Norfolk Flourish Survey 2024 – Deprivation

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Contents

Please note that this report includes analysis of questions concerning self-harm.

Norfolk Overview – 2024 data

Statements average across **Year 6 to Year 13** pupils (pupils aged 10 to 18) unless stated otherwise

Prevalence

Over **1 in 6** report currently receiving free school meals

Just over **1 in 4** report worrying quite a lot or a lot about money

Around **1 in 10** report that their household did not have enough food for everyone on at least some days in the 12 months prior to the survey

Around **1 in 13** report that their household used foodbanks or similar free/subsidised food in the 12 months prior to the survey

Over **1 in 13** report that their household struggled to heat their home in the 12 months prior to the survey

Just over **1 in 10** report that they do not have their own bedroom

Compared to pupils who do not identify as young carers, young carers are:

More than **twice** as likely to report that they currently receive free school meals

More than **twice** as likely to report that they do not have their own bedroom

More than **three times** more likely to report that their household did not have enough food for everyone on at least some days in the 12 months prior to the survey

More than **three times** more likely to report that their household struggled to heat their home in the 12 months prior to the survey

There is some evidence that pupils from deprived backgrounds may be under-represented in the Flourish Survey sample

Issues

Compared to pupils who report not receiving free school meals, pupils who report currently receiving free school meals are more likely to report:

- Low mental wellbeing
- Smoking at least once
- Vaping at least once
- Parents who smoke cigarettes
- Recently witnessing violence in their home between adults
- Not recently engaging in sport outside of school
- Not having a trusted adult to talk to when worried or upset
- It is never easy to make friends
- Being bullied a lot
- That regular school attendance is not important
- Not visiting a dentist in the last year or never visiting
- Wanting to lose weight

Averaging across **Year 8 to Year 13** pupils (pupils aged 12 to 18)

- Cutting or hurting themselves when worried or stressed
- Being in a romantic relationship
- Receiving a 'sext'

Compared to pupils who report not receiving free school meals, pupils who report currently receiving free school meals are **less likely** to report drinking alcohol at least once a month

Infographic text description

Statements average across Year 6 to Year 13 pupils (pupils aged 10 to 18) unless stated otherwise

Prevalence

- Over 1 in 6 report currently receiving free school meals
- Just over 1 in 4 report worrying quite a lot or a lot about money
- Around 1 in 10 report that their household did not have enough food for everyone on at least some days in the 12 months prior to the survey
- Around 1 in 13 report that their household used foodbanks or similar free/subsidised food in the 12 months prior to the survey
- Over 1 in 13 report that their household struggled to heat their home in the 12 months prior to the survey
- Just over 1 in 10 report that they do not have their own bedroom
- Compared to pupils who do not identify as young carers, young carers are:
    - More than twice as likely to report that they currently receive free school meals
    - More than twice as likely to report that they do not have their own bedroom
    - More than three times more likely to report that their household did not have enough food for everyone on at least some days in the 12 months prior to the survey
    - More than three times more likely to report that their household struggled to heat their home in the 12 months prior to the survey
- There is some evidence that pupils from deprived backgrounds may be under-represented in the Flourish Survey sample

Issues

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    - Low mental wellbeing
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    - Being bullied a lot
    - That regular school attendance is not important
    - Not visiting a dentist in the last year or never visiting
    - Wanting to lose weight
    - Averaging across Year 8 to Year 13 pupils (pupils aged 12 to 18):
        - Cutting or hurting themselves when worried or stressed
        - Being in a romantic relationship
        - Receiving a ‘sext’
- Compared to pupils who report not receiving free school meals, pupils who report currently receiving free school meals are less likely to report drinking alcohol at least once a month

The Survey

The results from the Flourish Survey begin to be reported on page 12; below, we first provide context to help interpret the results by discussing key details about the sample and analysis. This includes the sample's representativeness, variations in analysis by year group and how confidence intervals allow us to assess which differences in the results are likely to be real. Additionally, Appendix 1 provides further detail on the representativeness of the sample and Appendix 2 explains how year groups map to the age of pupils.

The sample

The analysis is based on a survey which in 2024 sampled 9,347 school pupils in Norfolk from 28 primary schools and 17 secondary schools/further education colleges.[1] The sample represents 12.3% of pupils in state-funded schools in eligible year groups (Year 4 to Year 13, equivalent to pupils aged 8 to 18). Three of the schools in the sample were independent schools. The survey was conducted by the School Health Education Unit (SHEU) which has run similar surveys in other parts of the country for many years. Where the similarity of question wording allows it, we have combined the 2024 data with that from previous Norfolk surveys conducted in 2015 and 2017.

