
SEN School	63	2	2.4
Total	**5,566**	**1,588**	-

Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

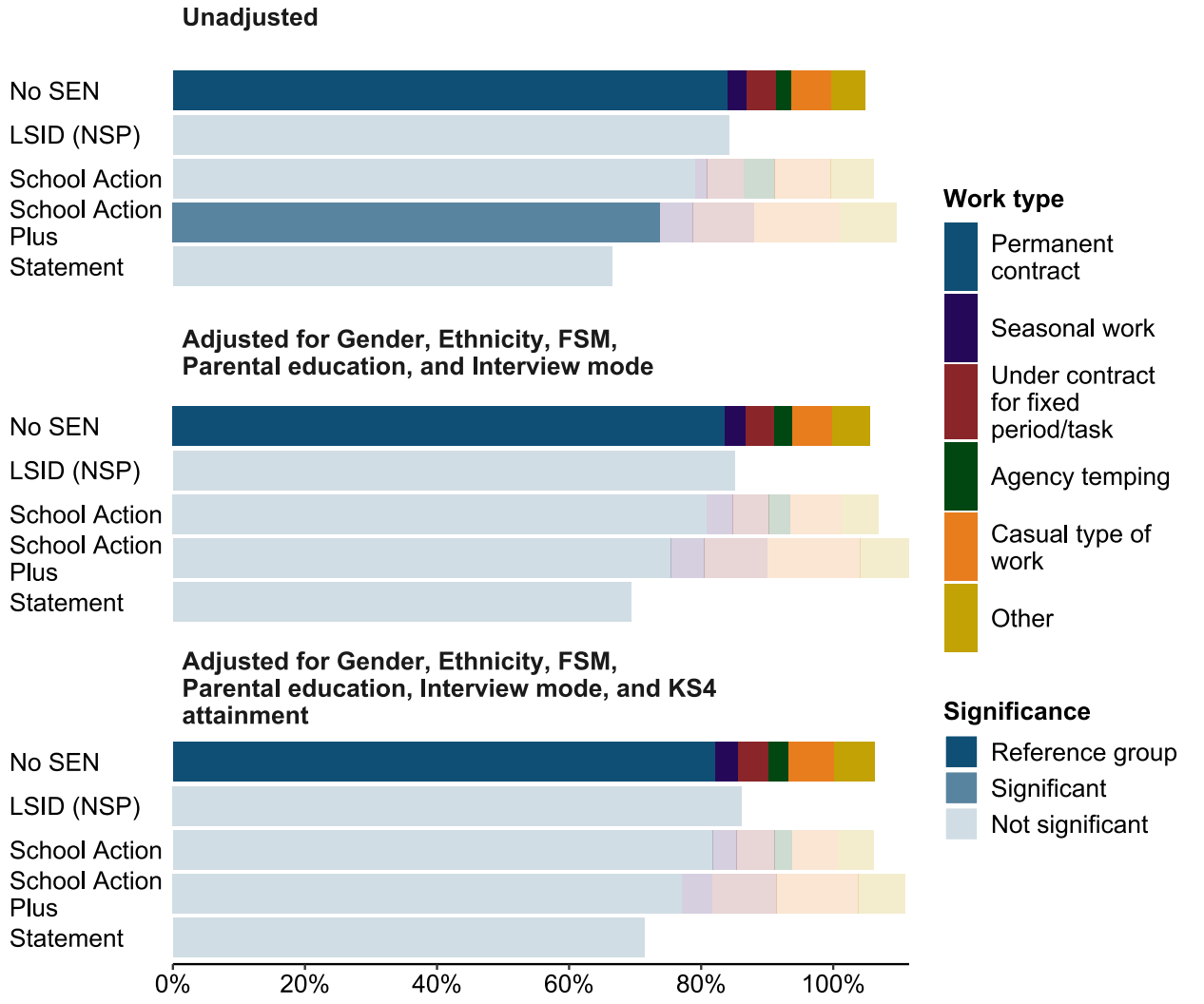
Objective work experiences

Employment contract

The large majority of those in paid work at age 19/20 had a permanent employment contract (82.2%). However, there was a suggested decline in prevalence of employment contracts with level of SEN provision: School Action (79.0%), School Action Plus (73.8%), and Statement (66.5%), compared to 84% of those with no SEN. Nevertheless, only the difference for School Action Plus was statistically significant, owing to the small sample size for statement young people.

Whilst there appears to be differences in the prevalence of other types of employment contracts across the SEN groups, a combination of small prevalences and sample sizes meant that none of the differences were statistically significant.

Figure 43: Employment contract, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

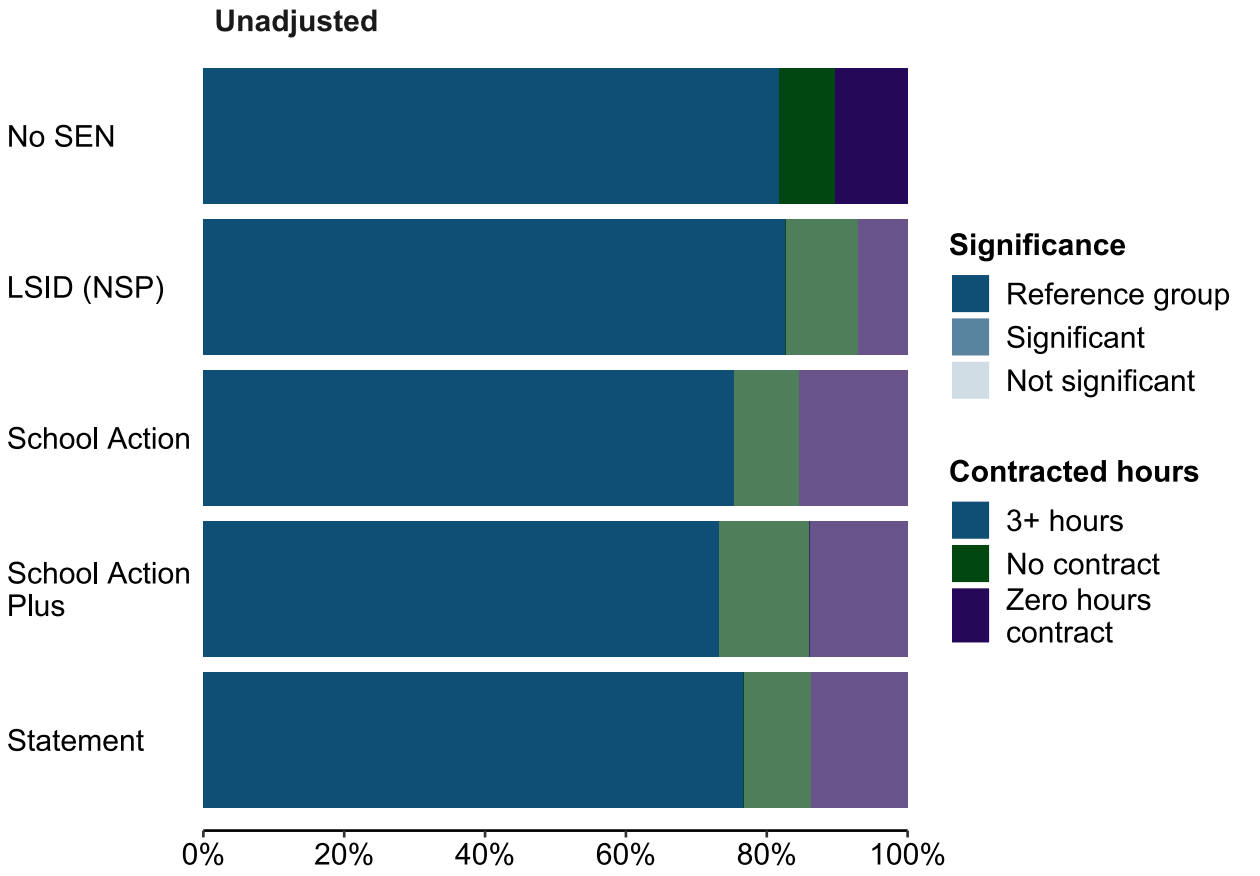
Adjustment for controls, and KS4 attainment, reduced some of the differences in the prevalence of permanent contracts, with the difference between School Action Plus and young people with no recorded need no longer statistically significant. Young people who were eligible for FSM were less likely to have a permanent contract but more likely to have SEN, which accounted for some of the original difference.

Contracted hours

Most young people also reported having contracted hours of employment (80.3%). There was some evidence that young people with SEN were less likely to have guaranteed hours: School Action (15.5%) young people were a little more likely to have had a zero-hour contract compared to those with no SEN (10.3%), however this difference was borderline significant (p = 0.07). Fewer School Action Plus (73.3%) young people and those with a Statement (76.7%) appeared to have contracted hours, however the

difference with no SEN (81.8%), was non-significant. Adjustment made little difference to our estimates.

Figure 44: Contracted hours, by SEN status



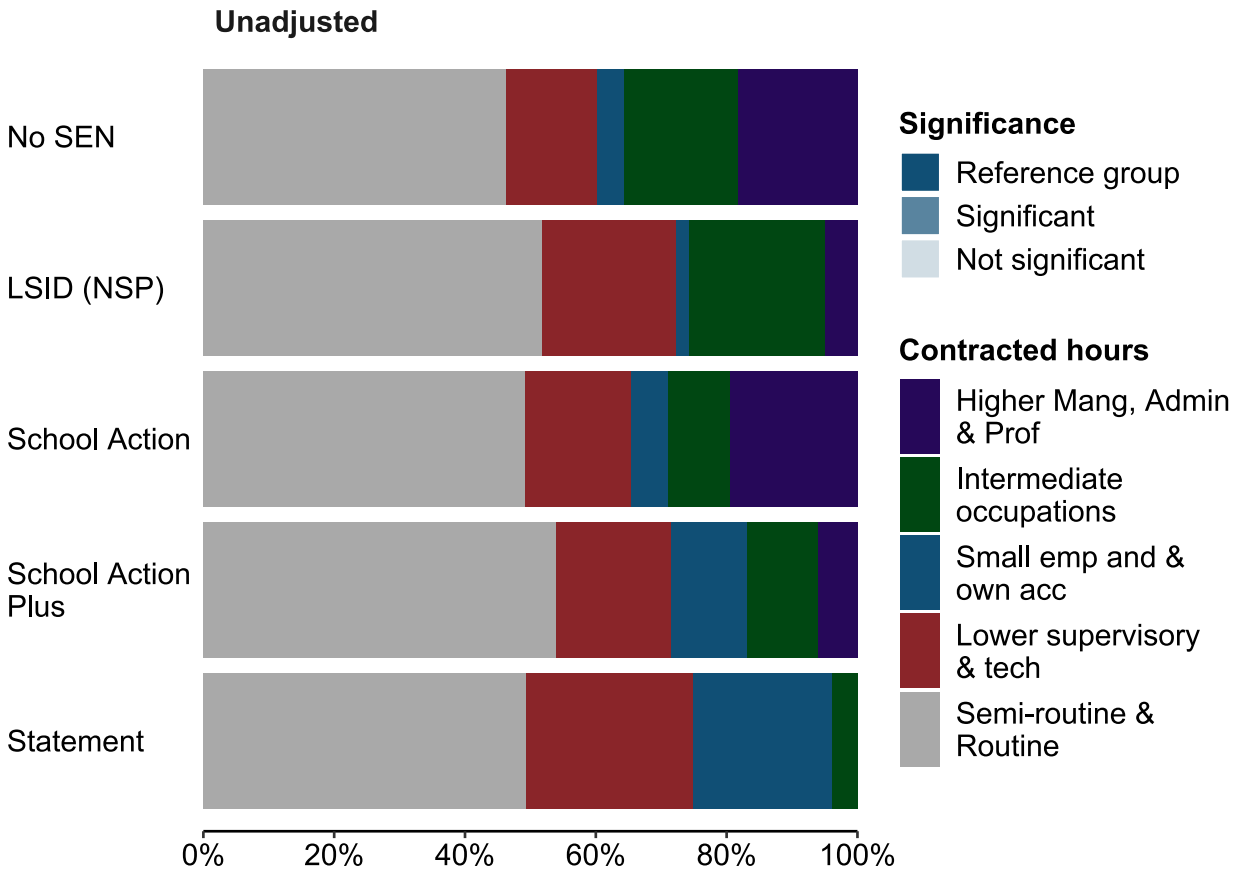
Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

NS-SEC

Looking at young people's occupational position at age 19/20, it is important to remember that these are individuals at the very beginning of their working lives, and that for many young people their occupational position will change. That said, there were some notable differences across the SEN groups, however small sample sizes hinder our ability to assess statistical significance for some of the findings.

Overall, 16.7% of young people were in higher professional or managerial occupations, 15.6% in intermediate occupations, 5.3% in small employers or own accounts, 14.9% in lower supervisory or technical roles, and, nearly half, 47.4% were in semi routine or routine occupations. School Action (9.5%) young people were less likely to be in intermediate occupations, and School Action Plus (6.0%) young people far less likely to be in higher professional or managerial occupations and were instead more likely to be in semi-routine or routine occupations (54.0%).

Figure 45: Occupational class (NS-SEC5), by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

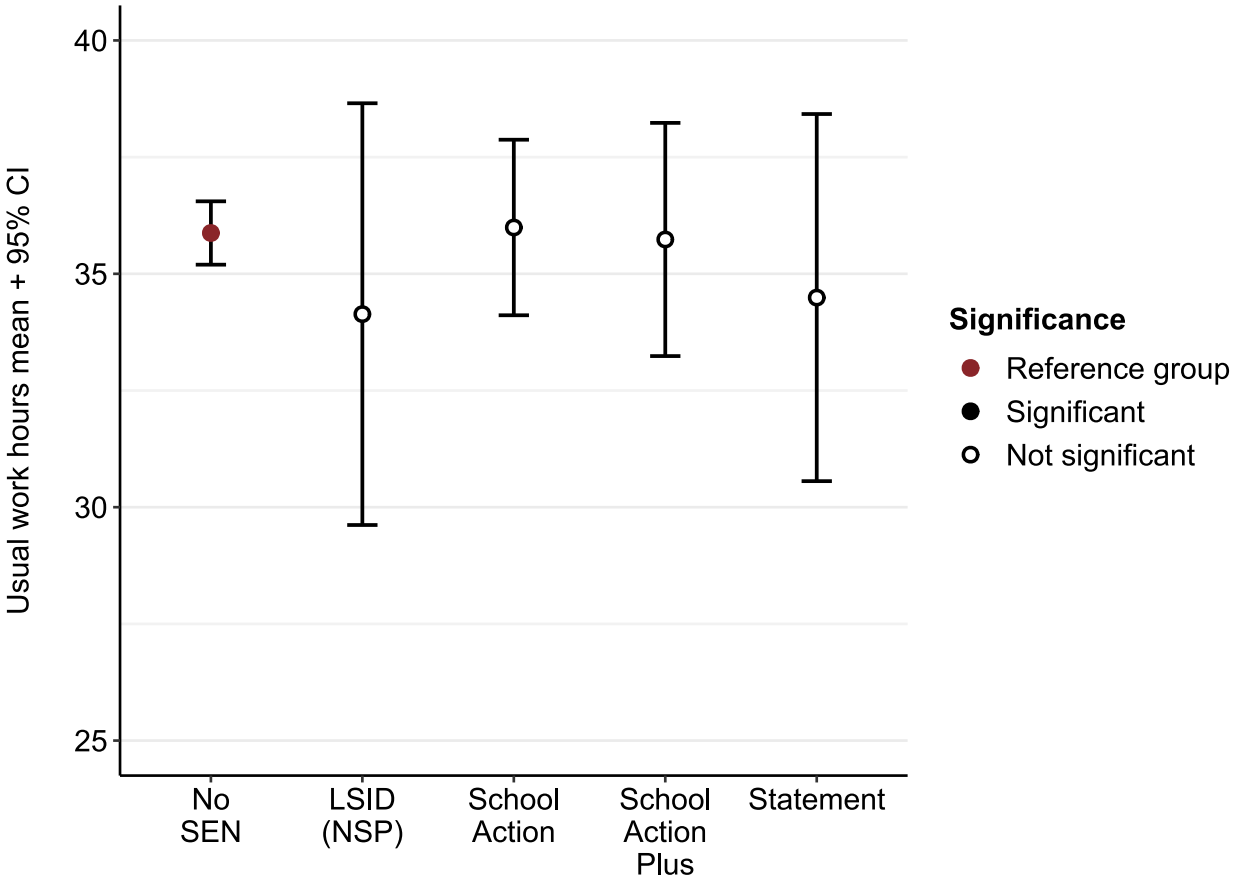
Interestingly, young people who had a statement (21.6%), were those most likely to be classified as small employers or own account, which includes self-employment. Whilst the sample size is quite small, which means we should remain cautious in our interpretation, a higher prevalence among School Action Plus (11.6%) also might point to a greater tendency towards, or more opportunities for, self-employment among young people with greater need. Although the difference for School Action Plus was non-significant.

Differences reduced slightly after we adjusted for controls. The low number of School Action young people in intermediate occupations was no longer significant. After further adjustment for KS4 attainment, only the very low numbers of young people in higher managerial and professional occupations among School Action Plus and Statement young people remained statistically significant.

Usual work hours

Average weekly working hours were similar across the SEN groups, falling between 34 and 36 hours per week. There was also very little change in the estimates after adjustment.

Figure 46: Usual work hours (weekly), by SEN status

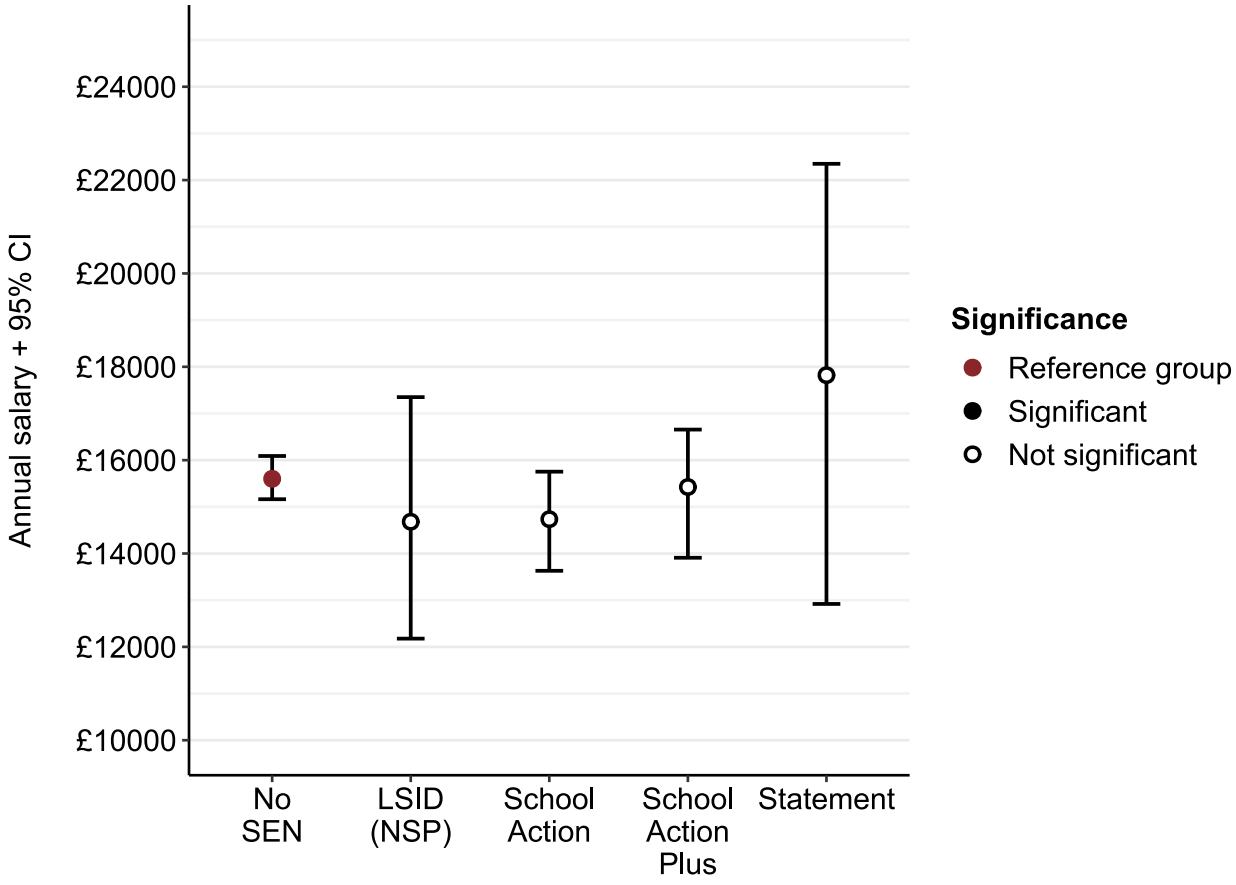


Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Wages

Although average annual earnings were lower among young people with LSID (NSP) (£14.7k) and School Action (£14.7k) young people compared to those with no SEN (£15.6k), small sample sizes and the overall variance in income mean these differences were non-significant, so we cannot be confident they existed in the wider population from which our sample was drawn. Young people with a Statement appeared to have much higher earnings on average but as the confidence intervals suggest, this is not a reliable estimate.