While SHEU has found that results from its surveys are generally broadly consistent with those from other data sources, it is important to note that the dataset is not a truly random sample of pupils. Instead, schools self-select to take part in the survey. As such, while the analysis below results from a large Norfolk sample and offers unique insights into the lives of Norfolk pupils, the results may differ from a survey that had a truly random sample of Norfolk pupils.

A separate topic report provides a detailed comparison of the Flourish Survey sample with the known characteristics of pupils in state-funded schools in Norfolk. A number of key points result from this comparison. First, we do not break out the data by individual district as the data is unevenly distributed across districts, in particular, only primary schools took part in the Borough of Great Yarmouth. Second, the geographic distribution of the data and information on the prevalence of pupils receiving free school meals suggests that pupils from deprived backgrounds may be under-represented in the Flourish Survey sample. Third, between 2015, 2017 and 2024 the age distribution of the

[1] Two private schools served both primary and secondary pupils so 43 schools took part in total.

sample varied noticeably, hence, when making comparisons between these three years we control for age by performing the comparison for individual year groups.

Questions and year groups

The questionnaire for secondary pupils was more detailed than the questionnaire for primary pupils, particularly around alcohol, drugs, smoking/vaping and sexual health.[2] Also, some questions that featured in both questionnaires were only asked to Year 6 and Year 7 pupils in the questionnaire for primary pupils. Significantly for the present report, in 2024 the question about receipt of free school meals was only asked to Year 6 pupils and above (pupils aged 10 to 11 and above). The year groups on which analysis is based are clearly indicated in the figure captions and text in each section.

When making comparisons between 2015, 2017 and 2024 we control for age by performing comparisons separately for Year 6, Year 8, Year 10 and Year 12/13 pupils.[3] We do this because of differences in the age distributions of the sample between 2015, 2017 and 2024. We do not report a comparison with SHEU data from other parts of the country in 2022 because the SHEU comparator figures are noticeably different to free school meal statistics for England in school census data.[4]

All the percentages and figures in this report are based on the data available for the relevant survey questions. Not all pupils responded to all questions. As such, the number of responses on which percentages and figures are calculated varies within and across topics.

As is standard, the survey was anonymous to ensure that pupils felt able to be honest in their responses. While this means it is not possible to contact pupils revealing issues of concern, the survey did contain multiple phone numbers and web addresses of organisations that pupils could contact to obtain topic specific support.

[2] Most Year 7 pupils were asked to respond to the questionnaire for primary pupils rather than the questionnaire for secondary pupils due to the more sensitive nature of some of the questions in the questionnaire for secondary pupils. As such, the secondary year groups for which the data aims to be representative are Year 8 to Year 13.
[3] These year groups are chosen to be consistent with the year groups used in the other topic reports.
[4] The SHEU comparator figures are not necessarily representative of England as a whole since they are based solely on those areas where SHEU has a contract to conduct the survey.

Assessing differences

Any differences we highlight in the text below are statistically significant at the 5% level. In the charts, the black lines extending from the end of bars are (95%) confidence intervals. The smaller the confidence interval, the greater the certainty we have about the true length of the bar/percentage. If the confidence intervals of two categories/groups do not overlap, we know that the difference between the categories is statistically significant, i.e. it is likely to be real. If the confidence intervals of two different categories/groups overlap, further analysis would be required to determine if any difference is statistically significant (likely to be real).

Measuring deprivation

Here, and in the other topic reports, the main indicator of deprivation that we utilise is whether pupils currently receive free school meals. We use this indicator because free school meals are a widely recognised deprivation indicator for pupils above Year 2 (pupils aged 6 to 7 years old), since above this year group to receive free school meals a pupil's family must be receiving one of a variety of state benefits indicating low income.[5] However, since 1 April 2018 free school meals are potentially a less reliable indicator of current deprivation than in earlier years due to a change in eligibility rules. Since 2018 once a pupil has claimed free school meals they can continue receiving free school meals until the end of primary or secondary school; prior to 2018 a pupil's free school meal entitlement would end when their family's benefit entitlement ended.

Also, like all the other indicators in the Flourish survey, our free school meal indicator is based on pupils reporting that they receive free school meals. As such, our free school meal indicator is likely to identify a slightly different group of pupils than if the official free school meal status of pupils was taken from administrative systems.

Assessing whether pupils in the Flourish survey come from deprived backgrounds is not straightforward as pupils may not have complete information about their family's economic circumstances, for example, many likely do not know their parents' earnings. Also, the Flourish survey did not collect details of pupils' home postcodes and so it is not possible to link a pupil to statistics about deprivation level in the area where there home is located.[6] While the location of schools is known, many schools have large catchment areas and so school location is unlikely to be a reliable indicator of the deprivation or socio-economic circumstances an individual pupil experiences.

Beyond receipt of free school meals, the other potential indicators of deprivation we consider are whether:

1. A pupil has their own bedroom
2. A pupil's household did not have enough food for everyone on at least some days in the 12 months prior to the survey
3. A pupil's household has used food banks or similar sources of free or subsidised food in the 12 months prior to the survey
4. A pupil's household has struggled to heat their home over the 12 months prior to the survey

[5] In the first three years of primary school (Year R, Year 1 and Year 2) all pupils receive free school meals; these are known as universal free school meals.
[6] Even if a question had been asked experience suggests many pupils would not know their postcode.

5. A pupil states that they worry quite a lot or a lot about money

Again, these indicators are all dependent on what a pupil reports in the Flourish Survey and so depend on a pupil's knowledge of their household's situation.

It is important to remember that these five reported situations are indicators or proxies for general deprivation and there is some uncertainty about the overall extent of deprivation or hardship that a pupil reporting an indicator is experiencing. For example, a pupil may not have their own bedroom because they want to share a bedroom with siblings. Similarly, a household struggling to heat their home may not automatically be poor if, for example, they live in a large old house; while those in a high earning household might worry about money a lot if, for example, they have lots of debts to pay or if the main earner's employment is at risk. Equally, a household may be deprived in ways not identified by the questions in the Flourish Survey.

Another point to consider, particularly when thinking about possible overlaps between indicators, is that the indicators based on the receipt of free school meals and the use of food banks are slightly different to the other indicators. Both of these indicators not only suggest a pupil may be suffering from deprivation they also show that the pupil and/or their household are receiving some support to help alleviate their deprivation.

All the statistics in the subsequent sections of this report are based on pupils who provide definitive answers, i.e. pupils reporting that they "don't know" or "don't want to say" are dropped from the analysis and do not feature in the calculation of the percentages. For some of the indicators a relatively high proportion of pupils reported that they did not know their status. Of all sampled Year 6 to Year 13 pupils (pupils aged 10 to 18) who provide some form of answer to the question about free school meals, 9.9% report that they do not know their free school meal status. Similarly, of all sampled Year 4 to Year 13 pupils (pupils aged 8 to 18) who provide some form of answer to the relevant questions, 18.7% report that they do not know whether or not their household used foodbanks in the 12 months before the survey and 21.1% report that they were not sure whether or not their household struggled to heat their home in the 12 months prior to the survey.[7]

[7] The question asking about whether everyone in a pupil's household had enough food in the 12 months prior to the survey did not include a "don't know" response option.

Free School Meals

Overall prevalence

17.6% of sampled Year 6 to Year 13 pupils report that they currently receive free school meals.[8] A further 9.3% of sampled Year 8 to Year 13 pupils[9] (pupils aged 12 to 18) report that they do not currently receive free school meals but that they have received them at some point in the past 6 years, while 2.0% report that they could have received free school meals at some point in the past 6 years but they did not. In the rest of the report, whenever a reference is made to pupils reporting receipt of free school meals we are specifically referring to pupils who report currently receiving free school meals.

The proportion of sampled pupils reporting that they currently receive free school meals is broadly stable across the different individual year groups from Year 7 to Year 12/13. However, the proportion of sampled pupils in Year 6 reporting that they currently receive free school meals is higher than the proportion in many of the older year groups by a margin which is statistically significant. For example, 24.8% of sampled Year 6 pupils report that they currently receive free school meals compared to 17.8% of sampled Year 7 pupils.

As noted earlier, it is suspected that the Flourish Survey may under-represent pupils from deprived backgrounds. This is based on the fact that 2023-24 school census data for Norfolk indicates that 23.0% of Year 6 to Year 13 pupils are known to be eligible for free school meals.[10] It is worth noting that part of the discrepancy between the Flourish Survey data and the school census data is due to the difference in definition: the school census records pupils who are eligible while the Flourish Survey records pupils who know that they receive free school meals. Also, the extent of the discrepancy varies by individual year group; for Year 12/13 pupils the Flourish Survey data shows a reported rate of receiving free school meals higher than the rate of eligibility reported in the school census data.