Figure 47: Wages (annual salary), by SEN status



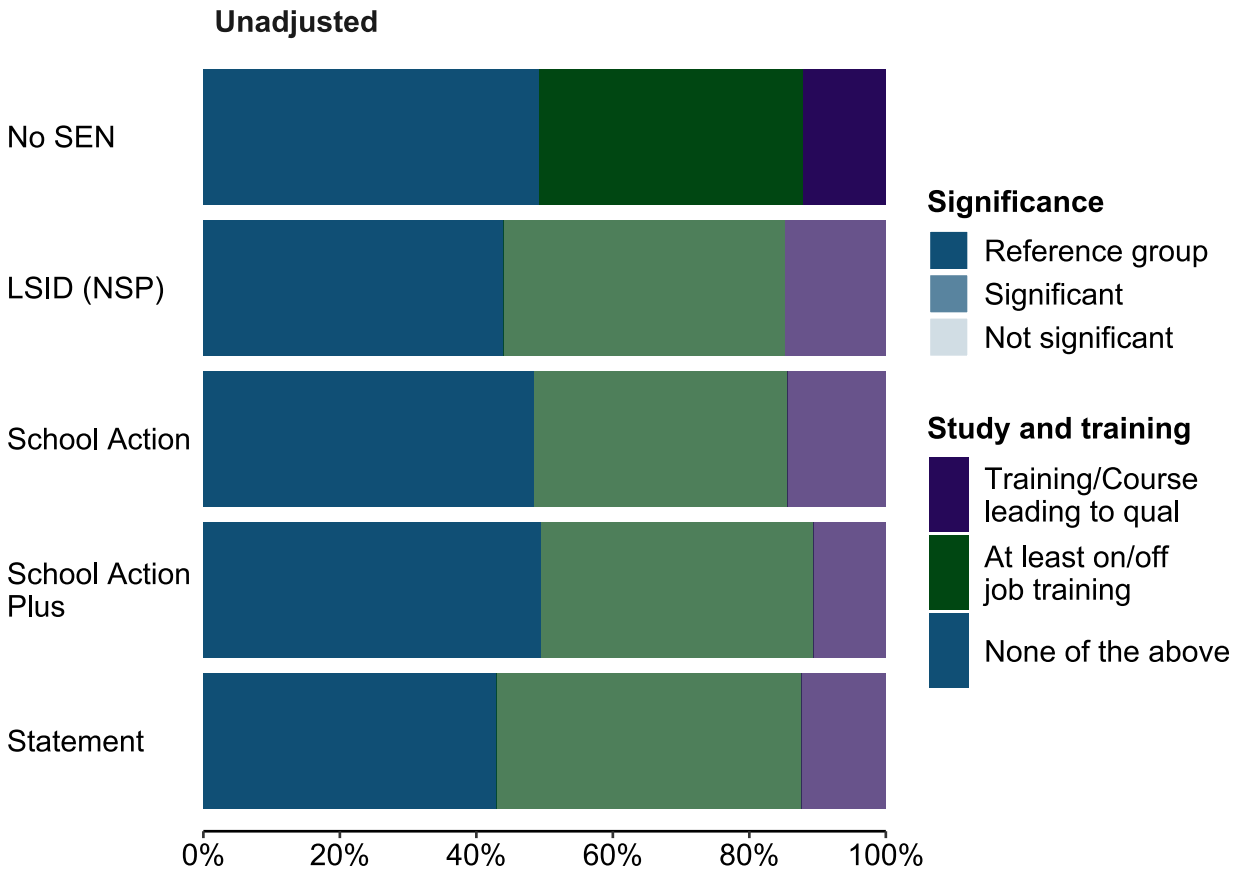
Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

After adjusting for controls, the predicted average income for School Action young people was borderline significant (£14.6k compared to £15.7k for no SEN), but otherwise there was little change to our estimates.

Study and Training in work

Differences in the numbers of young people studying or receiving training in work were relatively small. Around one in ten received training, or were on a course leading to a qualification, and a further two in five had received on or off the job training. Young people with LSID (NSP) (56.0%) and those with a Statement (57.1%) appeared more likely to receive training than those with no SEN (50.8%), however the differences were non-significant, owing to small sample sizes. The differences increase slightly after adjustment, with Statement (62.4%) young people more likely to receive some type of training, although the difference remained non-significant.

Figure 48: Study and training in work, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Subjective evaluations of employment

Lastly, we examined the differences in young people's own, subjective, evaluation of their employment. Young people were asked the extent to which they agreed or disagreed to a set of statements relating to different aspects of their employment, such as 'I am pleased with the promotion prospects available to me in this job', 'my job is important and makes me feel worthwhile', and 'I get on well with my colleagues'. Using a statistical technique called factor analysis, we were able to group these statements into three domains, deriving three separate measures capturing how well young people rated the 'extrinsic' and 'intrinsic' benefits of their employment, as well as the 'the sense of belonging it gave them'[38].

It is possible that there were differences in interpretation associated with a young person's level of need. Furthermore, there may be differences in aspirations and expectations across the SEN groups that may also affect how young people evaluate their employment. Nevertheless, young people's answers to these statements tells us

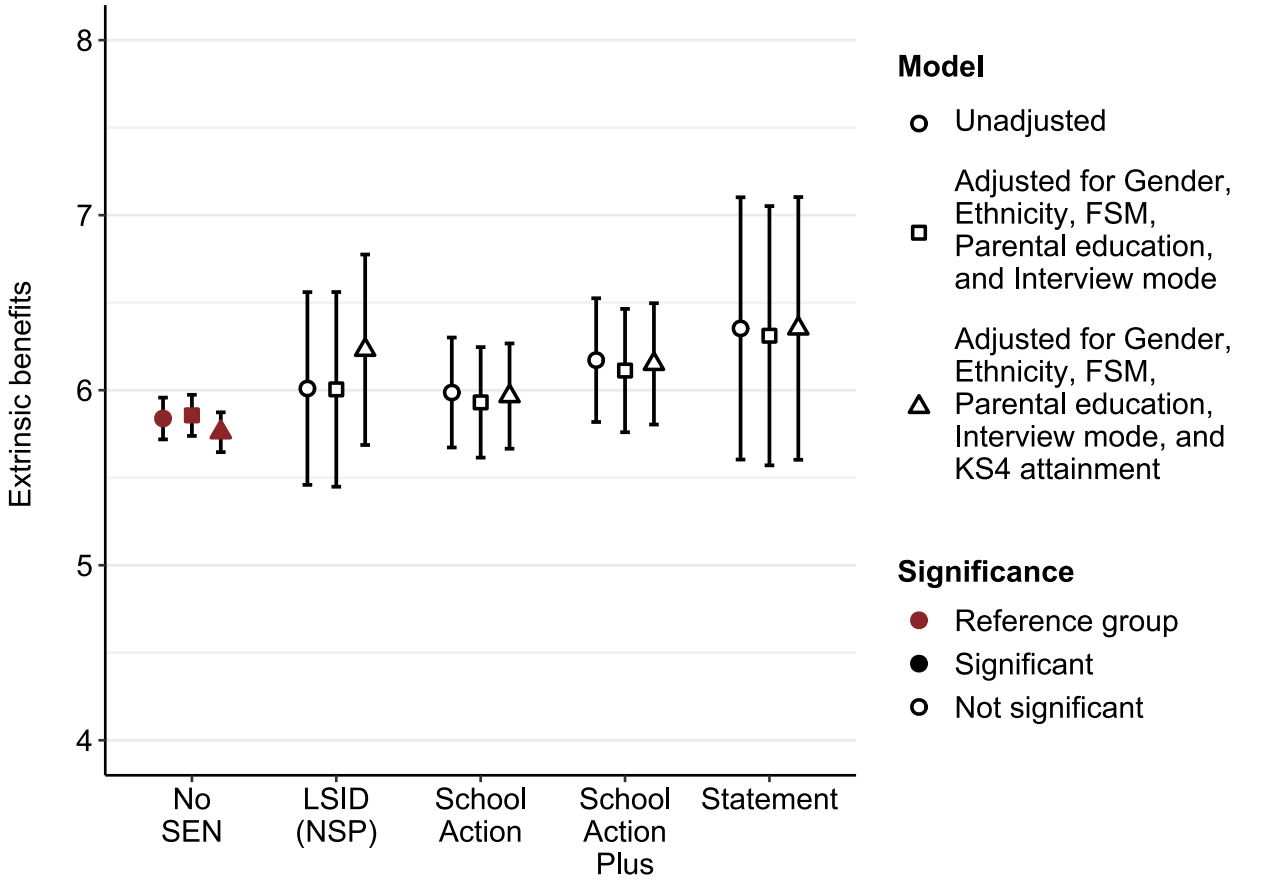
[38] The results of the factor analysis as well as the full list of statements are detailed in Appendix C of Ross, Duckworth and Harding (forthcoming).

something about the subjective experience of young people that go beyond the objective differences already considered.

Extrinsic benefits

There was little evidence from our analysis to suggest that young people with SEN rated the extrinsic benefits of their employment lower than other young people. Although none of the mean scores were statistically different to those with no SEN (5.9) – although School Action Plus was borderline significant (6.2, p = 0.08) – they were nevertheless all a little higher.

Figure 49: Extrinsic benefits of work, by SEN status



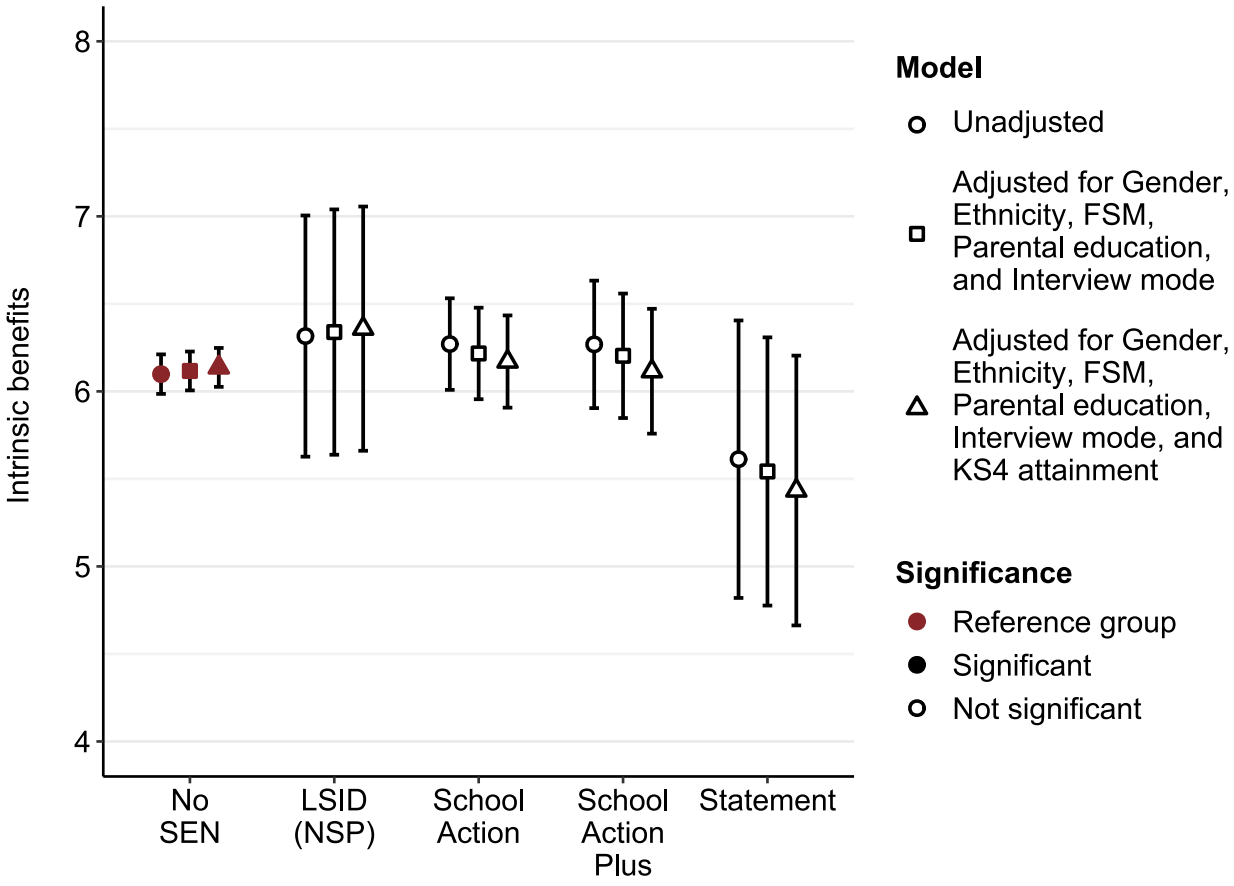
Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

There was a slight decline in differences after adjusting for controls – the borderline difference for School Action Plus became non-significant. Differences then increased slightly after further adjustment for KS4 attainment but remained non-significant. Young people with degree educated parents and those with higher attainment were more likely to give lower ratings of the extrinsic benefits of their employment, which might be a consequence of higher expectations.

Intrinsic benefits

Mean ratings of the intrinsic benefits their employment were also slightly higher for most SEN groups compared to those with no reported needs (6.1), however, again, none of the differences were statistically significant. The average for young people with a Statement (5.6) was quite a bit lower but given the small sample size of this group, was also non-significant. Again, there was a slight decline in differences after adjusting for controls, followed by a slight increase after further adjustment for KS4 attainment.

Figure 50: Intrinsic benefits of work, by SEN status

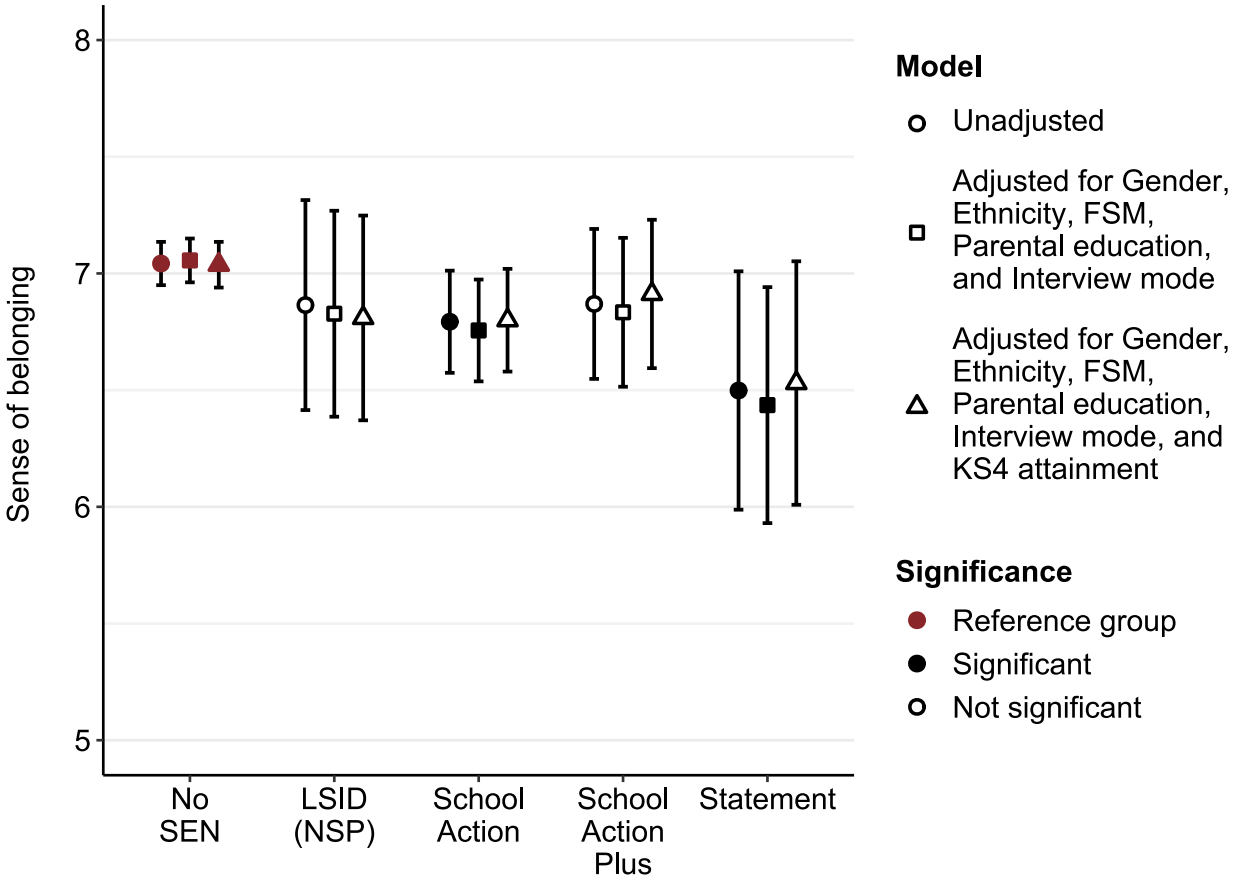


Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Sense of belonging

In contrast with the findings above, some SEN groups were less likely to report a sense of belonging at work compared to those with no SEN. School Action young people (6.8) and those with a Statement in mainstream schools (6.5) reported a lower sense of belonging, on average, than those with no reported needs (7.0).

Figure 51: Sense of belonging at work, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

There was very little change in the scores after adjusting for controls, however adjusting for differences in KS4 attainment led to a slight decline in differences, with differences both School Action (6.8; p = 0.06) and Statement (6.5; p = 0.07) young people becoming borderline significant. Higher attainment was associated with a greater sense of belonging, which had contributed to some of the original differences between these groups.

Change over time: Mental health and wellbeing

Some of the measures in the LSYPE2 are repeated over time, that is longitudinally across waves, enabling us to examine young people's development or change over time in those indicators. Furthermore, we can assess whether this change varies, and to what extent, across the various SEN groups. In our chapter on early adult outcomes, we reported similarities and differences across these measures at one point in time, when they were aged 19/20. Here we do the same in relation to young people's changing mental health and wellbeing using these same measures. First, we examine, change in young people's psychological distress using the GHQ-12, which was originally developed as a screening instrument for identifying minor psychiatric morbidity.

Mental Health: GHQ-12

GHQ-12 was measured repeatedly throughout the survey. Here we examine changes in young people's GHQ-12 scores between ages 14/15 (Year 10) and age 19/20, which was collected annually except for age 15/16 (Year 11). Using five points of measurement enables us to explore more complex patterns of change using more advanced statistical methods. We use two latent class modelling approaches, Latent Growth Curve Modelling (LCGM), and Growth Mixture Modelling (GMM).

Latent Growth Curve Modelling (LGCM)

Using a statistical method called Latent Growth Curve Modelling (LGCM), we were able to estimate an average trend in psychological distress for each of our SEN provision groups. The results are presented in Figure 52 and Table 21.

These trends are described in terms of three characteristics: the **intercept** (the average GHQ-12 score at time point one, in this case, Year 10), the **slope**, and the **quadratic** (or curvature of the trend).

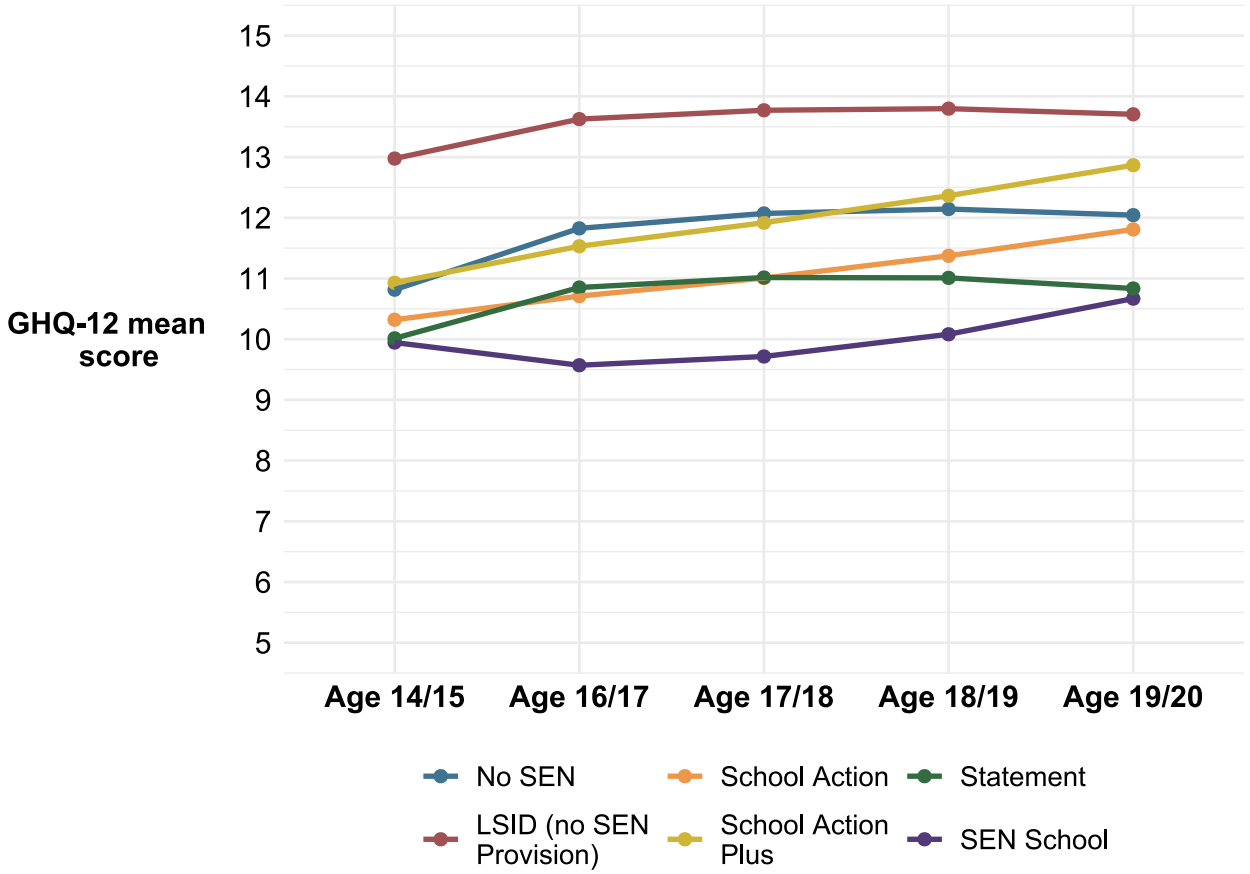
The coefficients presented in Table 21 show the differences in intercept, slope and quadratic between each SEN provision group compared to the No SEN group: Positive values indicate a higher intercept, slope, or quadratic than the no SEN group, and negative values indicate the opposite. A coefficient of zero indicates no difference.

Significant differences are reported at the 5% level or lower and shown in bold.

For ease of interpretation, the coefficients were converted into marginal estimates and plotted in Figure 52.

Young people with LSID (NSP) (13.0 in Year 10) had significantly higher GHQ-12 scores on average compared to those with no SEN (10.8 in Year 10), however, the overall trend from for these two groups were very similar: Average levels of psychological distress increased from age 14/15 (Year 10) until around age 17/18, after which they plateaued and then declined slightly. A very similar trend was also observed for young people with a Statement. Whilst their average scores were also lower still, compared to those with no SEN, the difference was not statistically significant.

Figure 52: Trends in GHQ-12 mean score (LGCM), by SEN



Source: NPD; LSYPE2, waves 1, 2, 4, 5, 6, 7, weighted.

Average trends in psychological distress were quite different for School Action, and School Action Plus young people, with evidence of a slow but accelerating increase in GHQ-12 scores over time. The difference, when compared to those with no SEN, was statistically significant for School Action (slope: -0.55; quadratic: 0.12)[39], but borderline significant for School Action Plus (quadratic: 0.12; p = 0.06). Average psychological distress for those who had attended SEN schools declined at first (slope: -1.09; p = 0.09), although the difference was borderline significant, meaning that we are less confidence

[39]The overall trend is a combination of both the slope and quadratic, it is therefore quite plausible for the slope for School Action to be negative relative to the slope for no SEN, whilst the overall trend remains steeper.

of this finding. A similar pattern of accelerated growth to School Action, and School Action plus then followed.