[8] 1,171 pupils in the 2024 sample report that they currently receive free school meals (since only 12% of pupils are sampled the number for Norfolk as a whole would be much higher). For most questions in the survey, the number responding will be different as some pupils will choose not to respond.
[9] The statistics in this sentence do not include Year 6 and Year 7 pupils because the relevant question in the questionnaire for primary pupils asked about receipt of free school meals over the previous 3 years rather than 6 years.
[10] See Create your own tables - Explore education statistics - GOV.UK. Across England as a whole, in January 2024 24.1% of state-funded secondary pupils were known to be eligible for free school meals. See CBP-9209.pdf

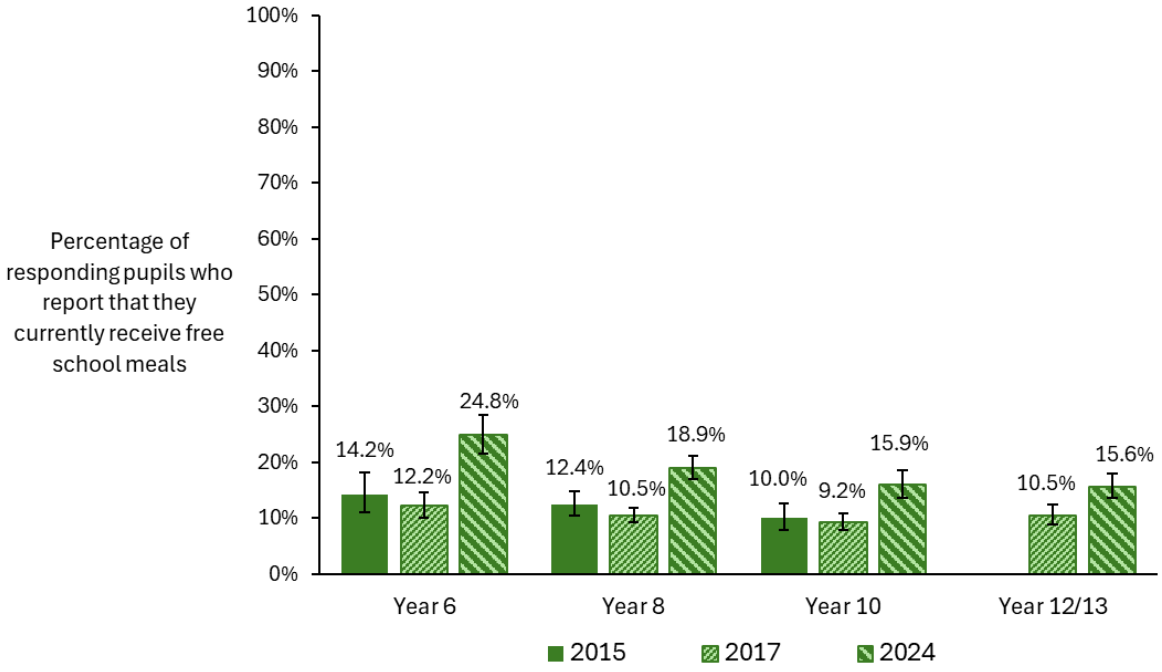
If the presumption that the Flourish Survey sample under-represents pupils from deprived backgrounds is correct, then the proportions of pupils reporting different deprivation related issues in the Flourish Survey likely represent minimum values for the proportions among the full population of Norfolk pupils. Comparisons between pupils reporting receipt of free school meals and those reporting that they do not receive free school meals are less likely to be affected by this issue of under-representation.[11]

[11] Comparisons between those receiving and not receiving free school meals would only face a potential issue if the pupils reporting receipt of free school meals in the Flourish Survey sample differed systematically in their characteristics from pupils receiving free school meals in the population of Norfolk school children.

Changes over time

Figure 1 shows that in each year group considered the proportion of pupils reporting that they currently receive free school meals rose considerably between 2017 and 2024. In Year 6, the percentage more than doubled from 12.2% in 2017 to 24.8% in 2024.[12] As discussed previously, a large part of this change between 2017 and 2024 is likely to result from a change in free school meal eligibility rules in 2018. School census data for England as a whole shows that the proportion of pupils in each of Year 6 to Year 11 eligible for free school meals increased by more than 10 percentage points between 2018 and 2023/24.

Figure 1: Percentages of sampled pupils reporting that they currently receive free school meals - 2015, 2017 and 2024 (Year 6, Year 8, Year 10 and Year 12/13 data separately)



[12] We do not include a comparison against school census data because of the previously discussed difference in definition between being eligible for free school meals and actually claiming them.

Variations across groups – interpretation

In the following subsection, the aim is to understand how the reported rate of currently receiving free school meals varies across a range of groups. The characteristics used for the breakdown are the same in all the Flourish Survey topic reports.[13] The characteristics used to split pupils are: identifying as having Special Educational Needs or Disability (SEND)[14], different ethnicities[15], identifying as a young carer[16], reporting low mental wellbeing[17], and gender identity[18]. Some pupils will fall into multiple groups, e.g. both identify as a young carer and report receipt of free school meals.

[13] In the other topic reports, receiving free school meals is itself one of the characteristics across which variations are mapped.

[14] 2,058 individuals in the 2024 sample identify as having SEND (since only 12% of pupils are sampled the number for Norfolk as a whole would be much higher). This number excludes those answering 'I don't want to say' and represents 22.3% of the sample (when considering Year 4 to Year 13 and excluding non-responses). The number of respondents identifying as having SEND is considerably higher in 2024 than in 2015 or 2017. This is probably linked to a change in question design whereby in 2024 respondents are identified as having SEND if they indicate that they experience at least one of six impairments/difficulties (those identifying as having a long-term illness are not included in the SEND indicator). For most questions in the survey, the number responding will be different as some pupils will choose not to respond.

[15] 986 individuals in the 2024 sample identify as not having a solely white ethnicity (since only 12% of pupils are sampled the number for Norfolk as a whole would be much higher). This number excludes those answering 'Don't want to say' and represents 10.6% of the sample (when considering Year 4 to Year 13 and excluding non-responses). For most questions in the survey, the number responding will be different as some pupils will choose not to respond.

[16] 625 individuals in the 2024 sample identify as young carers (since only 12% of pupils are sampled the number for Norfolk as a whole would be much higher). This number excludes those answering 'Don't want to say' or 'Not sure' and represents 6.8% of the sample (when considering Year 4 to Year 13 and excluding non-responses). For most questions in the survey, the number responding will be different as some pupils will choose not to respond.

[17] 3,155 pupils in 2024 have been classified as having low mental wellbeing (since only 12% of pupils are sampled the number for Norfolk as a whole would be much higher). This represents 39.9% of the sample when considering Year 4 to Year 13 and non-responses to the constituent questions are excluded. For most questions in the survey, the number responding will be different as some pupils will choose not to respond. Low mental wellbeing is identified according to an aggregate score from a range of questions according to recognised academic methods. For primary pupils and most Year 7 pupils the questions result in the Stirling Children's Wellbeing Scale (Stirling Scale), while for older pupils the questions result in the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). For both scales, 'low' mental wellbeing is identified as being a score at least one standard deviation below the mean score on the respective scales as reported in academic studies. Both scales ask pupils to rate their experience of life in the couple of weeks before the survey.

[18] 168 individuals in the 2024 sample describe their gender in another way beyond simply male or female (since only 12% of pupils are sampled the number for Norfolk as a whole would be much higher). This number excludes those answering 'I prefer not to say' and represents 1.9% of the sample (when considering Year 4 to Year 13 and excluding non-responses). Primary pupils as well as secondary pupils could identify as a gender other than male or female. The relevant question was framed as asking about gender identity and there was no separate question asking about sex at birth. For most questions in the survey, the number responding will be different as some pupils will choose not to respond.

When interpreting all figures in this report, it is important to remember that the analysis only shows correlations, i.e. how things differ across groups, it does not demonstrate that the difference is caused by being in a different group. For example, Figure 2 shows that pupils identifying as having SEND are more likely to report current receipt of free school meals. However, we do not know whether: (i) identifying as having SEND leads to pupils reporting receipt of free school meals, (ii) reporting receipt of free school meals leads pupils to identify as having SEND, or (iii) some other factor is driving the patterns in both identifying as having SEND and reporting receipt of free school meals.