Table 21: Trends in GHQ-12 mean score, by SEN status

SEN status:	Intercept		Slope		Quadratic	
No SEN (ref.)	**Coeff.**	***p***	**Coeff.**	***p***	**Coeff.**	***p***
LSID (NSP)	**2.2**	**0.00**	-0.2	0.61	0.0	0.78
School Action	-0.5	0.21	**-0.6**	**0.02**	**0.1**	**0.01**
School Action Plus	0.1	0.83	-0.4	0.16	0.1	*0.06*
Statement	-0.8	0.36	-0.1	0.82	0.0	0.98
SEN School	-0.9	0.42	*-1.1*	*0.09*	**0.2**	**0.02**

Source: NPD; LSYPE2, waves 1, 2, 4, 5, 6, 7, weighted.

Growth Mixture Modelling (GMM)

Figure 53 shows the results of a Growth Mixture Model (GMM), a person-centred approach to modelling development or change. Instead of estimating an average trajectory of psychological distress for each of our SEN provision groups, we explored the data to identify a set of 'typical' trends in young people's mental health and examined which of these trends young people with SEN were most likely to follow.

First, we estimated a set of underlying (latent) classes of young people using latent class analysis (LCA), beginning with a single class and adding an additional class with each consecutive model, until an optimal number of classes was identified. LCA is a less a less restrictive form of mixture modelling than GMM, allowing us to freely estimate a much broader range of different growth patterns in the data.

A five-class solution was selected to best describe trends in young people's mental health on the basis that this was the best fit to our data. * The solution was then re-estimated using the more restrictive but more parsimonious GMM approach, at which point it was also regressed on our SEN provision groups.

It was necessary to regress trends on gender also in order to recapture the original the latent class solution.

* We used the Vuong-Lo-Mendell-Rubin Likelihood Ratio Test and Lo-Mendell-Rubin Adjusted LRT Test (Lo, Mendell and Rubin, 2001) for model selection, which tests whether a solution with one less class is a better fit to the data.

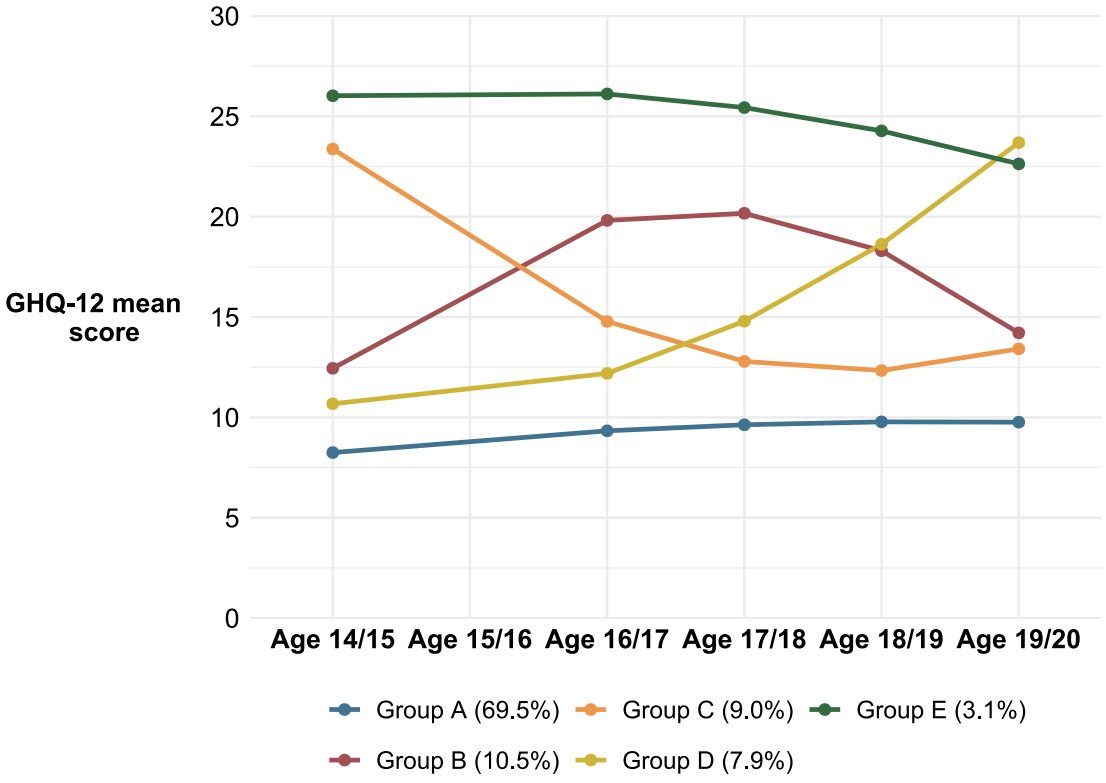
Five different trends in young people's mental health were identified, which are presented in Figure 53.

- **Group A:** Most young people had very good mental health across the period examined, with average GHQ-12 scores below ten from ages 14/15 right through to 19/20: (69.5% of young people).

However, four other trends present more mixed experiences of mental health:

- **Group B:** Young people with low to moderate levels of psychological distress in Year 10, increasing through Years12 and 13, before declining thereafter (10.5% young people)
- **Group C:** Young people with very high levels of psychological distress in Year 10, who then recover from Year 12 onwards (9.0% young people)
- **Group D:** Young people with low scores from Years 10 to 12, which was followed by a rapid increase in levels of psychological distress through to 'Year 15' (7.9% young people)
- **Group E:** A very small group with very high levels of psychological distress throughout the period, declining slightly from Year 13 (3.1%).

Figure 53: Typical trends in GHQ-12 (GMM), by SEN status



Source: NPD; LSYPE2, waves 1, 2, 4, 5, 6, 7, weighted.

The trends in psychological distress were regressed on SEN Provision to assess whether young people with different levels of SEN provision were more (or less) likely to experience different mental health trajectories. The results are presented as relative risk ratios (RRR) in Table 22. These can be interpreted as the likelihood that a young person with SEN provision 'X', in Year 10, followed trajectory 'B, C, D or E', as opposed to having consistently low GHQ-12 scores (the reference category), compared to young people with no SEN.

Compared to those with no SEN provision, young people with LSID (NSP) were more than twice as likely to follow a trajectory of low to moderate psychological distress in Year 10, increasing through Years 12 and 13, before declining thereafter (Group B: 2.4), or have very high levels of psychological distress in Year 10, from which they recovered from Year 12 onwards (Group C: 2.2). They were also almost four times more likely to have consistently high psychological distress throughout (Group E: 3.8), although this was a much rarer experience overall.

Table 22: Trends in GHQ-12 mean score, by SEN status

Consistently Low (70%): Ref	**Low / Mod (11%)**		**Very High (9%)**		**Low (8%)**		**Consistently very High (3%)**	
SEN status: (No SEN ref.)	**RRR**	***p***	**RRR**	***p***	**RRR**	***p***	**RRR**	***p***
LSID (NSP)	**2.4**	**0.01**	**2.2**	**0.03**	2.1	0.13	**3.8**	**0.01**
School Action	0.8	0.54	1.0	0.86	1.2	0.44	0.9	0.73
School Action Plus	1.0	1.00	1.4	0.29	**2.1**	**0.02**	**2.5**	**0.04**
Statement	0.8	0.76	1.0	0.99	1.0	1.00	2.6	0.21
SEN School	-	-	1.4	0.68	1.8	0.24	-	-
Female	**4.5**	**0.00**	**5.5**	**0.00**	**3.6**	**0.00**	**10.4**	**0.00**

Source: NPD; LSYPE2, waves 1-7, weighted.

School Action Plus young people were twice as likely to have low GHQ-12 scores from Year 10 to 12, followed by a rapid increase in psychological distress through to 'Year 15' (Group D: 2.1) than those with no SEN. They were also more than twice as likely (Group E: 2.5) to have consistently high levels of psychological distress. Beyond these differences, those for other young people with SEN were small and/or non-significant. Whilst young people with a Statement appeared more likely to have consistently high psychological distress also, this difference was non-significant. Given small sample sizes, it was not possible to estimate all the coefficients for those who had attended SEN schools.

In this analysis, associations with gender provides a useful yard stick for interpreting the size of the associations with SEN Provision. As we have already noted, young women are far more likely to report symptoms of psychological distress in general than young men, which is why all of the relative risk ratios (RRRs) for gender are positive (ranging from 3.6 to 10.4) and statistically significant. This shows the associations related to SEN provision were smaller than those for gender, however, they are far from inadmissible.

Wellbeing: ONS4

Our last set of longitudinal analyses looks at change in personal wellbeing over time using the four ONS4 measures described in Chapter 5, which include life satisfaction, whether the young person felt the things they were doing in their life were worthwhile, and their self-reported happiness and level of anxiety.

Method

Young people's responses to ONS4 were recorded twice, at ages 15/16 (in Year 11) and 19/20. Change in wellbeing was calculated by subtracting the score young people gave at age 15/16 from the score given at age 19/20. An individual increase in wellbeing is therefore denoted by a positive change score, whereas a decrease will be indicated by a negative score.

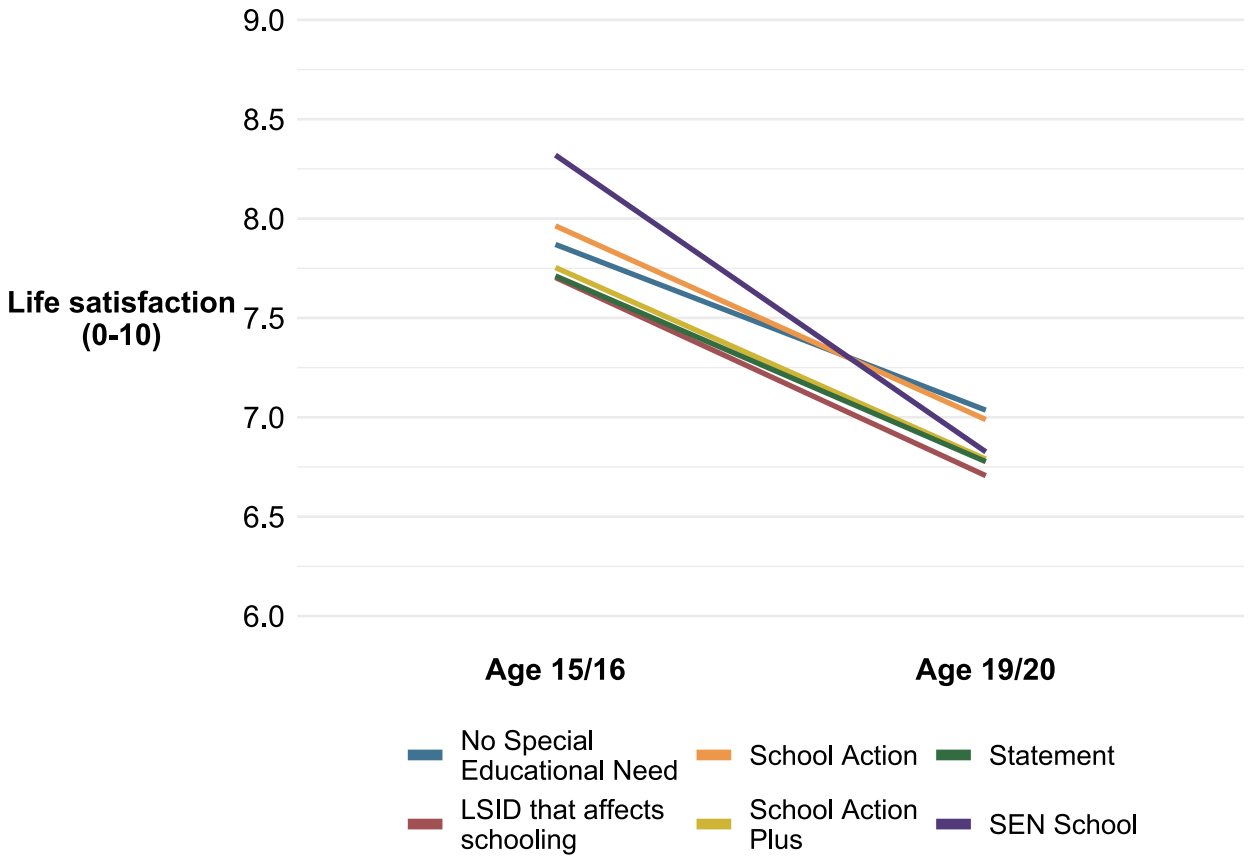
This score was then regressed on our SEN groups, which enabled us to examine differences in young people's changing wellbeing across levels of SEN provision.

Figures 54 to 57 show the change in mean scores for ONS4 for each SEN provision group from ages 15/16 to 19/20. Although we used change scores to assess for statistical differences in young people's changing wellbeing, for ease of interpretation we have presented the actual mean scores at both time points.

Life Satisfaction

On average, young people's life satisfaction declined over time (-0.86). Previously, we noted that the standard deviation for young people's life satisfaction – a measure of the true spread of young people's scores – was 2.0. This tells us that the majority young people (68%) scored between 5 and 9 on the original 10 points scale (one standard deviation above and below the mean score of 7). A decline of -0.86 is therefore almost half of a standard deviation, which is quite significant decline, overall. However, in terms of the differences decline across our SEN groups, these were all very small and/or non-significant. Whilst the average decline among those who had attended SEN schools was relatively larger, this was also non-significant.

Figure 54: Change in life satisfaction between age 15/16 and 19/20, by SEN status

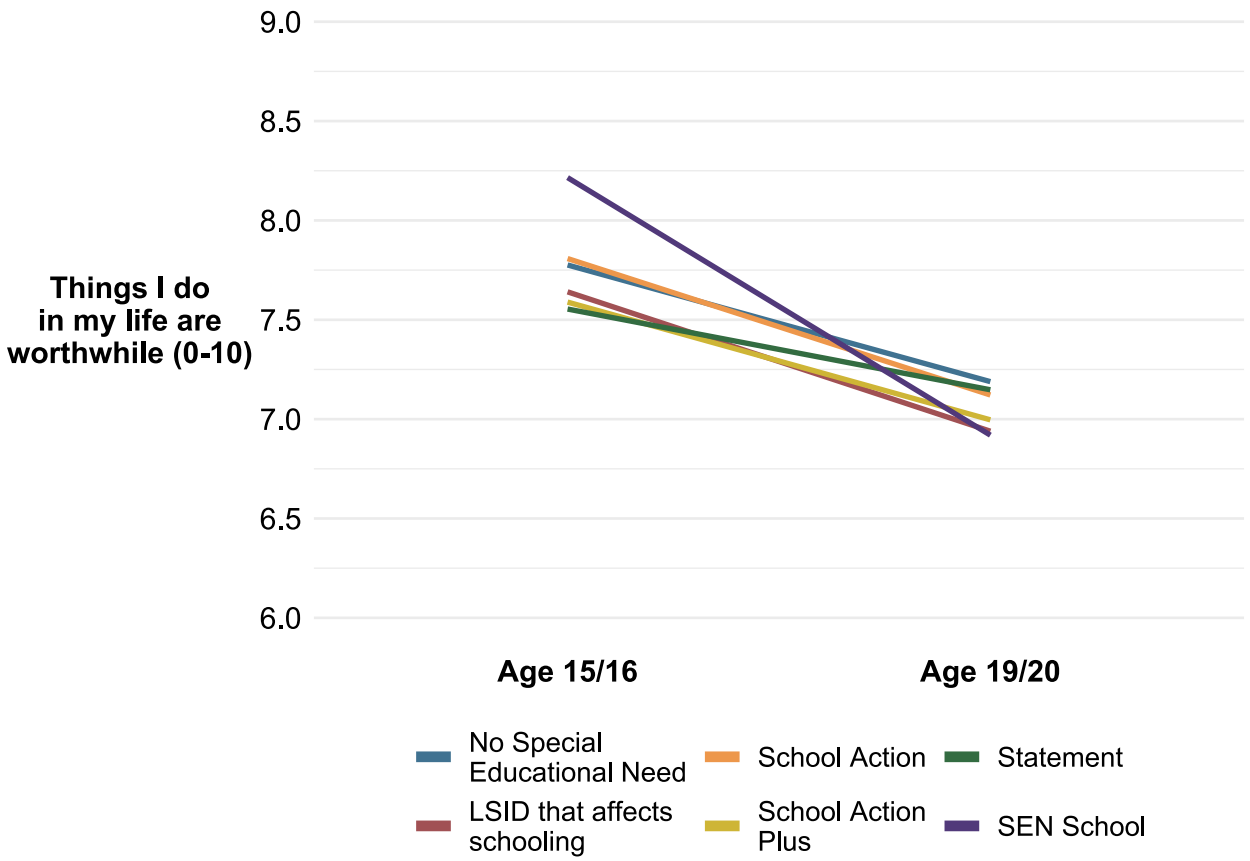


Source: NPD; LSYPE2, waves 1, 2, 3, and 7, weighted.

The things that I do in my life are worthwhile

The extent to which young people felt the things they did in their lives were worthwhile and purposeful also declined, although to a lesser extent (-0.60). Again, there was no evidence of any difference in decline across the SEN groups. A seemingly greater decline among young people in SEN schools, was also non-significant.

Figure 55: Change in feelings of purpose between age 15/16 and 19/20, by SEN status

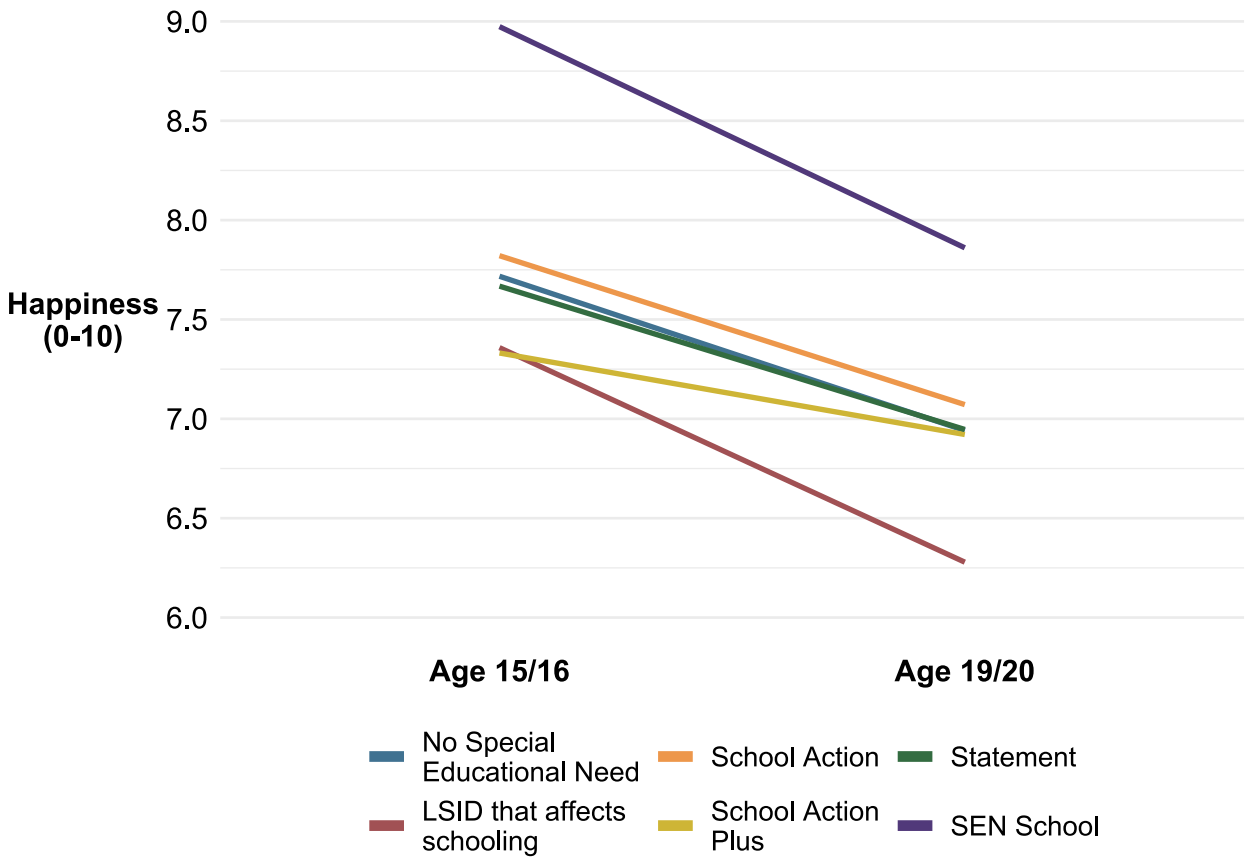


Source: NPD; LSYPE2, waves 1, 2, 3, and 7, weighted.

Happiness

Figure 56, describes much larger differences in young people's reported happiness overall as was previously reported in Chapter 5 (Figure 22). Young people who had attended SEN schools reported higher happiness on average both at age 15/16 (9.0 compared to 7.7 for those with no SEN) and age 19/20 (7.9 compared to 6.9). In contrast, LSID (NSP) young people reported lower happiness at both time points, however the difference was only statistically significant at age 19/20 (6.3 compared to 6.9). Again, however, whilst there was a sizable decline in happiness, differences across SEN provision groups were very smaller and non-significant. On average, self-reported happiness declined (-0.78).