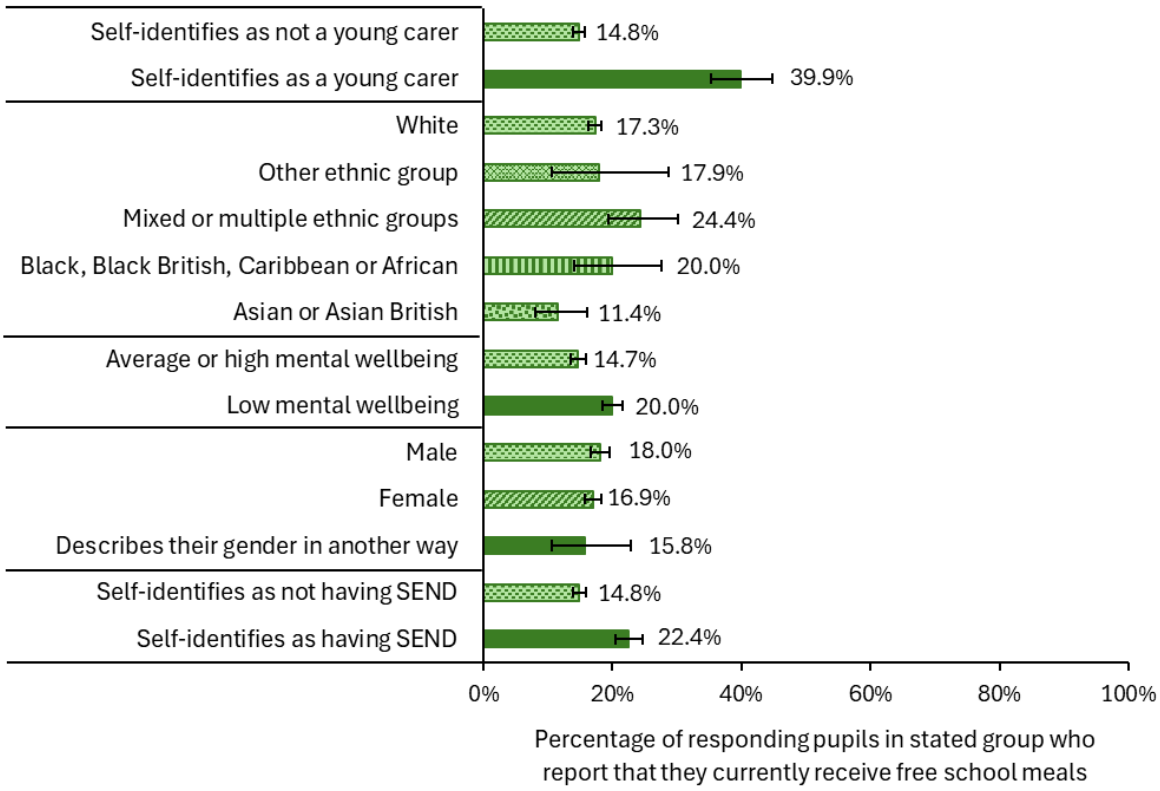
Linked to this, all figures in this report only report 'univariate' associations. In other words, they report how one characteristic (e.g. identifying as a young carer) is associated with one other variable (e.g. reporting current receipt of free school meals). They do not control for any other characteristics, such as age. It is possible that the patterns shown in the figures could result from differences in other characteristics between two groups e.g. if those identifying as a young carer and those not identifying as a young carer differed in age. However, controlling robustly for all characteristics is much more involved than the present analysis allows with it requiring multivariate regression analysis.

In Figure 2 the results should be read as follows. Each bar reports the percentage within the stated group that reports currently receiving free school meals. For example, in Figure 2 22.4% of pupils identifying as having SEND report that they currently receive free school meals. Each characteristic described on the previous page is used to split the overall sample of Year 6 to Year 13 pupils into mutually exclusive groups. In the case of those identifying as having SEND, there are two mutually exclusive groups: 'Self-identifies as having SEND' and 'Self-identifies as not having SEND'. The horizontal lines on the vertical axis separate the different cuts of the data, and the statements about statistical significance refer to comparisons between the groups between two of the horizontal lines, e.g. Self-identifies as having SEND vs Self-identifies as not having SEND.

Variation across groups – results

The most striking result in Figure 2 is that the proportion of sampled Year 6 to Year 13 pupils identifying as young carers who report current receipt of free school meals is more than double that for pupils who do not identify as young carers. Among sampled Year 6 to Year 13 pupils that identify as young carers 39.9% report that they currently receive free school meals compared to only 14.8% of pupils who do not identify as young carers. Also, pupils who report low mental wellbeing and/or identify as having SEND are more likely to report that they currently receive free school meals than pupils who do not report these characteristics. Additionally, pupils identifying as being from Mixed or multiple ethnic groups are more likely to report currently receiving free school meals than pupils who identify as White.

Figure 2: Percentages of sampled pupils reporting current receipt of free school meals by selected group - 2024 (Year 6 to Year 13 data combined)



Lastly, Figure 2 shows that pupils who identify as Asian or Asian British are less likely to report that they currently receive free school meals than pupils who identify as White (11.4% vs 17.3%).

Associations between different groups of interest

Figure 2 shows how the rate of reporting current receipt of free school meals varies across different groups of interest. This raises the more general question of how the characteristics reported in Figure 2 overlap. In particular, it seems worthwhile to understand the extent to which (i) identifying as a young carer, (ii) identifying as having SEND and/or (iii) reporting current receipt of free school meals identifies the same or different pupils.