Figure 56: Change in happiness between age 15/16 and 19/20, by SEN status

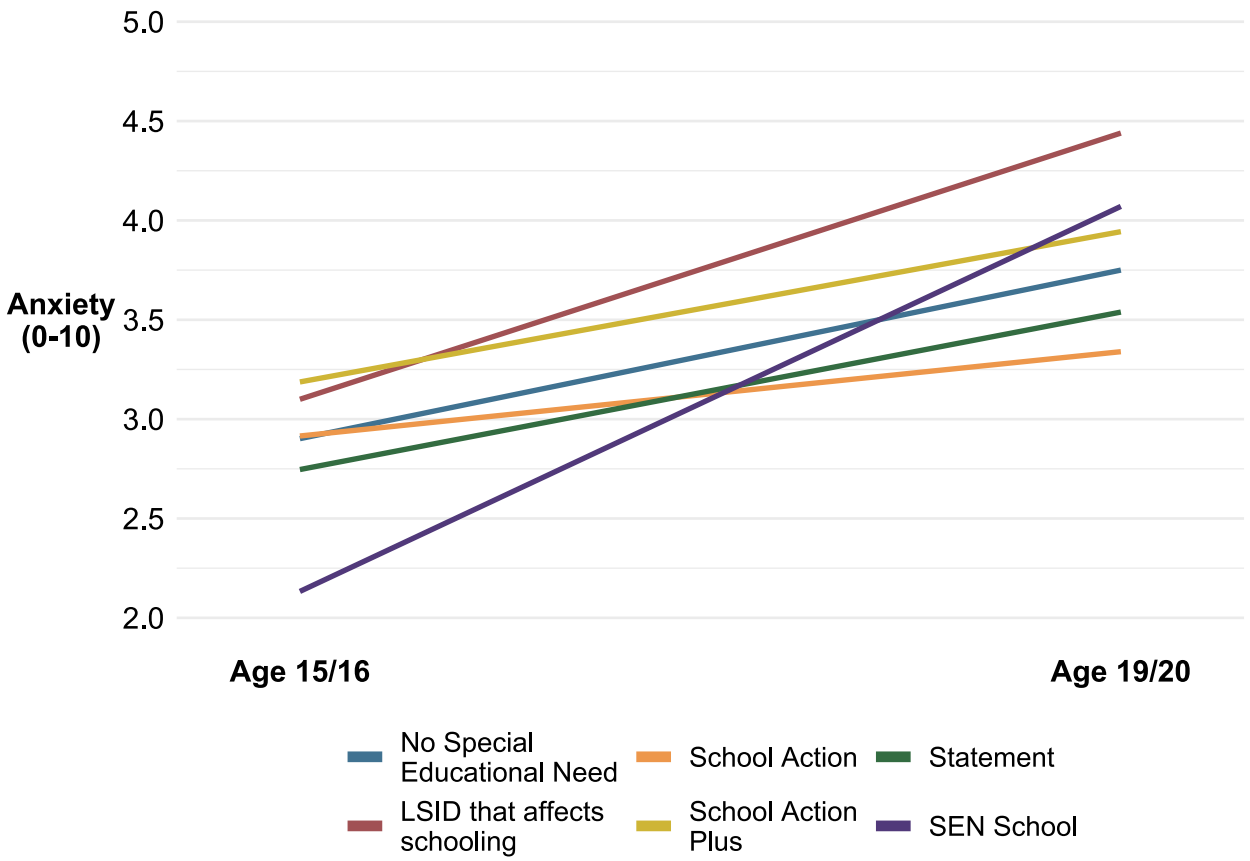


Source: NPD; LSYPE2, waves 1, 2, 3, and 7, weighted.

Anxiety

In line with the overall decline in wellbeing reported above, there was also evidence of sizable increase in young people's self-reported anxiety (0.85). Again, whilst there appears to be some differences in the level of change across the SEN groups, none of these differences were statistically significant. An apparent much steeper increase in anxiety among young people who had attended SEN schools was also non-significant.

Figure 57: Change in anxiety between age 15/16 and 19/20, by SEN status



Source: NPD; LSYPE2, waves 1, 2, 3, and 7, weighted.

Overall, therefore, there is evidence of a decline in young people's wellbeing between ages 15/16 and 19/20. However, our analysis suggests there were no differences in the level of decline across our SEN groups.

Perceptions of COVID-19

As they did for everyone, the experiences of young people with SEN varied enormously during the COVID-19 pandemic, with some facing disruptions to their education, employment and/or training and other missing out completely. Research visits to local areas, schools, and various educational services and providers in the autumn of 2020 by Ofsted for example, found that some children and young people with complex needs and others without an EHC plan were often not receiving education, some because their needs could not be met, others because there was too much anxiety around attending (Ofsted, 2021).

The Ofsted study indicates that while many of the challenges faced by young people with SEN during the pandemic were not necessarily new, they were likely exacerbated over the course of the pandemic. Other research here similarly highlights that with reduced or removed support compared with pre-pandemic levels and the additional strain of some important health services suspended during this time, young people identified with SEN felt the impact of COVID-19 more acutely than their peers (Disabled Children's Partnership, 2021). As such, it has been posited that their preparation for adulthood may have been disproportionately affected.

The two most recent waves of the LSYPE2 were administered at the very beginning of the pandemic and during it: wave 8 was administered between May and October 2020[40] when young people were aged 20/21; wave 9 took place predominantly in May – July 2021 when cohort members were 21/22 years old.[41] Both asked about the impact of the COVID-19 pandemic on different areas of young people's lives, including their studies, work, health, and social life.

Table 23 shows the unweighted sample sizes and weighted percentages for the different SEN provision groups as identified at age 14/15.[42]

[40] 79.3% of interviews were conducted in May and June 2020, with a further 14.2% in July. The final 6.5% were completed in August (4.4%), September (2.1%) and 2 interviews (0.04%) in October.

[41] Over half of the wave 9 interviews were administered in May 2021 (50.9%), with a further 22.4% in June, 10.6% in July.

[42] Attrition means that the sample sizes are smaller for these later ages, but the use of longitudinal weights means the relative sizes of the different provision groups remain broadly similar.

Table 23: SEN provision groups and sample sizes at age 20, 21 and 22

Wave	7		8		9	
Year	2019		2020		2021	
Age	19/20		20/21		21/22	
SEN Provision Group:	**n**	**%**	**n**	**%**	**n**	**%**
No SEN	4,436	78.5	3,733	78.4	3,488	78.2
LSID (NSP)	118	2.0	90	1.8	89	1.9
School Action	527	9.7	400	9.5	380	10.0
School Action Plus	293	5.5	221	6.0	209	5.8
Statement	135	2.6	97	2.6	102	2.6
SEN School	63	1.8	41	1.6	43	1.5
Total SEN	**1,018**	**19.6**	**759**	**19.7**	**734**	**19.9**
Total SEN + LSID (NSP)	**1,136**	**21.5**	**849**	**21.6**	**823**	**21.8**
Total cases	**5,572**	**100**	**4,582**	**100**	**4,311**	**100**

Source: NPD; LSYPE2, waves 1, 2, 7, 8 and 9. Table shows unweighted ns and weighted %s

A note on variation in the base questions

In 2020, when young people were aged 20/21, the question asked in relation to the perceived impact of the pandemic was: “The coronavirus outbreak has had a negative impact on [paid work; income; studies; home life; social life; mental health, physical health; mental or physical health of my friends and/or family…” with responses on a four-point scale from “strongly agree” to “strongly disagree”. Options for “not applicable”, “don’t know” and “don’t want to answer” were also available. The following year, in 2021, the question wording was slightly different: “Since the start of the virus in March 2020 up until now, what effect did the coronavirus pandemic have on your overall [paid work; income; education & training; housing; physical wellbeing; mental wellbeing; family relationships; social life]”, with responses on a five-point scale ranging from “very positive” to “very negative”, including “no effect” as a middle category. Again, in addition to these responses, young people could also respond “does not apply”, “don’t know” and “don’t want to answer”.

These slight variations in how the questions were phrased and particularly the inclusion of the “no effect” response in the 2021 survey make comparison over time difficult. Furthermore, the questions relating to the experiences of the pandemic and related impact were asked of all young people as part of the main survey assessment and not part of the routing based on activity. As such, it is difficult to disentangle responses where individuals may have responded “strongly disagree” or “don’t know”, for example, when

they more accurately should have answered “not applicable” if they were not actually engaged in any education or training / employment etc. at the time. [43]While it is clear from the data that many young people did answer appropriately (“not applicable” responses are proportionately much higher on questions in relation to ‘paid work’, 22.2% in 2020, and ‘studies’, 25.6% in 2020, compared to those for ‘social life’, 2.5%), there is still likely to be some measurement error in relation to how these questions and their responses were interpreted. In this short, descriptive section we therefore report proportions excluding those who responded “not applicable” but note that further interrogation of these results is possible. For interested readers, the main activities reported by young people at age 20/21 and 21/22 are given in Appendix Table 1.

Education and training

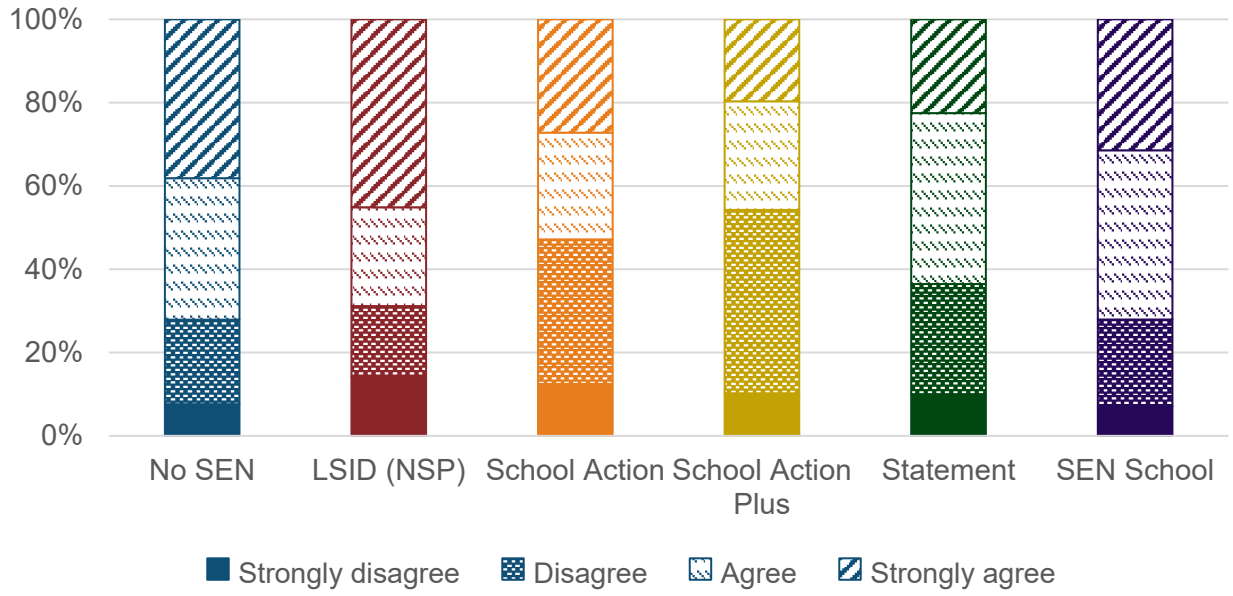
When asked about the impact of the pandemic on their studies at the beginning of the coronavirus outbreak, on average over half of young people (51.2%) “strongly agreed” or “agreed” it had been negative, with fewer than 1 in 4 (23.1%) “strongly disagreeing” or “disagreeing”. However, a quarter of the responding cohort (25.6%) appear not to be engaged in any form of education or training in 2020 (wave 8), citing “not applicable” [44] when asked about the impact on their studies, with proportions significantly higher amongst those in the School Action (35.7%), School Action Plus (33.1%) and Statements (43.3%) groups (see Appendix Tables 2 and 3 for main reported economic activity at ages 20/21 and 21/22, by SEN group).

Figure 58 reports the between group variation in responses, with those who responded “not applicable” removed, and shows that young people in each of the four SEN provision groups - as defined at age 14/15 - were less likely to “strongly agree” and “agree” that the COVID-19 pandemic had a negative impact on their studies than those with no SEN.

[43] Restricting the analysis only to those young people in the each of the relevant economic activities – for example only reporting data on the perceived impact of COVID-19 in relation to work for those who report being employed, etc. – necessarily precludes those engaged in multiple activities or whose activity changed over the course of the pandemic. It also changes the nature of the groups making any comparison more complicated.

[44] As noted, we use those responding “not applicable” as a proxy for those not engaged in this activity. In reality, it is likely that some for whom this question was not relevant would have responded “disagree” or even “strongly disagree”, particularly given the main activities reported by the responding sample at wave 8 where just 45.5% of the responding cohort appear to be mainly studying: 36.4% in university; 6.4% on apprenticeships or other training; 2.8% in full-time (non-HE) education (see Appendix Table 1 and variation by SEN group in Appendix Table 2), though it is conceivable that some of the 37.4% working are also undertaking education and/or training. More detailed analysis of main activities across the last two waves of LSYPE2 cohort is possible but is beyond the scope of the current research and so we do not explore any such discrepancies in the data further here.

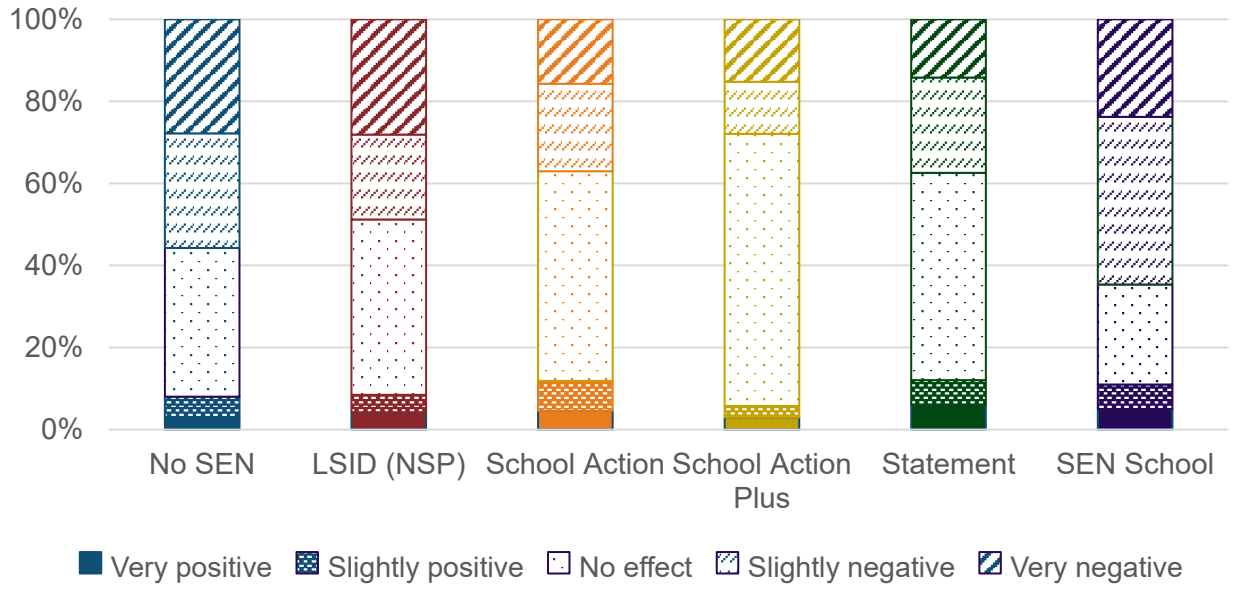
Figure 58: "The coronavirus outbreak has had a negative impact on my studies", age 20/21



Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

A year later, in the middle of 2021, the pattern is broadly similar, wherein those in the three main SEN provision groups – but not those in SEN schools for whom there was no significant difference - are less likely to report negative experiences in relation to their studies as a result of the pandemic (see Figure 59). Those in the three main SEN provision groups – School Action, School Action Plus and Statement – indicate the highest proportion of "no effect" on their studies, possibly reflecting their lower incidence of being in education and/or training (see Appendix Table 3), but again we are unable to disentangle these relationships here.

Figure 59: "Since the start of the virus to now, what effect did the coronavirus pandemic have on your overall education and training", age 21/22



Source: NPD; LSYPE2 waves 1, 2 and 9: weighted.

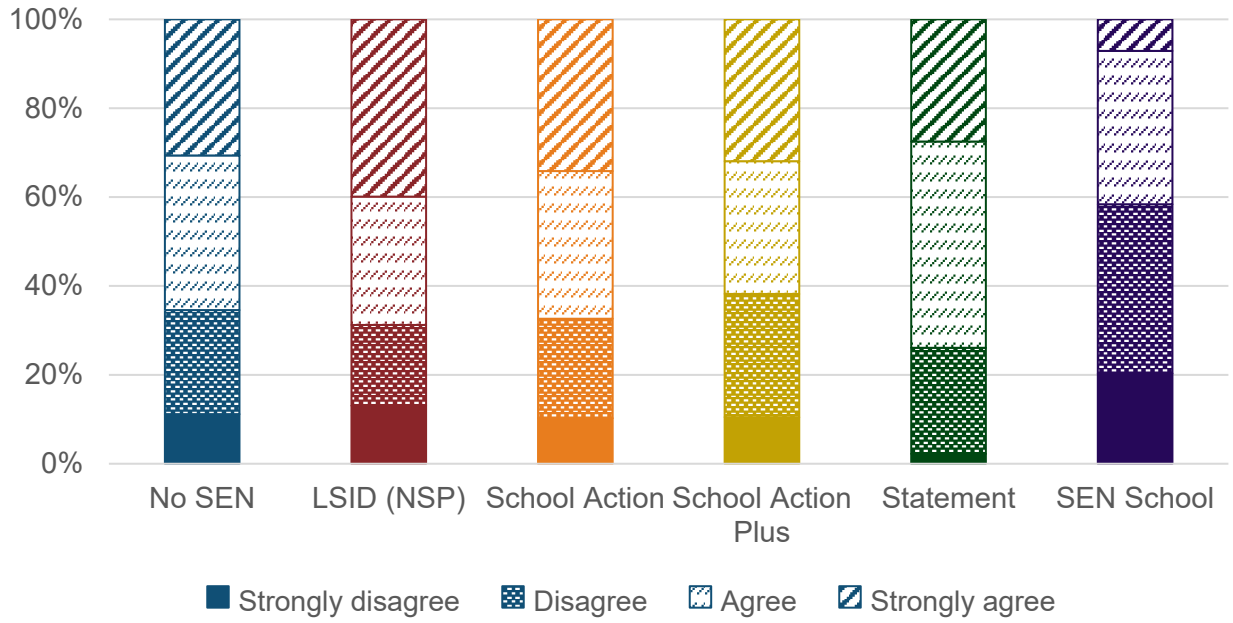
Employment and income

In terms of the impact of the coronavirus pandemic on young people's employment, negative experiences were experienced similarly across all SEN provision groups.

Figure 60 reports the proportions indicating impact on their employment, either positively or negatively, again removing those who responded "not applicable" across all SEN groups. Only those in SEN schools showed significantly different results from the No SEN group. However, note that the SEN school group is particularly small by age 20/21 (n = 41; 1.6% of the responding sample) and 53% of this group reported that any perceived impact on their job was "not applicable"[45] and so are excluded from the figure and related significance testing.

[45] At age 20/21 (in 2020), just over 1 in 5 (22.2%) reported that the item relating to impact on their job was "not appliable", rising to 41.4% of those in the Statement group and 53% in SEN schools (see also Appendix Table 2).

Figure 60: "The coronavirus outbreak has had a negative impact on my job", age 20/21



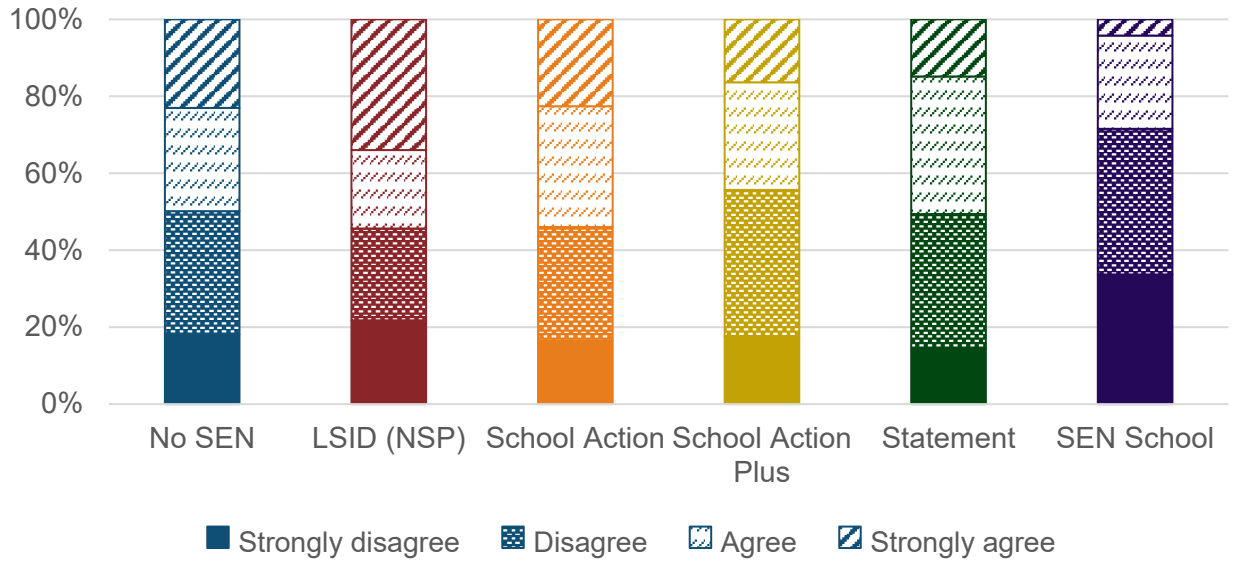
Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

Similar results were observed for the parallel item at wave 9, where just 12.8% of the responding sample reported the question was "not applicable" (11.3% in the No SEN group compared with 19.2% of those with Statements and rising to 63.7% of those in SEN schools).

As for their pay, the overall impact of the pandemic on young people's incomes also seems fairly consistent across the different SEN groups: no significant differences from the No SEN group were observed, except for those in the SEN school group[46] who again appear less likely to agree that they experienced any negative impact.

[46] 45.7% of the SEN school group at age 20/21 respond "not applicable" to the question regarding the impact of the coronavirus impact on their income.

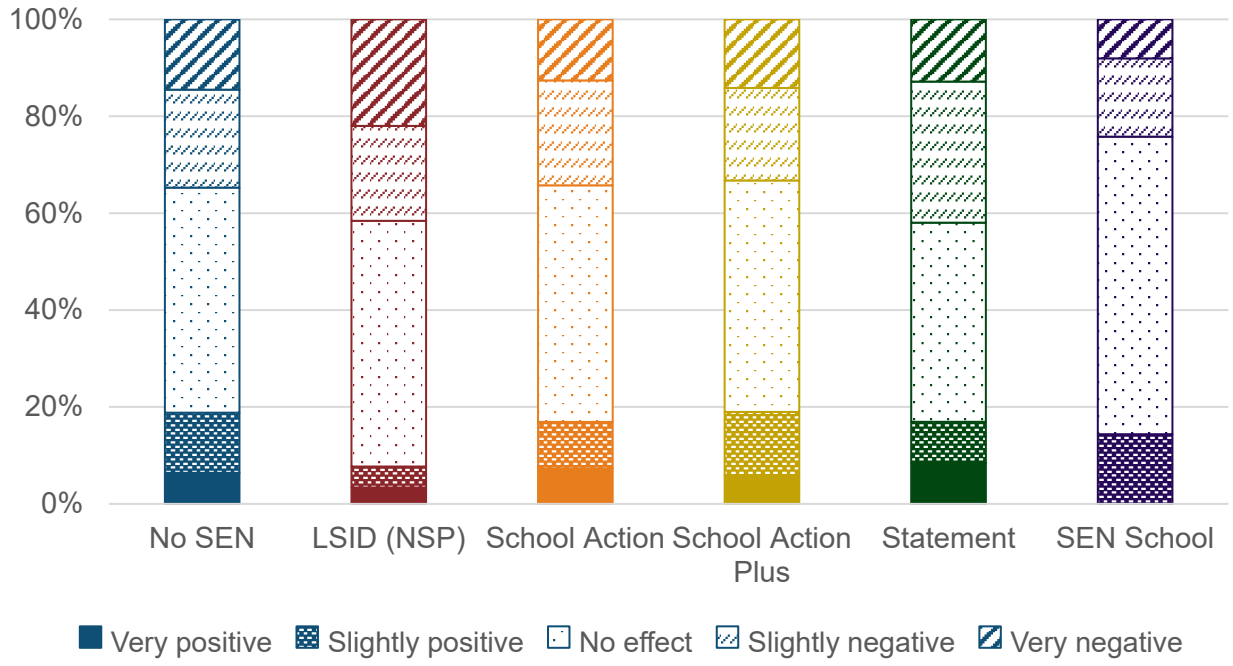
Figure 61: "The coronavirus outbreak has had a negative impact on my income", age 20/21



Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

A year later, when cohort members were age 21/22, those who were reported to have an LSID (NSP) at age 14/15 but received no school provision were slightly more likely to report negative effects of the pandemic on their income than those in the No SEN group.

Figure 62: "Since the start of the virus to now, what effect did the coronavirus pandemic have on your overall income", age 21/22



Source: NPD; LSYPE2 waves 1, 2 and 9: weighted.

Mental and physical health

Broadly speaking, young people reported that the COVID-19 pandemic had had a greater impact on their mental health than on their physical health. At age 20/21, over half, 54.9%, of all young people "strongly agreed" or "agreed" that the pandemic had negatively impacted their mental health, compared with 43.4% reporting the same in respect of their physical health.

Table 24: "The coronavirus has had a negative impact on my …", age 20/21

Response:	Mental Health (%)	Physical Health (%)
Strongly agree	**19.3**	**13.1**
Agree	**35.5**	**30.3**
Not applicable / Don't know [47]	**3.8**	**4.0**
Disagree	**32.8**	**39.0**
Strongly disagree	**8.6**	**13.6**
TOTAL:	**100**	**100**

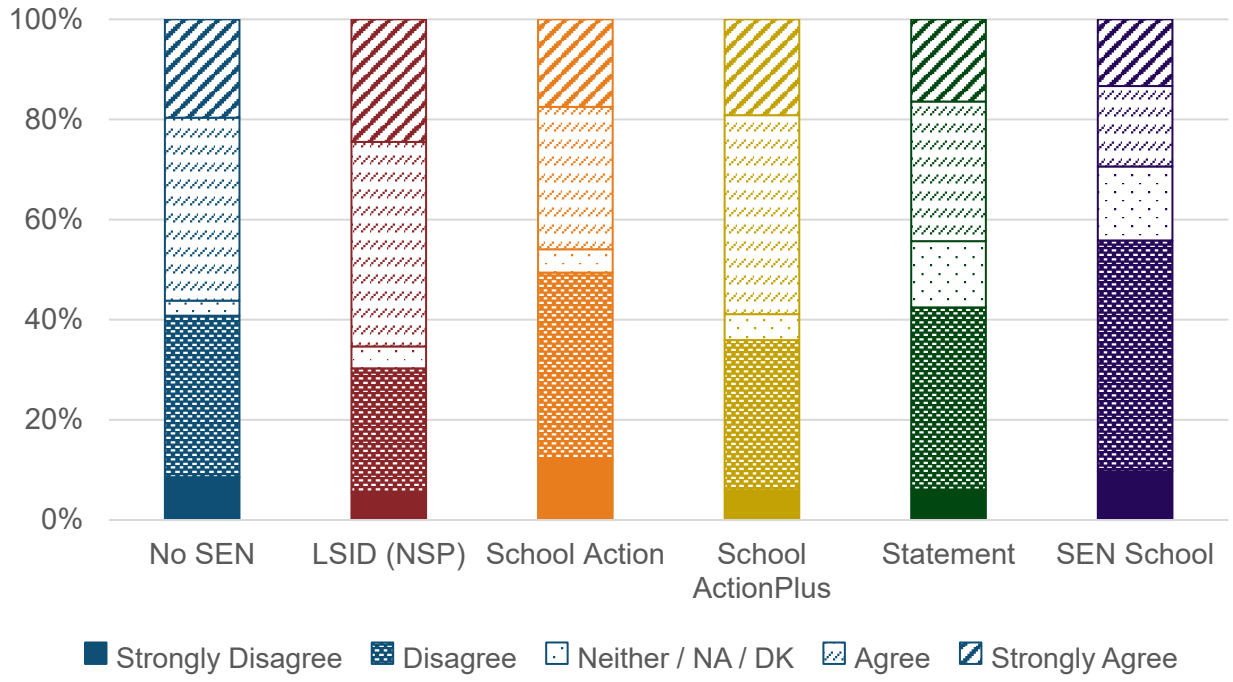
Source: LSYPE2, wave 8, weighted.

This is also the case for young people across each of the SEN groups with the exception of young people who were in SEN schools. For those who were in SEN schools at age 14/15, the perceived negative impact of COVID-19 on physical health was marginally higher than on mental health (31.6% compared with 29.4%, respectively), but overall, the proportions for this agreeing (or strongly agreeing) any perceived negative impact was also much lower (see Figure 63).

Those in the School Action group and those who were in SEN schools were significantly less likely to agree that the pandemic had negatively impacted their mental health than those with no identified SEN. Despite slightly stronger agreement amongst those in the LSID (NSP) and School Action Plus groups, these differences are not statistically significantly different from those with No SEN.

[47] At age 20/21 (wave 8) for the questions relating to more subjective assessments of the impact of COVID-19 (mental health; physical health; social life; and home life) we recode the "not applicable" and "don't know" responses as midway between agree and disagree: essentially a proxy for "neither agree nor disagree". The proportions reporting "not applicable" for these items is much lower than for questions relating to perceived impact on activity outcomes, though there is variation by SEN group.

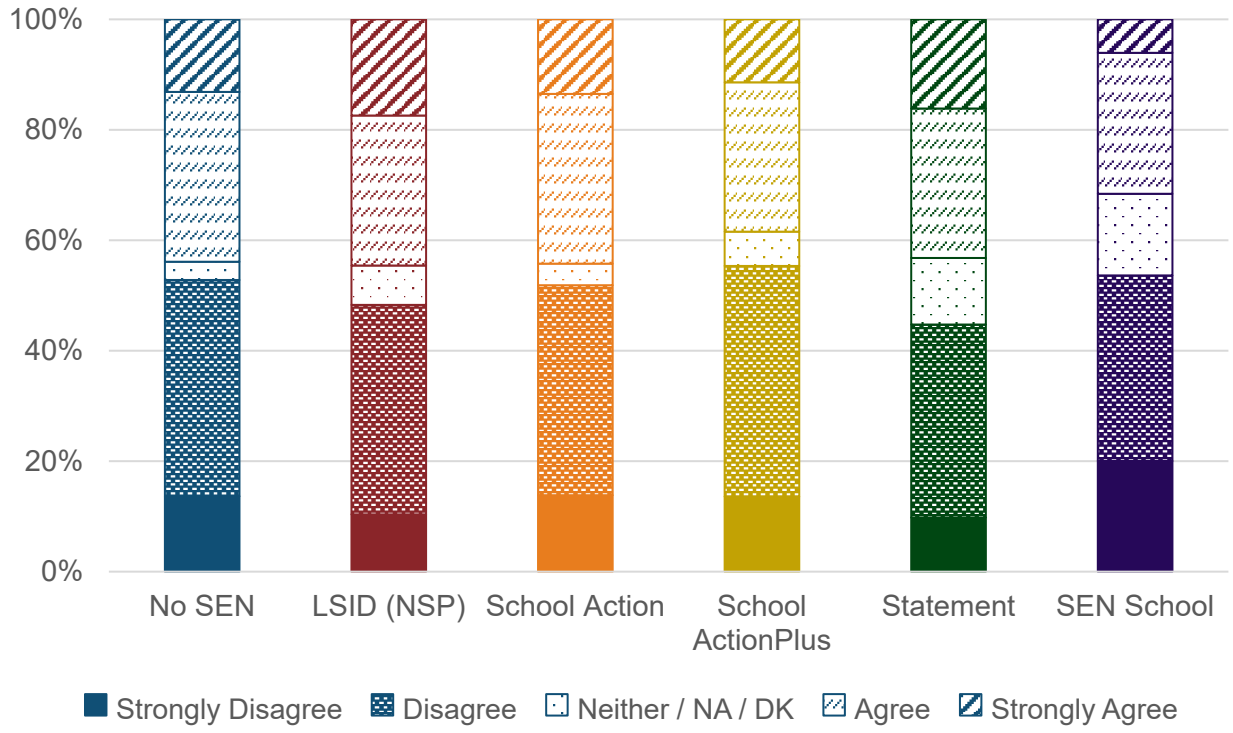
Figure 63: "The coronavirus outbreak has had a negative impact on my mental health", by SEN group, age 20/21



Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

There are no significant differences between the SEN groups in terms of the perceived impact of COVID-19 on their physical health.

Figure 64: "The coronavirus outbreak has had a negative impact on my physical health", by SEN group, age 20/21



Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

Midway through 2021, at age 21/22, young people continue to report that their mental health was more impacted than their physical health: Across all young people, nearly two thirds (64.2%) reported a "slightly negative" or "very negative" impact on their mental wellbeing, compared with 44.9% reporting the same impact on their physical wellbeing.

Again, however, we note the differences in the way the questions were worded: "The coronavirus outbreak has had a negative impact on …" (age 20/21: wave 8); and "Since the start of the virus in March 2020 up until now, what effect did the coronavirus pandemic have on your overall…" (age 21/22: wave 9) meaning a direct longitudinal comparison cannot be made. Moreover, the question at age 20/21 refers to mental / physical health and at age 21/22 to mental/physical wellbeing; while comparable, these terms, and how they are interpreted, differ.

Table 25: "Since the start of the virus in March 2020 up until now, what effect did the coronavirus pandemic have on your overall …", age 21/22

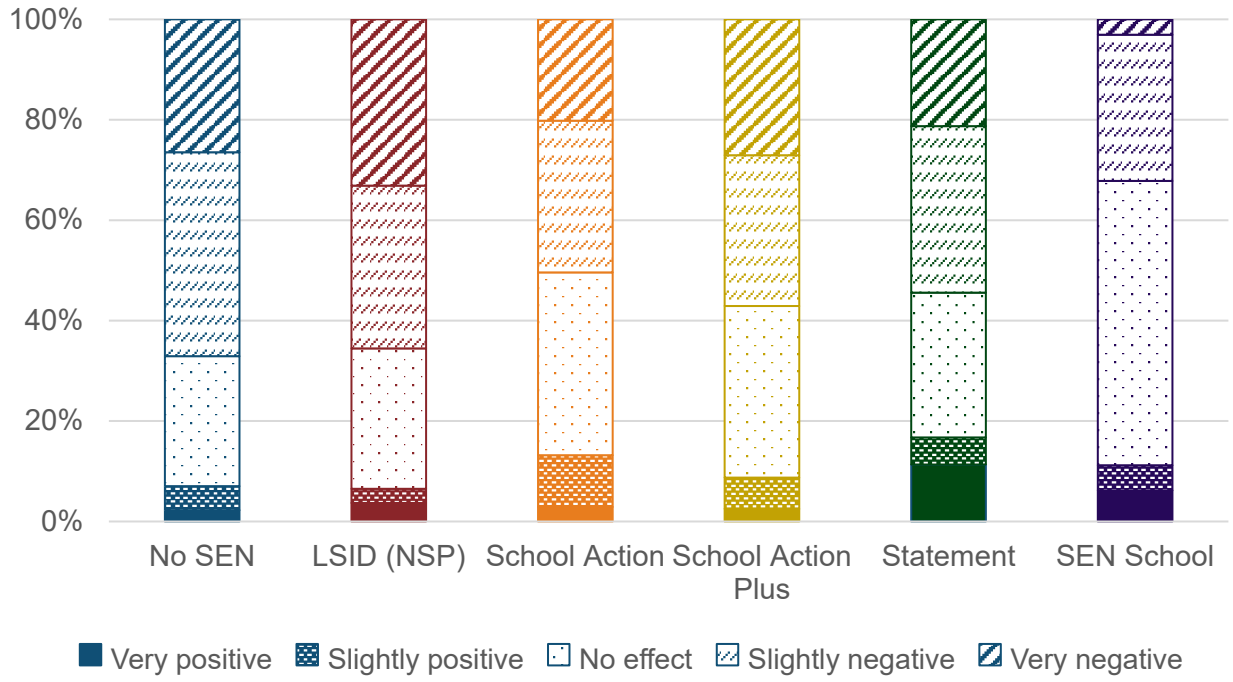
Response:	Mental Wellbeing (%)	Physical Wellbeing (%)
Very positive	**2.6**	**3.3**
Slightly positive	**5.4**	**9.9**
No effect [48]	**27.8**	**42.0**
Slightly negative	**38.5**	**32.4**
Very negative	**25.6**	**12.6**
TOTAL	**100**	**100**

Source: LSYPE2, wave 9, weighted.

Again, the impact varies between the SEN groups with those in the School Action group, those with Statements and in SEN schools less likely to indicate negative impacts on their mental wellbeing than those in the No SEN group who themselves report the most negative impact on their mental wellbeing. Over half (56.6%) of those who were in SEN schools at age 14/15 report "no effect", with just 3.1% indicating a "very negative" impact.

[48] At age 21/22 (wave 9), the question contains a "no effect" option. As such, while there are a small number of young people who nevertheless respond "not applicable" to questions relating to both mental and physical wellbeing (3.3% and 4.4%, respectively), unlike for the previous year, we do not combine these responses with the "no effect" response.

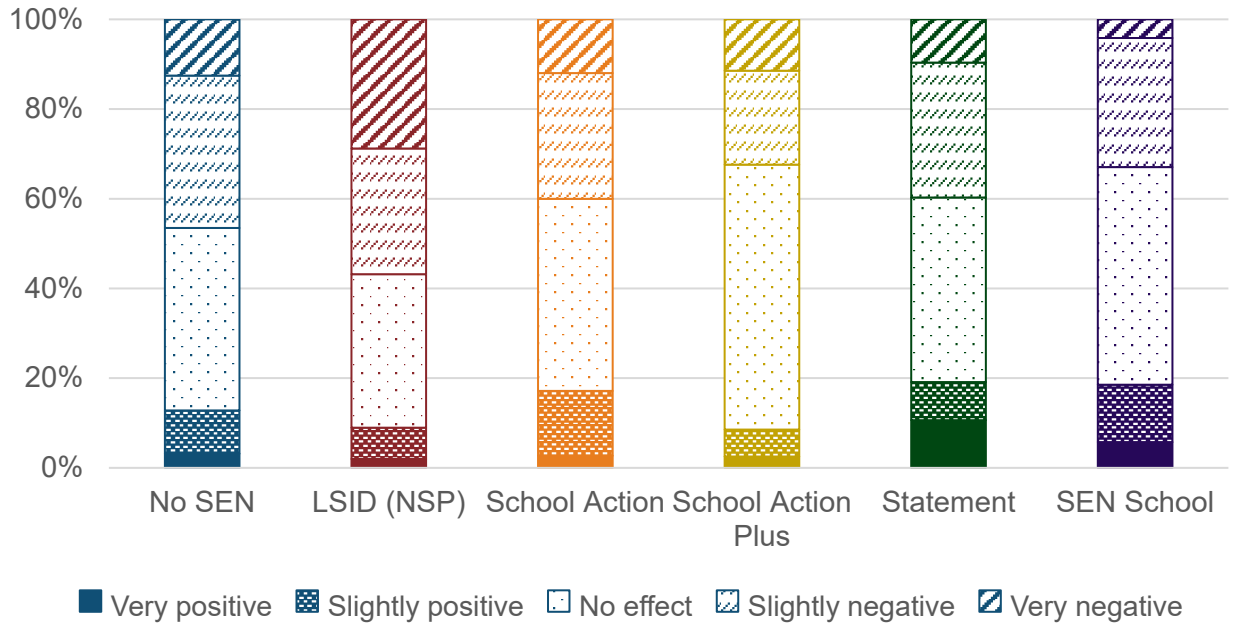
Figure 65: "Since the start of the virus to now, what effect did the coronavirus pandemic have on your overall mental wellbeing", by SEN group, age 21/22



Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

For physical health, those in the LSID (NSP) group are more likely than those in the No SEN reference groups to report negative effects of COVID-19. Significant differences are also observed here for those in the School Action Plus group who are less likely to report negative effects in terms of their physical wellbeing than those with no identified SEN. This group also have the largest proportion reporting "no effect", 59.1% on their physical health.

Figure 66: "Since the start of the virus to now, what effect did the coronavirus pandemic have on your overall physical wellbeing", by SEN group, age 21/22



Source: NPD; LSYPE2 waves 1, 2 and 9: weighted.

One concern, particularly in relation to questions pertaining to mental health, is that young people with additional needs might answer or interpret questions differently to a non-SEN population. Evidence cited earlier suggests that this is not the case for established and well-validated measures such as the GHQ-12 (Mayhew, et al., 2020) and so as a basic check regarding the overarching direction of results shown here, we also compared mean levels of the GHQ-12 measure of psychological distress across the six groups at both ages 20/21 and 21/22.

Table 26 reports the mean GHQ-12 scores for young people in each SEN group at ages 19/20, 20/21 and 21/22 and shows a similar pattern of results:

- At age 21/21, young people in the LSID (NSP) and School Action Plus groups have higher levels of psychological distress than those in the No SEN reference group, while those in the School Action, Statement and SEN School groups have lower levels compared to the No SEN group.
- At age 21/22, differences between LSID (NSP) and Statement group compared to those in the No SEN population are less marked, and those in the School Action and SEN School groups show lower levels of psychological distress.

Table 26: Mean GHQ-12 scores, by SEN group, at age 20, 21 and 22

Age:	19/20		20/21		21/22	
SEN Provision Group:	**Mean**	**Std. dev.**	**Mean**	**Std. dev.**	**Mean**	**Std. dev.**
No SEN	12.2	(6.3)	13.3	(6.9)	13.4	(7.1)
LSID (NSP)	**13.5 ***	(6.7)	**14.9 ***	(6.7)	14.9	(7.7)
School Action	11.9	(6.4)	**12.5 ***	(6.5)	**12.3 ***	(7.1)
School Action Plus	**13.1 ***	(7.3)	**14.2 ***	(7.4)	**14.5 ***	(8.4)
Statement	**10.9 ***	(6.2)	**12.0 ***	(6.6)	12.9	(7.3)
SEN School	**10.5 ***	(5.5)	**11.1 ***	(4.5)	**11.3 ***	(6.6)

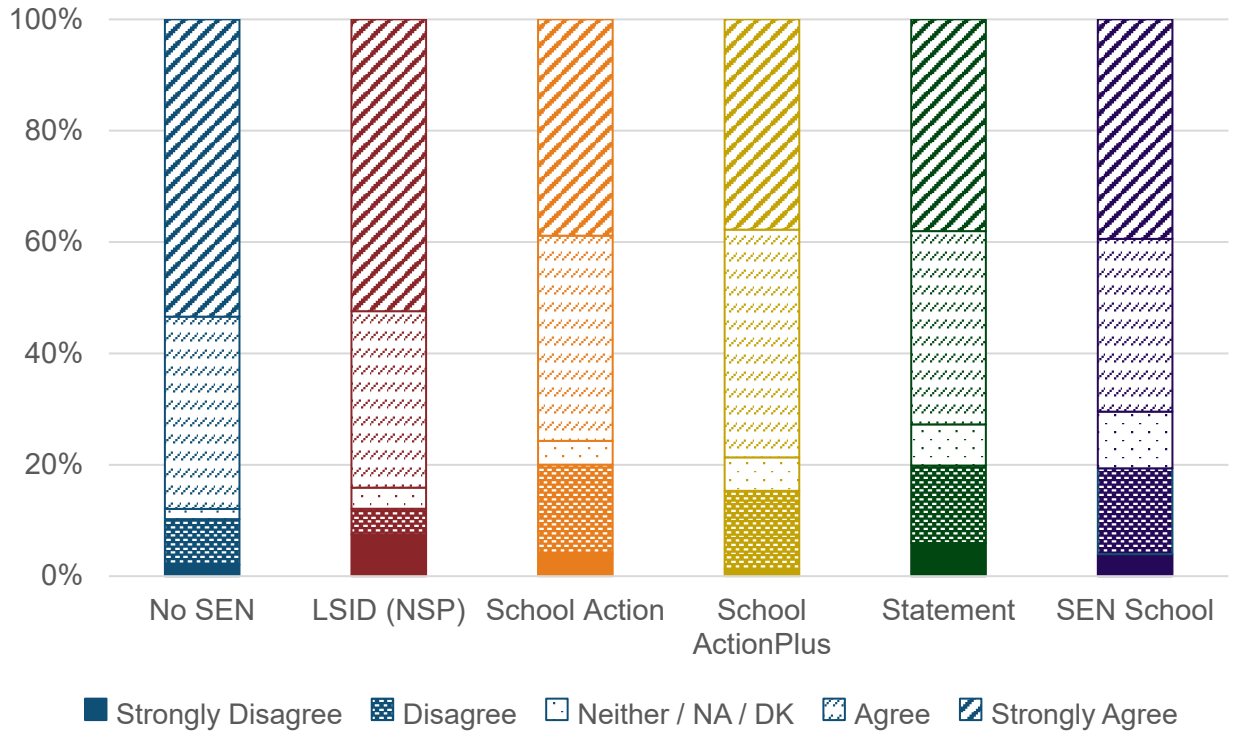
Source: NPD; LSYPE2, waves 1, 2, 7, 8 and 9, weighted.

This is a fairly simple robustness check that attempts to capture whether there might be underlying differences in how some individuals might answer and/or interpret questions regarding mental health and wellbeing. However, at a high-level at least, it does seem that there is alignment between the more subjective, single-item measures in relation to the perceived impact of the pandemic and the more objective indicators of psychological distress across the different SEN groups explored here.

Social life

Perhaps unsurprisingly given the lockdowns imposed during the pandemic, the majority of young people reported an impact of COVID-19 on their social lives: 85.5% of the overall cohort at age 20/21 “agree” or “strongly agree” that the pandemic has negatively impacted their social life, but those with SEN are less likely than those in the No SEN group to do so. There is no significant difference between those in the LSID (NSP) group and young people with no identified SEN.