To statistically identify associations between groups (i)-(iii) we perform chi-squared tests of independence for each possible pairing of two out of the three characteristics. Each chi-squared test allows us to assess whether there is an association or not between the characteristics. Even when associations between variables pass the test for statistical significance there can still be variations in the strength of the association, i.e. the probability of observing characteristic B if you observe an individual with characteristic A. The strength and direction of the association between a pair of characteristics can be expressed by calculating the phi co-efficient for each pairing. The phi co-efficient can vary from -1, the strongest negative correlation, to a value of 1, the strongest positive correlation between two characteristics.[19]

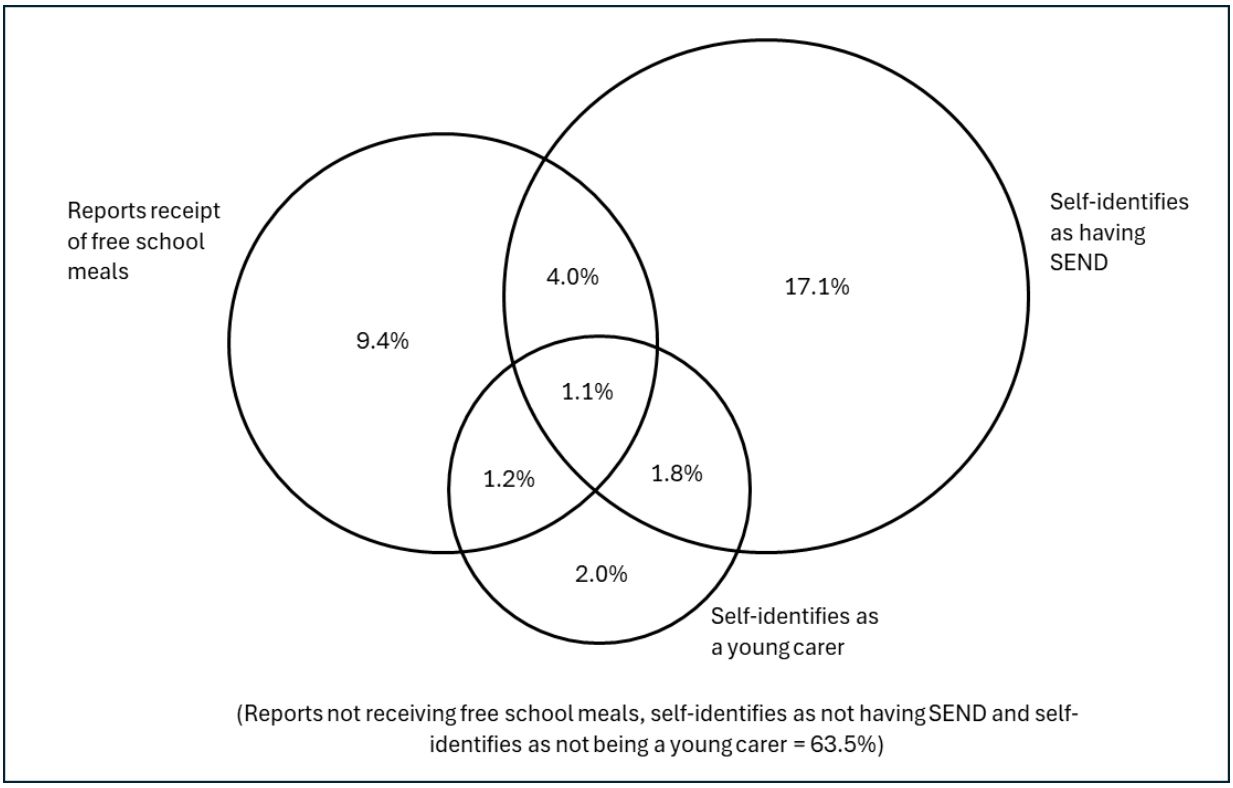
Again, this analysis only shows correlations not causation and the reported associations are univariate so they do not control for other variables such as age. To understand the potential for robust causal relationships between the different characteristics one should review the relevant academic literature.

The chi-squared tests show that sampled Year 6 to Year 13 pupils identifying as a young carer, identifying as having SEND and/or reporting current receipt of free school meals are all associated with each other in a manner that is statistically significant. However, the values of the phi co-efficients are low suggesting the size of the associations are relatively low. Between reporting free school meals and identifying as a young career the phi co-efficient is 0.17, between reporting free school meals and identifying as having SEND it is 0.09, and between identifying as a young carer and identifying as having SEND it is 0.13. For comparison, in the topic report on risk-taking behaviours some of the phi co-efficients exceed 0.5.

[19] A value of 1 between characteristics A and B implies that every individual reporting characteristic A also reports characteristic B. In contrast, a value of -1 implies that no individual who reports characteristic A also reports characteristic B.