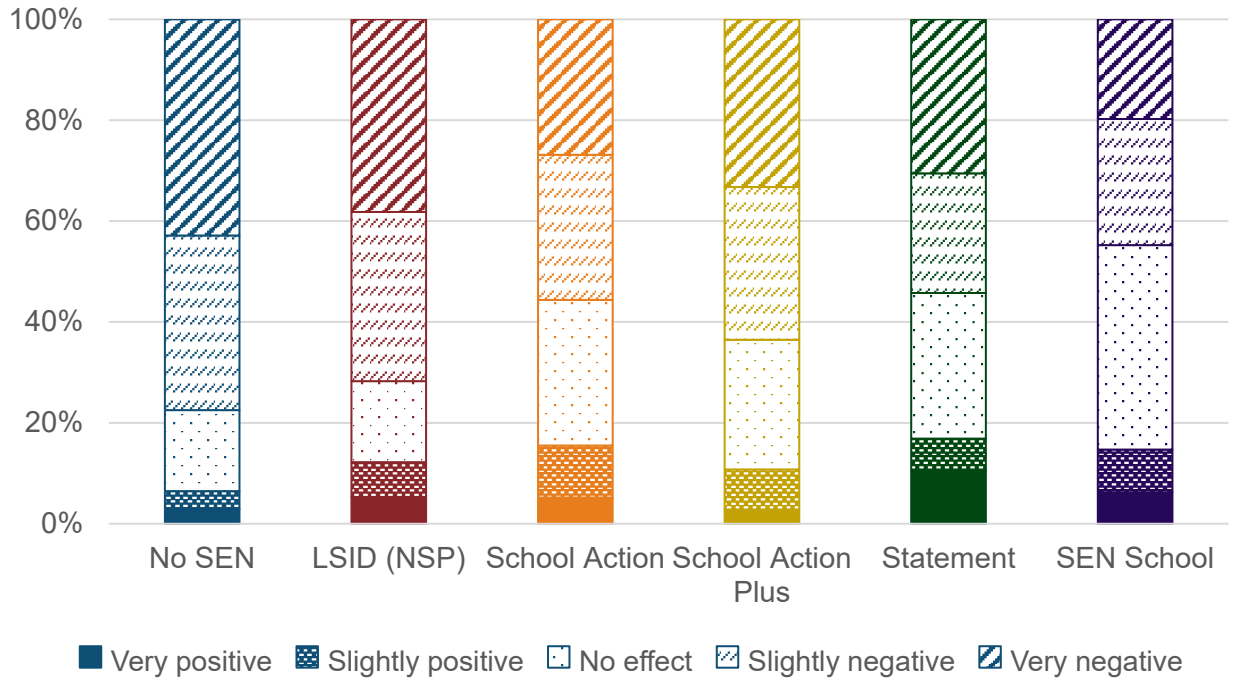
Figure 67: "The coronavirus outbreak has had a negative impact on my social life", age 20/21



Source: NPD; LSYPE2 waves 1, 2 and 8: weighted.

The pattern is the same at age 21/22 with all groups who had received SEN provision at age 14/15 less likely to report negative effects than those with No SEN: over three quarters (77.5%) of those with No SEN report that the effects of the pandemic on their social lives was "slightly negative" or "very negative" compared with just over half of those in the School Action (55.6%) and Statement (54.3%) groups, and less than half of those from SEN schools (44.8%). Four in every ten of those who had been in SEN schools (40.5%) indicated that the pandemic had had "no effect" on their social life, the highest proportion across all SEN groups.

Figure 68: "Since the start of the virus to now, what effect did the coronavirus pandemic have on your overall social life", by SEN group, age 21/22

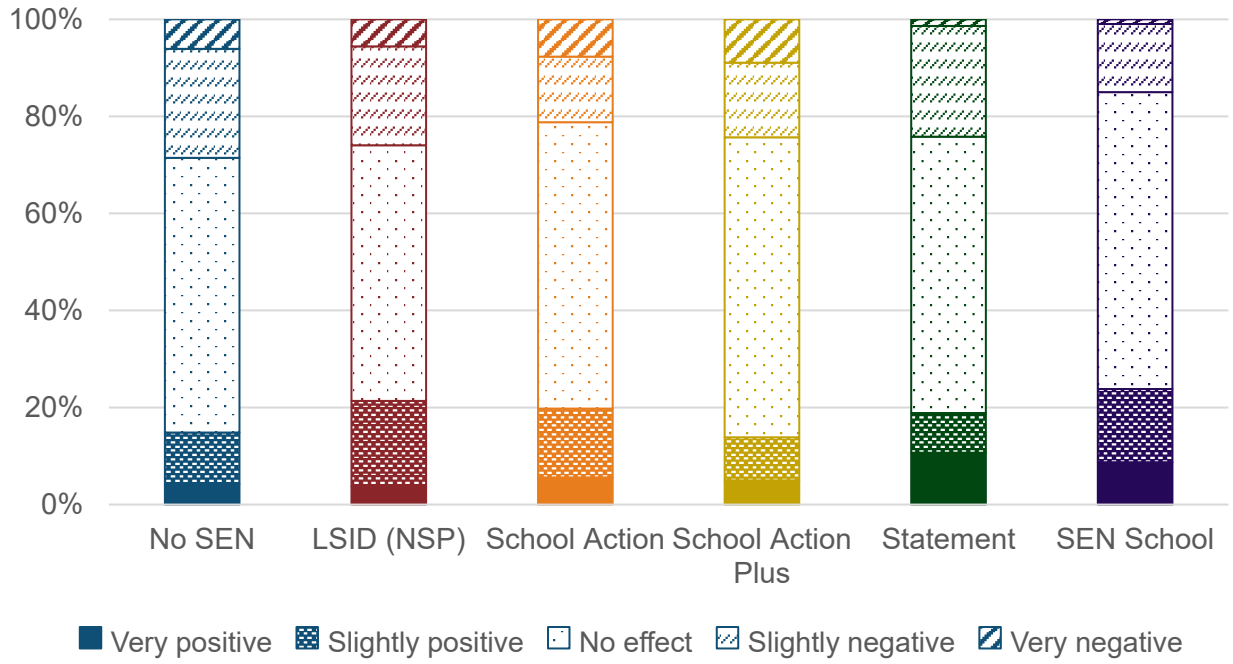


Source: NPD; LSYPE2 waves 1, 2 and 9: weighted.

Family relationships

At age 21/22 only, young people were asked about the impact of COVID-19 on family relationships, with the vast majority across all of the groups reporting no effect. However, those in the School Action group were less likely than those in the No SEN group to report negative effects of the pandemic on their family relations.

Figure 69: "Since the start of the virus to now, what effect did the coronavirus pandemic have on your overall family relationships", by SEN group, age 21/22



Source: NPD; LSYPE2 waves 1, 2 and 9: weighted.

Young people were also asked about the impact of the pandemic on their home life at age 20/21 and housing at age 21/22 but no significant differences were found.

Perceptions of COVID-19: Summary

Young people's perceptions of the impact of COVID-19 on various aspects of their lives are evident in the LSYPE2 cohort, but typically appear greater for those who were in the No SEN group at school than for those who had been in receipt of various forms of SEN provision.

These findings are contrary to what the extant research on SEN populations suggests but may simply reflect the nature of the comparison: young people in the No SEN population might have experienced the changes and restrictions imposed by COVID-19 more acutely than their SEN counterparts simply because they were used to living a more uncomplicated life until then. With the onset of pandemic, and the related controls that were put in place, everyone faced a "new normal", some were maybe just less accustomed to having to make adjustments.

It may also be that the questions asked here in relation to young people's experiences of the pandemic and their perceptions of the impact it had on their lives were less relevant to certain SEN groups. If more specific areas, such as access or provision, had been the focus, the results might have been quite different.

Finally, as previously noted, interpretation of the questions may also vary by SEN and the ways in which the questions were posed and phrased also changed over the two years. Analysis of change requires the same metric or dimension to be used over time; had the questions been asked in the same way or earlier measures repeated, we might be able to more confidently identify meaningful variation between the different groups under investigation here.

Report summary and conclusions

This report has described in detail the lives of young people who received different levels of SEN provision at school and illustrated the ways in which, some of them very subtle, the sub-groups of this sizeable population vary and, importantly, how they compare with their no SEN peers.

The findings from this research relate to young people from the LSYPE2 born in 1999/2000, who took their GCSEs in the academic year 2014/15 and are currently in their mid-twenties. Information collected on their level of identified SEN was captured in the National Pupil Database prior to the changes introduced by the new SEND system in 2014/15. Our analysis thus reflects the earlier classifications of School Action, School Action Plus, Statement (mainstream) and Statement (SEN school). We also include a further group of young people with no identified SEN but who have a longstanding illness or disability which parents reported affected the child's schooling as a proxy for those who might be classified as the "D" under the revised SEND classifications.

Many of the results presented here replicate previous research in describing the characteristics of secondary-school children associated with having SEN, such as being a boy, coming from more socioeconomically disadvantage homes, and having lower levels of academic achievement. The findings also build on previous research and explore early adult outcomes across a range of areas reflecting a greater focus on preparation for adulthood in its broadest sense, again replicating findings already observed amongst this population regarding post-16 attainment and labour market outcomes, but also extending the reach into areas of mental health and wellbeing, health-related behaviours and indicators of independent living.

This final section of the report summarises the results across each of the SEN groups in relation to their no SEN counterparts, draws out some key themes from the findings, and reflects on some of the analytical issues which emerged.

An overview of each of the SEN groups

LSID (No SEN Provision)

Young people with no identified SEN but with a longstanding illness or disability (LSID) which parents report affected their schooling make up 2.0% of the age 19/20 LSYPE2 cohort.[49] They are similar to the No SEN reference group in terms of some of their key characteristics – no differences with respect to gender; term of birth; family type – but they are significantly more likely to come from socially disadvantaged background (higher FSM eligibility; higher levels of local area deprivation). Perhaps unsurprisingly given their

[49] See Table 1 for detail on the type of LSID (NSP) conditions reported.

schooling is reported to be affected by their LSID, this group also have lower overall KS4 achievement compared to those in the No SEN group, but higher than any of the groups with an identified SEN.

However, in terms of their educational attitudes and school experiences, the LSID (NSP) group appear more like the other SEN groups, particularly those who received School Action and School Action Plus provision in school: lower attitudes to school and teachers; greater likelihood of having been bullied or truanted; less time spent on homework; less likely to want to stay on in education post-16 or think to ever apply to university; and report slightly higher levels of engagement in risky behaviours. They are also the most likely, after those in SEN Schools, to report wanting to leave education, employment and training altogether at 16: when asked in Year 9 (age 13/14), 3.2% of the LSID (NSP) group state they plan to leave and “be unemployed”; “start a family”; or “Don’t know”, compared with 0.4% of the No SEN group; 2.0% of the School Action group, 1.7% of those with School Action Plus; 0.7% with Statements; and 4.0% of those in SEN Schools.

In terms of their activities outside of the educational sphere, young people in the LSID (NSP) group are again similar to those with no identified need: there are no significant differences in respect of engagement in positive activities; who free time is spent with and how often they see friends; or regarding their sense of self (locus of control and attitudes towards the link between hard work and success).

However, where differences do emerge with the No SEN reference group is in relation to health and wellbeing outcomes in early adulthood. Young people in the LSID (NSP) group have higher GHQ-12 scores, that is greater levels of psychological distress, than those without SEN, even after controlling for other factors (gender, ethnicity, FSM eligibility, parental education, KS4 attainment and interview mode). They also report lower levels of happiness, greater anxiety, and more loneliness, but interestingly, no significant difference in relation to their subjective mental health and wellbeing as a result of the COVID-19 pandemic. They are also the only group to report a significantly more negative impact of the pandemic on their physical health likely reflecting the nature of their longstanding illness or disability (see Table 1 for further detail on the types of LSID reported by this group).

Their post-16 attainment outcomes are lower than those observed amongst the No SEN group, but again as with their KS4 achievement, higher on average than for young people in each of the SEN provision groups. These differences largely disappear, however, when achievement is taken into account suggesting that once we adjust for prior attainment, there is little difference in terms of overall progress between those with LSID (NSP) and those without SEN. There are also minimal differences in relation to early employment and financial support outcomes when comparing the LSID (NSP) and No SEN groups, the main one being receipt of benefits, likely reflecting the higher incidence of unemployment and other non-working statuses amongst this group which may again be linked to the nature of their LSID: 4.3% of those in the LSID (NSP) group are unemployed

at age 19/20 compared with 2.8% of the No SEN category; a further 1.9% report volunteering as their main economic activity; 3.1% are looking after family; and 3.6% are ill or disabled and unable to work.

Pupils who had no formally identified SEN but with challenges that, at least from their parents' perspective, impacted their school life do less well than their peers with no reported additional needs. This small, potentially 'off the radar', group of young people may have fallen short of SEN thresholds or simply been missed in the system, but the results shown here are indicative of what under supported needs might look like and highlight the importance of accommodating a broad range of challenges affecting school experience.

School Action and School Action Plus

The School Action and School Action Plus groups are the largest of the SEN provision categories in our data making up 9.7% and 5.5% of the age 19/20 cohort, respectively, and are the most similar to each other in terms of characteristics, educational experiences, social engagement, as well as many of the early adult outcomes explored in this report. As seen elsewhere in the SEND literature, young people with School Action and School Action Plus provision (now typically grouped under the single category of SEN Support) are more likely to be boys and from more socially disadvantaged households than their counterparts without SEN. Similar to those of Dhuey and Liscomb (2010), our results also suggest that, compared with those with no SEN, young people in both groups are more likely to be summer born, that is younger for their year. This age-related association is not observed for pupils in either the Statement category or those in SEN Schools.

Both groups also have lower KS4 achievement, lower attitudes to school, are more likely to have been bullied, as well as to have truanted than their peers without SEN. They, and their parents, have lower educational aspirations and expectations and both have, on average, a more externalised locus of control and a stronger belief that hard work results in success than those in the No SEN reference category. Young people with School Action and School Action Plus provision report being less likely to take part in sport, play a musical instrument or read than those with No SEN, but are no less likely to report differences in relation to how - or with who - they spend their free time.

Again, as with those in the LSID (NSP) group, where differences do emerge between these two SEN provision groups is in comparing mental health and wellbeing related outcomes. For example, both have higher levels of psychological distress (GHQ-12 score) at age 19/20 than those with no SEN, even after controlling for other factors, and pupils in the School Action Plus group also have higher "caseness", that is having three

or more psychological or somatic symptoms.[50] Those receiving School Action Plus provision have lower overall life satisfaction, a lower belief that the things they do in their lives are worthwhile, higher anxiety and report greater loneliness, all measured at age 19/20 and controlling for other factors. Prior to the inclusion of controls, young people in the School Action Plus group also reported greater use of cannabis at age 19/20, but this association is reduced when associated factors are taken into account and both frequency of alcohol use and binge drinking are lower than amongst the No SEN reference group.

There are also some differences in terms of early employment and financial outcomes amongst those working: 46.5% of the School Action group are in employment, with a further 10.0% in apprenticeships or training; the corresponding proportions for the School Action Plus group are 46.9% and 5.7%, respectively. For example, those in the School Action group are more likely than those with No SEN to have a zero-hours contract and have less sense of belonging at work; while those in the School Action Plus group are less likely to have a permanent contract and are less likely than those with no SEN to have a job classified as Professional/ Managerial. Receipt of benefit is higher for both groups than for young people with No SEN, but the significance level falls away for those in the School Action group after the inclusion of KS4 attainment controls.

Their post-16 achievements are, however, broadly very similar, but our results do indicate that far more of the School Action group are in university at age 19/20 (21.4% versus 12.3%) while the reverse is true with respect to those unemployed: 8.3% of the School Action group are unemployed at age 19/20 compared with 18.6% of the School Action Plus group, a figure comparable with the rate observed for those in SEN schools.

This in combination with other less positive outcomes for those in receipt of School Action Plus at school suggest that at least some in this group did not receive all the support they needed. There is clearly a considerable degree of heterogeneity within each level of need and detailed exploration of specific types of need within each group was beyond the scope of the current study, but the findings here also underscore the value in personalised approaches that accurately meet the needs of all young people with SEN.

Statement in mainstream

Young people with Statements in mainstream settings make up 2.6% of the age 19/20 LSYPE2 cohort, are the third largest of the SEN groups identified after School Action and School Action Plus and share many of the same characteristics. Those with Statements are more likely to be boys, come from more disadvantaged homes - though are no more

[50] Individuals in the School Action Plus group also have higher mean levels of GHQ-12 measured at 20/21 and 21/22. These analyses were carried out as robustness checks in relation to how different groups of young people might answer questions in relation to their subjective versus objective mental health in the chapter on Perceptions of COVID-19 but were beyond the scope of the current study and these means do not control for other factors associated with either SEN provision or the incidence of poor mental health.

likely than those with no SEN to live in a single parent household - and have lower average KS4 achievement.

Similar to those in SEN Schools, in comparison with the No SEN group young people with statements in mainstream settings have more positive attitudes towards their teachers, but like those in receipt of School Action and School Action Plus provision have lower overall attitudes to school. Young people who had statements were more likely to be bullied, to truant and engage in risky behaviours but have lower incidence of drug and alcohol use in early adulthood.

Out of school, they take part in sport less often than those with no SEN and are less likely to play an instrument or read. Socially, those in the Statement group appear more like those in SEN Schools and report going out with friends less often, spending more time with family as well as alone. However, unlike those in SEN Schools and more akin to young people in the LSID (NSP) and School Action Plus groups, they report higher levels of loneliness at age 19/20 and, prior to the inclusion of KS4 attainment controls, lower life satisfaction.

In terms of early adult employment and financial support outcomes, young people with statements are less likely to have debt than those with no SEN, but more likely to receive financial support from their parents and to be in receipt of benefits. Those who work - 29.3% were in employment at age 19/20 and a further 8.0% on apprenticeships or in training - are more likely to do so with small employers, adjusting for related controls (though this significance falls away when KS4 attainment is controlled for). Like those with School Action, they also report lower sense of belonging at work than those working who had no identified SEN at school.

Compared with those with no SEN, young people in the Statement group report less of an impact of COVID-19 on their studies but note that far fewer were in education at ages 20/21 (19.3% in university and 6.0% in full-time non-HE education) and 21/22 (13.1% in university and 1.5% in full-time non-HE education). They also report a less negative impact of the pandemic in relation to their own mental wellbeing at age 21/22 than the No SEN reference group.[51]

SEN School

The small group of young people who were in SEN schools during their secondary education (1.8% of the age 19/20 cohort) likely have the most need[52] and, broadly, the poorest outcomes across the groups explored. However, with their needs identified and

[51] Young people with Statements in mainstream education also have lower average (unconditional) GHQ-12 scores at ages 19/20 and 20/21.
[52] Detailed analysis on the specific needs of young people within each of the SEN categories was beyond the scope of the current research, but it is important to note that within level of SEN provision, including those in special schools, there is considerable heterogeneity of needs.

supported in specialised settings, many in this group are faring well across a number of the indicators explored. For example, consistent with Barnes & Harrison (2017) which found that those who attended special schools or Alternative Provision were more likely to get on well with their peers than those in mainstream settings, in this study young people in SEN schools were no more likely to report bullying during school than those with no SEN, with all other SEN groups reporting significantly higher levels.[53]

Those who attended SEN schools also report higher levels of happiness at age 19/20 than those in the No SEN group and show no mean level differences in terms of overall mental health (GHQ-12), life satisfaction, feelings of worth, anxiety or loneliness. Though we do note that these measures were not developed for non-SEN populations and there is evidence of greater variation in overall distribution across some of these measures, most notably life satisfaction and happiness. They also report lower levels of alcohol or drug use in early adulthood despite having engaged in significantly more risky behaviours during their school years and frequently truanted.

The SEN School group also report regularly playing sports - nearly half (48.2%) doing so more than once a week – and have more positive attitudes towards their teachers than those without any identified SEN. They spend the most amount of free time with their families, more so proportionately than any of the groups, and were less likely to report that the coronavirus pandemic negatively impacted their studies, health or family relationships.

However, their achievement levels, both in school and post-16, are much lower than all the other groups considered, they are more likely to have qualifications below Level 1, be in receipt of benefits and require greater financial assistance from their parents. Reflecting this, nearly half, 45.4%, remain in full-time non-HE education at 19/20, compared to an average of 5.5% for the whole cohort, and more than 1 in 5 (21.4%) are unemployed, higher than observed for any of the SEN groups.

Exploring the transitions of this small but important group of young people as they continue their transition to adulthood is a particular area for future research. For example, are transitions more challenging for those who were in SEN schools after this high level of support provided is withdrawn? Is this why nearly half of those in this group remain in full-time non-HE education at 19/20?

[53] Note, however, that the analysis conducted here is unable to comment on any potential selection or filtering effects which might underpin such a result: for example, whether those with a certain type of primary need are more or less likely to be bullied and, at the same time, more or less likely to be in a SEN school.

Key themes

Gradients of need

As shown across all of our results chapters and highlighted in the summaries of each of the identified SEN groups outlined above, there are clear gradients across the broad range of indicators and early adult outcomes explored associated with the different levels of support needs: as the level of need increases, individuals, broadly, do less well. So, for example, experience of bullying and the proportions who truant rise fairly steadily with the level of need, while locus of control, taking part in sport and spending social time with friends declines. This pattern is more evident for the academic-related outcomes considered, such as reading, time spent on homework and the likelihood of applying to university, with the relationship for KS4 achievement most acute: the average KS4 Best 8 points score falls progressively from 347 amongst those in the No SEN group, to 314 for the LSID (NSP), 262 for School Action, 220 for School Action Plus, and 201 for those with statements in mainstream schools.

Our findings also demonstrate similar patterns in early adult outcomes in terms of main economic activity[54], receipt of government benefits and financial support from parents, and post-16 attainment outcomes, such as the highest level of attainment reached by age 19/20 and the type of qualifications achieved.

These results, particularly pertaining to achievement-related outcomes, are not necessarily new, replicating those seen elsewhere in the extant literature in young people at various ages, but give new insight into the breadth of outcome areas such associations with level of support needs can be observed in. What is perhaps more interesting is where these patterns are not observed or are more subtle, in particular those relating to mental health and wellbeing outcomes.

Mental health and wellbeing

The richness of the LSYPE2 data provides a unique set of measures captured throughout secondary school and into early adulthood, amongst them several indicators of mental health and wellbeing, both established and well-validated screening tools for detecting psychological distress (the GHQ-12) and more subjective measures designed to evaluate personal wellbeing (ONS4).

Across these different measures, however, our results show a far less clear relationship with young people's level of need. For example, while young people in the LSID (NSP) and School Action Plus groups fare significantly worse than those in the No SEN group – higher GHQ-12 scores, greater anxiety, more reports of loneliness – our results also

[54] As the level of needs increases, including from the No SEN to LSID (NSP) groups, the proportion in university declines, with a, largely, corresponding uptick in the numbers working and unemployed.

suggest that those in the School Action group and those with Statements have relatively good levels of adjustment. Moreover, young people in SEN Schools report higher levels of happiness and non-significant differences in relation to other mental health and wellbeing outcomes. However, particular caution is needed in interpreting these findings as the measures used were designed for general use and not SEND populations specifically. As such there are limits in the extent to which we can confidently draw conclusions or generalise any differences observed, even based on our fully conditional models.

The results here also show that while all young people with SEN reported higher levels of engagement in risky behaviours during their school years - drinking, smoking, taking drugs, fighting, antisocial behaviours – this did not translate into greater incidence of drug and alcohol use in early adulthood. Across the four indicators explored, there is no significant difference between the No SEN and LSID (NSP) groups in the frequency of use, but those who received SEN provision at school all report lower levels of drinking and less drug use than the No SEN reference, even after adjusting for associated covariates and prior attainment.

By contrast, in terms of young people's perceptions of the impact of COVID-19 on their mental health and wellbeing, those in the School Action group and those with Statements, both in mainstream schools and specialised settings, report less of a negative impact than those with no SEN, while those in the LSID (NSP) and School Action Plus groups appear more like the reference category.

Social life and engagement with others

Young people identified as requiring SEN provision at school, particularly those with the greatest levels of need, appear to have smaller social circles as young adults, for example being less likely to take part in sport and doing so less frequently than those in the No SEN group. Those who had Statements, both in mainstream settings and in specialised SEN schools, are also less likely to go out frequently with friends compared to those without any identified SEN and report spending more time with their families and alone during their free time.

In line with these findings, our analysis of the perceived impact COVID-19 on young people again indicates that those in the No SEN and LSID groups felt the most affected: those in receipt of any level of SEN provision at school reported significantly less impact of the pandemic on their social life. These results also suggest that across groups, the initial impact of the pandemic and related lockdowns was felt more acutely, with an average of 87.8% of individuals reporting a negative impact on their social life compared to 73.5% responding similarly a year later; the pattern at both time points is the same across the different SEN groups.

Achievement

As with KS4 achievement, the post-16 attainment outcomes explored here follow the same pattern: as the level of support needs increase, overall achievement worsens. For example, three-quarters (74.8%) of the No SEN group achieved a Level 3 qualification by age 19/20, compared to 60.1% of those in the LSID (NSP) group, less than half of those in receipt of School Action provision (44.1%) and with Statements (40.1%), and around a third of those in the School Action Plus group (32.2%). These estimates fall slightly when adjusted for background factors, but the overarching story remains, with lower level (below Level 1) and vocational qualifications more likely than academic qualifications across all levels of SEN need.

In terms of type of qualifications achieved by age 19/20, academic qualifications are more common amongst the No SEN group and their uptake gradually decreases as need rises. Interestingly, young people in the LSID (NSP) group are less likely to complete apprenticeships than academic qualifications compared to the No SEN group, despite similar proportions engaged in such training programmes: 6.4% of those with no SEN report apprenticeship or other training as their main economic activity at 19/20, compared to 6.5% of those with LSID (NSP) but no SEN school provision. This might reflect variation in the type of training being undertaken – apprenticeships versus other training courses or schemes which are grouped together in our data – or that those in the LSID (NSP) group are yet to complete but would be interesting to explore in more detail in future research.

Our findings also indicate that nearly half (45.4%) of those in SEN Schools are still in full-time non-HE education at age 19/20 while more than 1 in 5 are unemployed (21.4%), the highest proportion of unemployed young people amongst any of the groups at this age. Additional analysis conducted as part of our Perceptions of COVID-19 chapter show that these figures remain similar over the following waves of the LSYPE2 study (waves 8 and 9 which were administered in 2020/21 and 2021/22), with 49.8% in full-time non-HE education at age 20/21 and 25.5% unemployed, and 36.0% and 21.2%, respectively, at age 21/22 (see Appendix B). Exploring what these young people are studying - and where - might prove useful in understanding what helps some individuals in this group avoid becoming NEET.

Early employment outcomes and material circumstances

There are few substantive differences across the early economic and work-related outcomes explored here but these analyses provide a good baseline from which to explore later outcomes.

The post-16 transitions in economic activity over a four-year period vary significantly across the groups. Most notably, as the level of need increases, the proportions moving to university declines while the numbers moving into work increases, particularly so for

those who received School Action and School Action Plus provision at school where just under half are employed at age 19/20. who received School Action Plus provision at school: at age 16/17, they make up 7% of this group, twice the proportion seen for those in the School Action group and higher than any of the groups explored, a figure that rises to nearly 1 in 5 young people by age 19/20 and is comparable with the rate observed for those who were in SEN schools.

The results also highlight, that across all the SEN categories explored, receipt of benefits is higher than for the No SEN reference group, even after controlling for other factors. This is true for both Universal Credit / Legacy benefits as well as Disability benefits. These results support those using the LEO data which find that pupils identified with SEN were 3.7 times more likely to be on out of work benefits than those without (DFE, 2018a). We also find that where debt is lower, other forms of financial support, including from parents, are higher, particularly those with greater levels of need – School Action Plus, Statement, SEN Schools.

The absence of significant results across many of the outcomes explored here partly reflect the age of this young cohort, for example, the very low prevalence of any young people who have left the parental home. Moreover, the indicators capturing early adult employment experiences are, necessarily, only available for those in work which for the age 19/20 LSYPE2 cohort is 33.4%, with an additional 6.7% on apprenticeships or other training schemes but rises to a combined proportion of 56.5% and 52.7% of the School Action and School Action Plus groups and falls to just 9.0% of those in SEN Schools.

Limitations

One of the main limitations of our study is the extent to which we can draw conclusions about young people with SEN based on a survey designed for a general population-based secondary-school cohort. We find interesting differences in relation to mental health and wellbeing outcomes, for example, some of which align with those of other authors – young people who were in SEN schools during the secondary education being no more likely to report bullying during school than those with no SEN (see also Barnes & Harrison, 2017) – but others which could reflect more the difficulties for some young people with SEN to report on in an accurate way, such as the higher anxiety levels observed amongst those in the School Action Plus group. We note too that due to the broad remit of the LSYPE2 survey, some areas of interest, such as independent living or relationships with others, may again not be asked in a way that accurately reflects specific experiences relevant to different groups of young people.

Our sensitivity analyses and robustness checks (see Appendix A for further detail) attempt to address concerns in relation to the validity of responses amongst the different groups and do not appear to indicate that young people with SEN in our sample had particular difficulties with the nature of the questions being asked. Nevertheless, there is

growing evidence highlighting the specific need for assessment tools suitable for individuals with, for example, moderate to severe learning difficulties, particularly those who speak few or no words (see for example, Mingins, et al., 2024), and so surety in our findings remains limited and any conclusions drawn, tentative.

The value of this study is in the breadth of measures and outcomes described our ability to adjust for known covariates and the sample size which permits detailed analysis of subgroups of the SEN population alongside comparison with no SEN peers. The results presented here replicate previous work, extend our knowledge of the similarities and differences between young people with different levels of support needs, and point to potentially new and interesting findings. However, to fully understand this diverse group of children and young people and explore their unique pathways, our results should be read in conjunction with those from studies such as SEND Futures which focus specifically on the SEND population and replicated based on more appropriately designed measures.

The results presented here may also be limited by their groupings under the previous SEN classifications but the age of the cohort and the richness of the LSYPE2 data allow for detailed consideration of early adult outcomes across a range of indicators. Nevertheless, our group sizes broadly reflect those seen in the same year national statistics (see National tables: SFR 26/2014: Table 5D) and our findings replicate those in the extant literature, with most aligning with a distinction between School Action and School Action Plus (now SEN Support) and those with statements, both mainstream and in specialised settings (EHC plans). Additional detail on primary need might possibly have helped tighten our groupings to make them more relevant to current classifications. However, our core interest lay more in exploring variation across a broad set of outcomes for young people with different levels of need than in the granularity of differences in specific needs.

Finally, we note that while we use the complex weights available in the LSYPE2 to take into account the loss of sample members between waves, higher attrition across our SEN groups means that our sample is unlikely to be fully representative of *all* young people with SEN. We are also unable to comment on whether young people with particular needs were more or less likely to be retained within the LSYPE2 cohort. Analysis from the SEND Futures study, for example, found some variation in response rates by need types and survey modes (Knudsen, et al., 2023). Again, however, our focus was more on distinguishing between all the possible levels of SEN provision available for this cohort than in exploring in detail the heterogeneity of types of need within each group.

Future research

To fully understand variation in the adult outcomes of different groups of young people with SEN, longer term follow-up of the LSYPE2 cohort is required. The transition to

adulthood is an exciting time for most young people but many individuals with additional needs and their families face a number of challenges including a sharp drop in support and changes in eligibility for services (see Scottish Government, 2023 for a recent review). Additional waves following the cohort to their mid to late twenties, in line with research using the LEO data, would enable far more detailed consideration of how SEN affects adult adjustment across a broad array of indicators. In addition, a longitudinal study of the SEND population including appropriately designed measures to accurately meet the needs of young people, containing specific questions and with sufficient sample sizes to enable subgroup analyses.

Future research should also explore variation within the different SEN groups themselves and include analysis of the types of SEN needs young people have in relation to the outcomes considered here, particularly those in relation to mental health and wellbeing where our findings may be more open to interpretation.

Our findings also show that, with the exception of those who received School Action provision at school, young people across all SEN groups are more likely to experience a longstanding illness or disability in early adulthood, controlling for associated factors. Exploring this cohort further into adulthood would also allow for investigation as to whether this is a continuation of earlier need or an additional risk in the transition to adulthood.

It would also be interesting to explore how different outcomes cluster together, particularly amongst some of the mental health and wellbeing measures and where there is greater variation across the different SEN groups. For example, do those with higher levels of happiness also have lower levels of loneliness and anxiety? Are those with lower feelings of worth those who are struggling to gain Level 2 qualifications or more likely to be unemployed and unable to find suitable work?

Concluding thoughts

The findings presented in this report replicate much of the existing research on the characteristics associated with young people who have SEN and their outcomes, extending it both to different tiers of need with the support system and a broader range of areas of early adulthood, including attitudes and sense of self.

The results are in line with levels of support provided to young people with varying needs and requirements resulting from their SEN and demonstrate the value in taking a more detailed look within levels of provision to ensure that all areas of young people's development are being supported. Our findings also suggest that some pupils whose needs put them in the School Action Plus group did not receive all the support they needed.

There is very tentative evidence to suggest a possible protective or otherwise ‘sheltering’ element to going to a special SEN school for those with the highest levels of support needs: in line with other research (Barnes & Harrison, 2017), our findings indicate that in contrast to other forms of SEN provision, young people in SEN Schools are no more likely to report experiencing bullying than those with no identified SEN. Young people in SEN Schools also report greater happiness than those in the No SEN group and no differences in relation to feeling lonely, while those with statements in mainstream provision are more likely to have been bullied in school, and to experience loneliness and lower life satisfaction in early adulthood. Replication with measures appropriate to the needs of SEND individuals is required before any firm conclusions can be drawn.

Finally, these findings demonstrate the merits of an additional layer of provision for those young people whose longstanding illness or disability affects their schooling, here defined as the LSID (NSP) group, whose outcomes are typically poorer than those without any identified need. The evidence presented here suggests that this group may represent a currently under-supported set of pupils that would benefit from additional resources.

References

Anderson, O and Nelson, M. (2021), *Post 16 education and labour market activities, pathways and outcomes (LEO)*. DFE-RR1125. Department for Education: London (Post-16 education and labour market activities, pathways and outcomes (LEO) - GOV.UK (www.gov.uk))

Baker, C., Dawson, D., Thair, T. and Youngs, R. (2014) *Longitudinal Study of Young People in England: Cohort 2, wave 1.* DFE-RR388. Department for Education: London.

Barnes, M. and Harrison, E. (2017). The wellbeing of secondary school pupils with special educational needs. DFE-RR711 Research Report. London.

Chatzitheochari, S., Parsons, S., and Platt, L. (2014). Bullying experiences among disabled children and young people in England: Evidence from two longitudinal studies.

Crawford, C., Dearden, L. and Greaves, E. (2013). *When you are born matters: Evidence for England.* IFS Report R80. London: Institute for Fiscal Studies.

Crawford, C., Dearden, L. and Greaves, E. (2014). The drivers of month-of-birth differences in children's cognitive and non-cognitive skills. *Journal of the Royal Statistical Society: Statistics in Society (Series A),* 177 (4), 829-860.

Crowley, J., Khriakova, E., Knudsen, L. and Reddin, J. (2023). SEND Futures: lives at age 12-13. Exploring wellbeing, peer relationships, experiences of bullying and independence among young people with SEN at age 12-13 (RR1393). Department for Education: London.

Daniel, J., and Wang, H. (2023). Gender differences in special educational needs identification. *Review of Education*, *11*(3), e3437.

Department for Education (2024a) Special educational needs in England, Academic year 2023/24 - Explore education statistics - GOV.UK (explore-education-statistics.service.gov.uk)

Department for Education (2024b).Key stage 2 attainment, Academic year 2023/24 – Explore education statistics – GOV.UK (explore-education-statistics.service.gov.uk)

Department for Education (2024c). Key stage 4 performance, Academic year 2022/23 – Explore education statistics – GOV.UK (explore-education-statistics.service.gov.uk)

Department for Education (2024d). Suspensions and permanent exclusions in England, Spring term 2022/23 – Explore education statistics – GOV.UK (explore-education-statistics.service.gov.uk)

Department for Education (2024e).Key stage 4 destination measures, Academic year 2021/22 – Explore education statistics – GOV.UK (explore-education-statistics.service.gov.uk)

Department for Education (2024f). Special_educational_needs_and_disability_analysis_and_summary_of_data_sources_Aug24.pdf (publishing.service.gov.uk)

Department for Education (2024g). Further education and skills: Academic year 2023/24.

Department for Education (2023). Widening participation in higher education: Academic year 2021/22.

Department for Education (2019). Statements of SEN and EHC plans: England, 2019.

Department for Education (2018a). Outcomes for pupils eligible for free school meals and identified with special educational needs: Ad-hoc statistics.

Department for Education (2018b). Destinations of key stage 4 and key stage 5 students, England, 2016/17.

Department for Education (2014). Children and Families Act. London: DfE.

DfE, DoH (Department for Education and Department of Health). 2015. *Special Educational Needs and Disability Code of Practice: 0 to 25 Years. Statutory Guidance for Organisations Which Work with and Support Children and Young People Who Have Special Educational Needs or Disabilities.*

Dhuey, E. and Lipscomb, S. (2010) Disabled or young? Relative age and special education diagnoses in schools. *Econ. Educ. Rev., 29,* 857– 872.

Dickinson, P., and Cullen, M. A. (2018). Work experience and vocational/technical provision for young people on SEN support: A rapid evidence assessment.

Donovan, N. and Halpern (2002) *Life Satisfaction: the state of knowledge and implications for government*, Government Strategy Unit

Duckworth, K., Ross, A., Harding, C. and Lessof, C. (forthcoming). *Non-immediate HE pathways in the LSYPE2.* DFE Research Report. Department for Education: London.

Goldberg, D. P. and P. Williams (1988). *A user's guide to the General Health Questionnaire.* Windsor, NFER: Nelson.

Gutman, L. M., & Schoon, I. (2018). Aiming high, aiming low, not knowing where to go: Career aspirations and later outcomes of adolescents with special educational needs. *International Journal of Educational Research*, *89*, 92-102.

Hagenaars, J.A. and McCutcheon, A.L. (2002). Applied latent class analysis. Cambridge, UK: Cambridge University Press.

Hobson H, Kalsi M, Cotton L, Forster M, Toseeb U. Supporting the mental health of children with speech, language and communication needs: the views and experiences of parents. Autism Dev Lang Impair. 2022;7:23969415221101137.

HM Government (2023). Special Educational Needs and Disabilities (SEND) and Alternative Provision (AP) Improvement Plan: Right Support, Right Place, Right Time. CP 800

Hutchinson, J. (2021). Identifying pupils with special educational needs and disabilities. *Education Policy Institute*.

Kantar Public (2015). *Technical report for the 2nd cohort of the Longitudinal Study of Young People in England (LSYPE2): Waves Two and Three (2014 and 2015).* Waves 2 and 3 (2014 and 2015) Technical Report

Knudsen, L., Spencer, S., Sivathasan, C., Shah, D., Wood, M. and Hussey, D. (2023). *SEND Futures Discovery Phase: Wave 1 methodological report* (RR1394). Department for Education: London.

Kreuter, F., Presser, S., and Tourangeau, R. (2008). Social desirability bias in CATI, IVR, and web surveys: The effects of mode and question sensitivity. Public Opinion Quarterly, 72(5), 847–865. https://doi.org/10.1093/poq/nfn063

Lessof, C., Ross, A., Brind, R., Bell, E. and Newton, S. (2016). *Longitudinal Study of Young People in England, Cohort 2: Health and Wellbeing at wave 2.* DFE-RR501. Department for Education: London.

Lo, Y., Mendell, N.R. and Rubin, D.B. (2001). Testing the number of components in a normal mixture. Biometrika, 88, 767-778.

Mayhew, E., Stuttard, L., and Beresford, B. (2021). An assessment of the psychometric properties of the GHQ-12 in an English population of autistic adults without learning difficulties. *Journal of Autism and Developmental Disorders*, *51*(4), 1093-1106.

McKinnell, C. (2024). Minister McKinnell speech as Schools and Academies Show 2024. [Online]. 20 November, Birmingham. [Accessed 17 January 2025].

Mingins, J. E., Tarver, J., Pearson, E., Edwards, G., Bird, M., Crawford, H., Oliver, C., Shelley, L. and Waite, J. (2024). Development and psychometric properties of the Clinical Anxiety Scale for People with Intellectual Disabilities (ClASP-ID). *Journal of Neurodevelopmental Disorders*, *16*(1), 43.

Muthén, B. O. (2000). Methodological issues in random coefficient growth modeling using a latent variable framework: Applications to the development of heavy drinking. In Multivariate Applications in Substance use Research, edited by L. C. J. Rose, C. Presson and J. Sherman. Hillsdale, N.J.: Erlbaum.

Muthén, B. (2004). Latent variable analysis: Growth mixture modeling and related techniques for longitudinal data. In D. Kaplan (ed.), Handbook of quantitative methodology for the social sciences (pp. 345-368). Newbury Park, CA: Sage Publications.

Nelson, M and Anderson, O. (2024). *Labour market outcomes: Executive Summary.* DFE-RR1464. Department for Education: London. Accessed online: Labour market outcomes: executive summary

Ofsted (2021). SEND: Old issues, new issues, next steps. Accessed online: SEND: old issues, new issues, next steps - GOV.UK (www.gov.uk)

Oliver, C., Adams, D., Allen, D., Crawford, H., Heald, M., Moss, J., Richards, C., Waite, J., Welham, A., Wilde, L. and Woodcock, K., 2020. The behaviour and wellbeing of children and adults with severe intellectual disability and complex needs: the Be-Well checklist for carers and professionals. *Paediatrics and Child Health*, *30*(12), pp.416-424.

Oliver, C., Ellis, K., Agar, G., Bissell, S., Chung, J.C.Y., Crawford, H., Pearson, E., Wade, K., Waite, J., Allen, D. and Deeprose, L., 2022. Distress and challenging behavior in people with profound or severe intellectual disability and complex needs: Assessment of causes and evaluation of intervention outcomes. In *International Review of Research in Developmental Disabilities* (Vol. 62, pp. 109-189). Academic Press.

Richardson, D. (2012) *An Evaluation of International Surveys of Children*, Social Policy Division, Paris: OECD Publishing.

Ross, A., Duckworth, K. and Harding, C. (forthcoming). *Post-16 pathways and age 19/20 outcomes: Evidence from the LSYPE2.* DFE Research Report. Department for Education: London.

Scottish Government (2023). *Literature Review: Transitions to adulthood for disabled young people. (Report prepared by The Diffley Partnership).* The Scottish Government: Edinburgh.

Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American journal of Applied Mathematics and statistics*, *9*(1), 4-11.

Strand, S. (2007). *Minority ethnic pupils in the Longitudinal Study of Young People in England. DCSF Research Report RR-002.* London: Department for Children, Schools and Families.

Strand, S. and Lindorff, A. (2018). Ethnic disproportionality in the identification of Special Educational Needs (SEN) in England: Extent, causes and consequences.

Strand, S., & Lindorff, A. (2021). Ethnic disproportionality in the identification of high incidence Special Educational Needs: A national longitudinal study ages 5-11. Exceptional Children, 87(3), 344-368. https://doi.org/10.1177/0014402921990895

Tuckett, S., Robinson, D., and Bunting, F. (2021). Measuring the disadvantage gap in 16-19 education. *Education Policy Institute. https://epi. org. uk/wpcontent/uploads/2021/02/Measuring-the-16-19-disadvantage-attainment-gap_EPI-2021. pdf*.

van den Bedem, N.P., Dockrell, J.E., van Alphen, P.M., Kalicharan, S.V. and Rieffe, C., 2018. Victimization, bullying, and emotional competence: Longitudinal associations in (pre) adolescents with and without developmental language disorder. *Journal of speech, language, and hearing research*, *61*(8), pp.2028-2044.

Appendix A: Sensitivity analysis in relation to how different SEN groups might answer and interpret survey questions

There are ways that we can examine young people's responses to assess whether different groups of young people are interpreting survey questions in the same or a similar way. For scales that are constructed from responses to a set of underlying questions, such as the General Health Questionnaire (GHQ-12), or the work evaluation questions, that were used to measure young people's subjective evaluation of their employment, we can use Factor Analysis.

Factor analysis (for example, see Shrestha, 2021) is a statistical technique that enables us to assess whether, and to what extent, responses to a set of survey questions statements reflect common, underlying, constructs (also known as factors). We use the information derived from these analyses to construct scales with a detailed understanding of what it is these scales are measuring. In addition, we can use the same method to assess whether the measurement instrument (the official term for the derived scale) is performing in the same way across different groups, including whether specific questions are being interpreted differently. This type of analysis is beyond the scope of the present study; however, it is something we would certainly recommend in future studies examining young people with SEN.

There are other things that we can do, however, that also help us to identify potential differences in interpretation, or in the difficulties that some young people might be having in answering certain types of questions. One approach involves examining differences in the distribution of young people's responses across groups. Appendix Figures 1 to 4 present the distributions of the young people's responses for our different SEN groups to the ONS4 wellbeing measures: life satisfaction, the extent to which young people feel the things they do in their lives are worthwhile, self-reported happiness, and anxiety.

It is plausible that some young people, particularly those with greater support needs, might have difficulty with answering these questions, or simply interpret and respond to them in a different way to most young people, and it is this last point which is key. To some degree, everyone will have their own interpretation of these questions. All of us will have our own ideas about what counts as a satisfactory life, for example. But beyond these smaller differences, significant differences in the distribution of responses can be a cue for more important differences in interpretation or difficulty in answering questions.

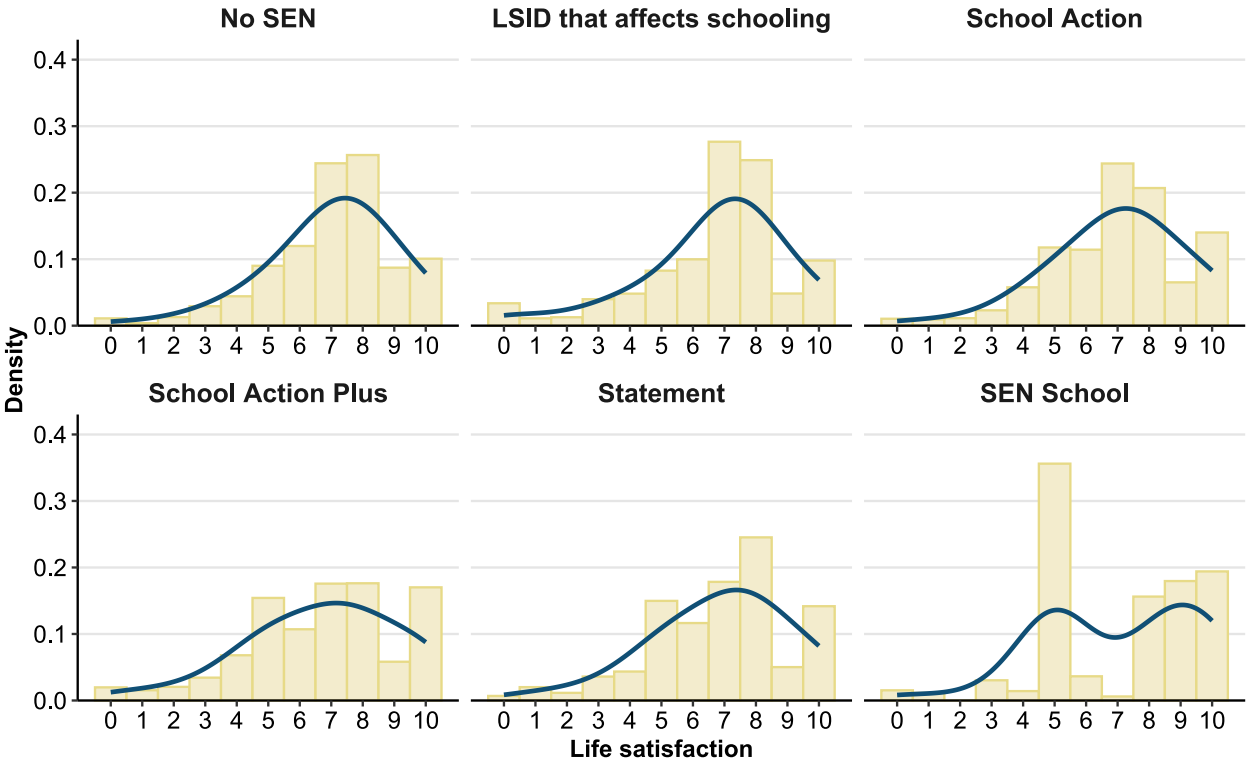
Appendix Figure 1 shows the distribution of responses for life satisfaction across the different SEN provision groups, along with their estimated density curves[55]. Differences in the distributions also tell us something about the underlying experiences of young people in each group. Among those in the No SEN, LSID (NSP), and School Action

[55] A density curve is a smoothed, continuous curve that approximates the underlying distribution, useful, as in this case, for comparing distributions across groups.

groups, most reported a life satisfaction score of 7 or 8, with some young people reporting higher scores, and a set of lower scores tailing off to the left, which is the common pattern of response for this measure. For young people in the School Action Plus group, and those with a statement, however, the distribution is more spread, suggesting a wider range of, or more mixed, experiences.

The distribution for those who attended a SEN school in Year 10 is markedly different, however. Many of these young people responded '5', which is the value directly in the middle of the scale. This could indicate that young people in this group were more likely find it difficult answering this question and so simply opted for the middle of the scale. It is a question that requires a reasonable level of reflection, which might be prove more challenging for someone with cognitive difficulties, for example. There also appears to be two distinct subsets of responses, with some in this group more likely to respond very positively, and more so than for any other SEN group. Of course, we cannot be absolutely certain in our interpretations without knowing more about these individuals, their particular needs, and the data collection process, such as the interview itself. However, our findings suggest we should at least be cautious in our interpretation of the mean life satisfaction score for those who attended SEN schools.

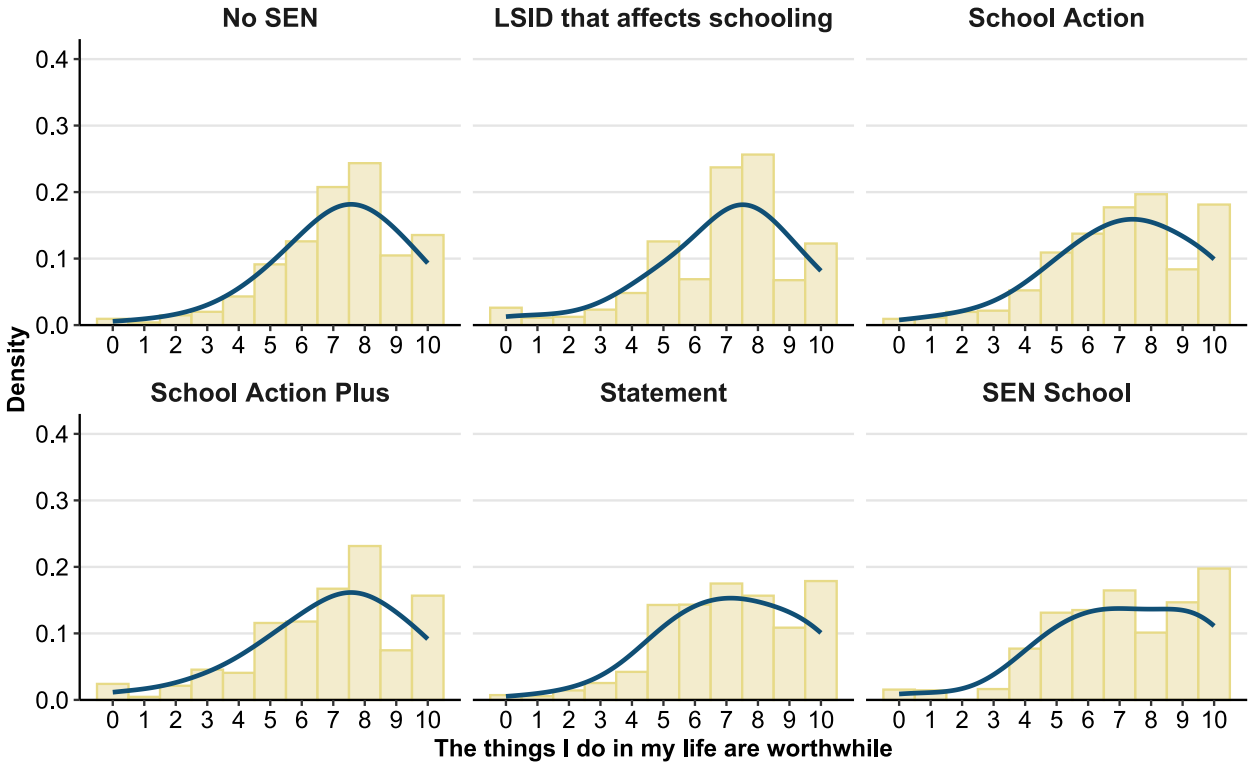
Appendix Figure 1: Life Satisfaction: Distributions by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

There appears less cause for concern for the measure ‘the things I do in my life are worthwhile’. Reponses from young people in the No SEN and LSID (NSP) groups, but also to some extent those who received School Action Plus provision at school, follow a standard pattern of response for this measure. For other SEN groups, many more young people selected the highest or otherwise second highest score. This might be indicative of a difference in interpretation or understanding of the question, however the evidence for this is weaker than it was for life satisfaction.

Appendix Figure 2: “The things I do in my life are worthwhile”: Distributions by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

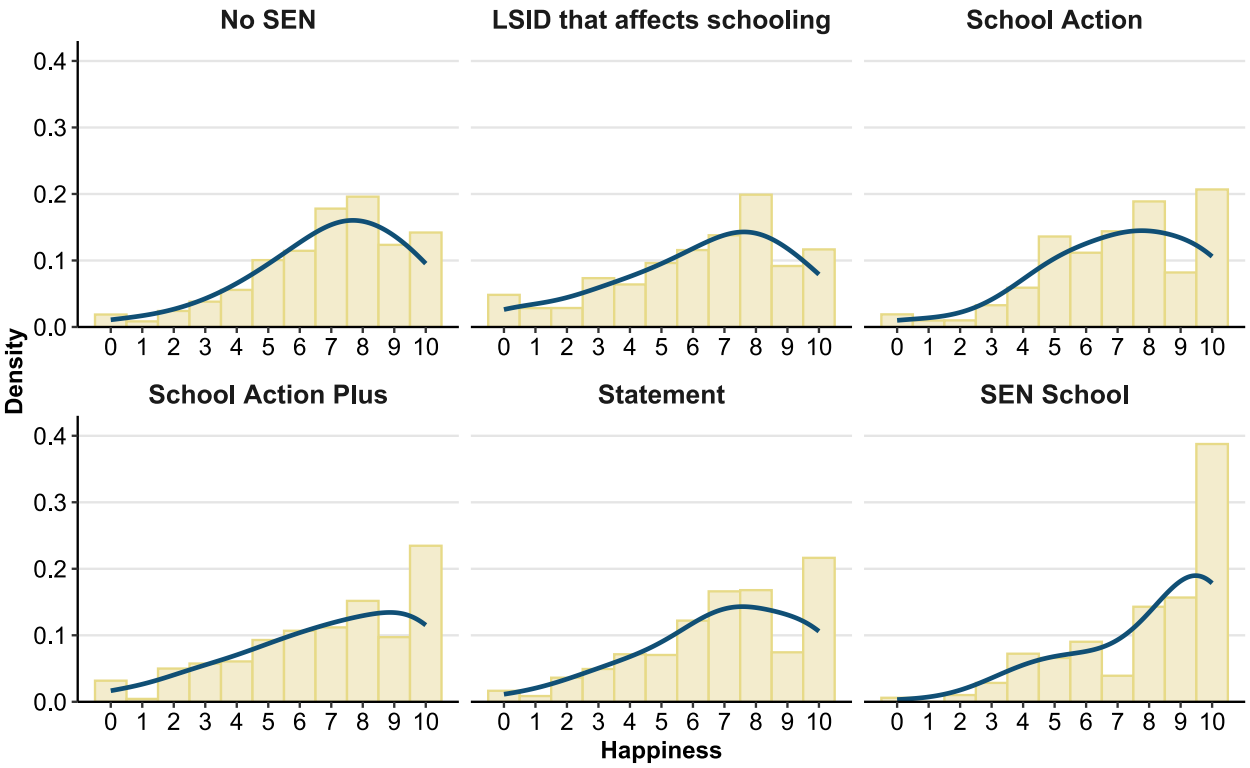
Responses to self-reported happiness are more difficult to evaluate. The distribution of responses was also quite different for those who attended SEN schools: many of these young people reported the highest level of happiness, and this response was also more prevalent for other SEN groups. However, we might expect this question to be easier to interpret than those in relation to satisfaction, for example, and therefore differences in response may more likely reflect real differences in experiences. As we note elsewhere, it is plausible that some young people with greater support needs could, to a certain extent, be insulated from some of the obstacles and decision making that other young people of this age are beginning to face. Equally though, some pupils with SEN, particularly those with speech, language and communication needs or social, emotional and mental health difficulties may simply have more difficulties accurately expressing

themselves. Regardless of the underlying reasons for this variation, it is prudent that we consider these differences in distribution in the interpretation of our findings.

More young people with SEN also report zero on a scale of 0 to 10 on anxiety. Young people with intellectual difficulties, particularly those with a high level of need, might not easily understand the concept of “anxiety” or recognise some of their behaviours as being because they are anxious, leading to an under-reporting of anxiety symptomatology. Hence research in this area specifically notes the value of assessments designed with diverse diagnostic groups and varying communications abilities in mind (Mingins, et al., 2024). Accordingly, we are cautious in our interpretations of differences for this measure.

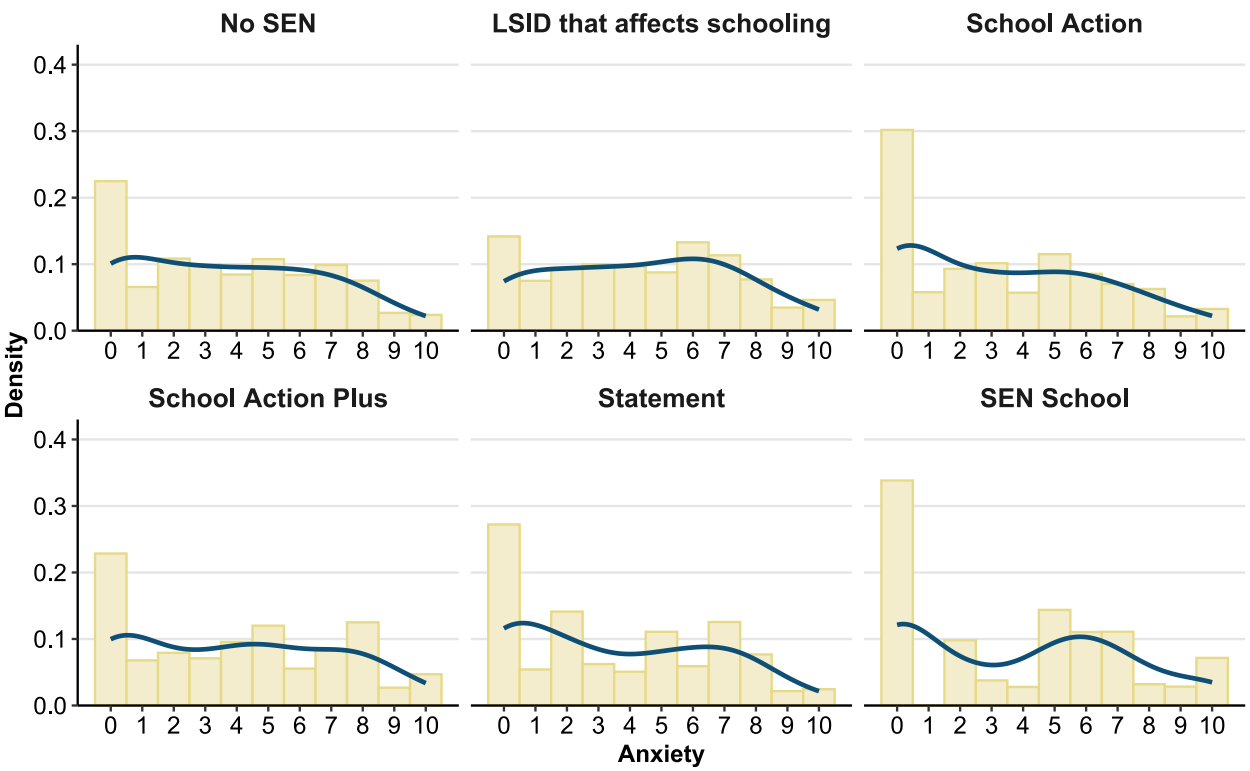
Differences in the distribution of other measures, such as frequency of alcohol use and binge drinking, were considered in the process interpreting results, however there was nothing to suggest that any of these were problematic.

Appendix Figure 3: Happiness: Distributions by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Appendix Figure 4: Anxiety: Distributions by SEN status

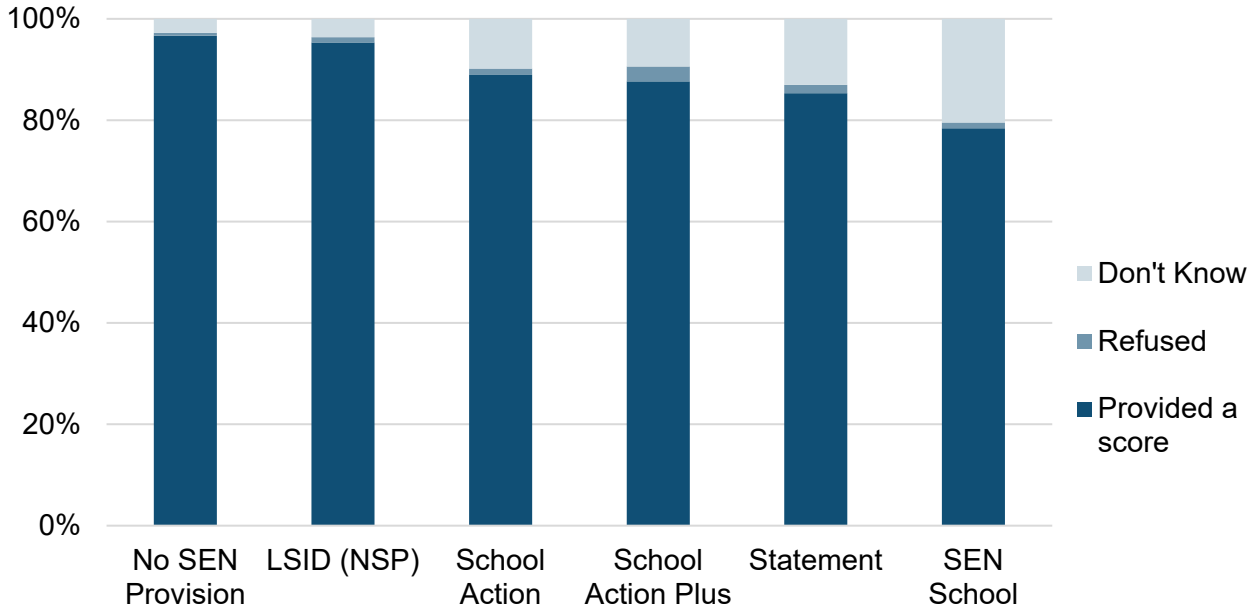


Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

Another approach for assessing differences in the difficulties young people face in responding to survey questions is an examination of the proportions of those who do not answer. At age 15/16, around 1 in 20 of all young people responded 'I don't know' or refused to respond to the wellbeing measures described, however, this figure increased with level of SEN provision.

Appendix Figure 5 shows the proportion of young people in each SEN provision group that responded, 'I don't know', or refused to respond to the question on life satisfaction. Most provided a valid answer, however there was a clear gradient in response related to level of SEN need. Overall, young people were far more likely to respond, 'I don't know' than refuse to respond, however doing either increased incrementally from 1 in 30 (3.3%) young people with no SEN, to 1 in 20 (4.7%) of the LSID (NSP) group, 1 in 9 (11.1%) School Action young people, 1 in 8 (12.3%) School Action Plus young people, 1 in 7 (14.7%) young people with a Statement, and as many as 1 in 5 (21.6%) young people who had attended a SEN school. This supports our finding that suggested young people who had attended SEN schools might have more difficulty with this question, however it also indicates a level of difficulty across the SEN groups.

Appendix Figure 5: Life satisfaction: Response type, by SEN status



Source: NPD; LSYPE2, waves 1, 2 and 7, weighted.

There was a slight increase in the number of young people responding ‘I don’t know’ or refusing to respond, overall, to the question of whether they felt the things they were doing in their lives were worthwhile, which is what we might have expected. This would seem to be a more complex question, perhaps requiring a greater level of reflection, although this was not something that was picked up in our distribution analysis. A clear gradient in response was less evident, although the proportion among those who had attended a SEN school remained 21.6%.

Levels of non-response decreased for happiness, but then increased again for anxiety, which also supports findings in our analysis of the distribution of responses across SEN provision group as well as concerns by others (Mingins, et al., 2024) about conceptually understanding the term. Most importantly, however, there was a constant gradient in relation to level of SEN need across all four ONS4 measures. We are therefore cautious when drawing any significant conclusions from our analysis of these measures.

Appendix B: Main activities at ages 20/21 and 21/22

Appendix Table 1: Main activity of young people aged 20/21 and 21/22

Main Economic Activity	Age 20/21 (2020) %	Age 21/22 (2021) %
Working	37.4	53.8
In university	36.4	22.2
Unemployed	7.9	8.3
Apprenticeship / Training / PWPC	6.4	4.4
Other transitions	5.6	6.0
Full-time Education (non-HE)	2.8	1.8
Looking after family / children	1.6	1.8
Volunteering	1.0	0.4
Ill or disabled, unable to work	1.0	1.3
Total cases	**100**	**100**

Table notes: Unemployed includes those looking for work; PWPC: Part of the week working, part of the week in a college

Appendix Table 2: Main activity of young people aged 20/21, by SEN group

Main Economic Activity	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
Working	36.4	36.7	47.7	44.4	31.3	8.3
In university	42.1	34.2	16.4	10.0	19.3	1.5
Unemployed	6.4	10.0	10.2	17.6	8.7	25.5
Apprenticeship / Training / PWPC	6.0	4.0	8.6	7.8	7.8	2.7
Other transitions	4.8	5.0	9.5	8.9	12.1	4.1
Full-time Education (non-HE)	1.6	3.0	3.4	3.8	6.0	49.8
Looking after family / children	1.3	2.3	2.5	3.7	1.2	1.6
Volunteering	0.8	1.8	1.3	1.1	5.4	5.3
Ill or disabled, unable to work	0.6	3.1	0.4	2.8	8.2	1.3
Total cases	**100**	**100**	**100**	**100**	**100**	**100**

Table notes: Unemployed includes those looking for work; PWPC: Part of the week working, part of the week in a college

Appendix Table 3: Main activity of young people aged 21/22, by SEN group

Main Economic Activity	No SEN	LSID (NSP)	School Action	School Action Plus	Statement	SEN School
Working	54.0	44.8	60.4	56.3	48.1	9.9
In university	25.6	23.2	9.9	6.6	13.1	1.6
Unemployed	6.7	9.8	12.9	13.7	17.6	21.2
Apprenticeship / Training / PWPC	4.2	5.1	4.7	3.8	4.2	16.0
Other transitions	5.6	10.1	6.6	6.6	9.0	9.7
Full-time Education (non-HE)	1.1	0.0	1.6	3.2	1.5	36.0
Looking after family / children	1.6	2.7	2.4	3.3	1.2	1.7
Volunteering	0.4	0.0	0.2	1.2	1.4	0.0
Ill or disabled, unable to work	0.8	4.2	1.3	5.3	4.0	3.9
Total cases	**100**	**100**	**100**	**100**	**100**	**100**

Table notes: Unemployed includes those looking for work; PWPC: Part of the week working, part of the week in a college

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