It is also possible to understand the overlap between the different characteristics by drawing a Venn diagram. Figure 3 shows that for sampled Year 6 to Year 13 pupils the most common outcome is for pupils not to report any of the three characteristics, with 63.5% of pupils reporting that they do not receive free school meals, do not identify as having SEND and do not identify as a young carer. After this the next most common outcomes are for sampled Year 6 to Year 13 pupils to report solely identifying as having SEND (17.1%) and to report solely receiving free school meals (9.4%).

Figure 3: A Venn diagram showing the overlap between sampled pupils reporting current receipt of free school meals, identifying as having SEND and identifying as a young carer - 2024 (Year 6 to Year 13 data combined, size of circles not to scale)



The data in Figure 3 also shows that among sampled Year 6 to Year 13 pupils 8.1% of pupils report at least two out of the three characteristics and 1.1% simultaneously report that they receive free school meals, identify as a young carer and identify as having SEND. Another insight from Figure 3 is that those identifying as young carers are more likely to report having multiple characteristics simultaneously than those who report receiving free school meals or who identify as having SEND. Among sampled Year 6 to Year 13 pupils who identify as young carers, a clear majority (67.4%) also report receipt of free school meals and/or identify as having SEND. In contrast, among pupils who

report receiving free school meals or who identify as having SEND the majority of pupils only report that they have one of the three characteristics.

If one extends the analysis above to include a fourth characteristic, namely reporting low mental wellbeing, again the chi-squared test of independence provides evidence that all possible pairs of the four characteristics are associated with each other. Although, again, the size of the associations between the different pairs of the four characteristics are low with phi co-efficients ranging from 0.07 to 0.19.

Given that reporting low mental wellbeing is relatively common, when considering the four characteristics the proportion of sampled Year 6 to Year 13 pupils who report none of the characteristics is only 42.8%. In other words, a majority sampled Year 6 to Year 13 pupils have at least one of the following characteristics: (i) reports current receipt of free school meals, (ii) identifies as having SEND, (iii) identifies as a young carer, and/or reports low mental wellbeing. The next most common combinations when four characteristics are considered are: solely reporting low mental wellbeing (20.9%), identifying as having SEND and also reporting low mental wellbeing (9.6%), solely identifying as having SEND (7.8%) and solely reporting current receipt of free school meals (5.6%).

Looking across all the possible combinations of the four characteristics, 18.2% of sampled Year 6 to Year 13 pupils report at least two of the characteristics, while 4.8% report at least three of the characteristics and only 0.9% report having all four characteristics simultaneously.

Outcomes associated with receipt of free school meals

In the other topic reports, whether a pupil currently receives free school meals or not is one of the characteristics used to split the data for comparison. This section summarises the results reported in other topic reports where a statistically significant difference is found between pupils reporting receipt of free school meals and those who report not receiving free school meals. As usual, this section simply reports associations, rather than demonstrating that differences in outcomes are caused by receiving free school meals (or deprivation more generally).

Overall, the picture is clear: across a range of domains pupils who report current receipt of free school meals are more likely to report outcomes viewed as potentially concerning than pupils who report currently not receiving free school meals.

There are only a couple of occasions where pupils reporting receipt of free school meals report outcomes that might be considered ‘positive’ relative to pupils who report not receiving free school meals. Although, even here, the extent to which the following results are ‘positive’ can probably be debated. First, sampled Year 6 to Year 13 pupils who report receipt of free school meals are less likely to report drinking alcohol at least once a month than pupils who report not receiving free school meals (11.2% vs 14.2%). Second, sampled Year 6 to Year 13 pupils who report receipt of free school meals are less likely to report missing school at some point in the 12 months prior to the survey to go on a day trip or holiday in term time than pupils who report not receiving free school meals (16.2% vs 19.9%).

When an indicator is not discussed in this section but results for it are reported in another topic report, the presumption should be that any difference in the indicator between sampled pupils reporting receipt of free school meals and those reporting not receiving free school meals is not statistically significant.

Risk-taking behaviours

Looking across the different behaviours in the risk-taking behaviours report their pattern of associations with reporting receipt of free school meals is rather mixed. As already stated, pupils reporting receipt of free school meals are less likely to report drinking alcohol at least once a month than those who report not receiving free school meals. However, sampled Year 6 to Year 13 pupils who report receipt of free school meals are more likely to report that they have smoked at least once (17.4% vs 12.6%) and/or vaped at least once (36.8% vs 25.9%) than pupils who report not receiving free school meals. Similarly, sampled Year 10 to Year 13 pupils who report receiving free school meals are more likely to report taking drugs at least once than pupils who report not receiving free school meals (21.7% vs 15.8%).

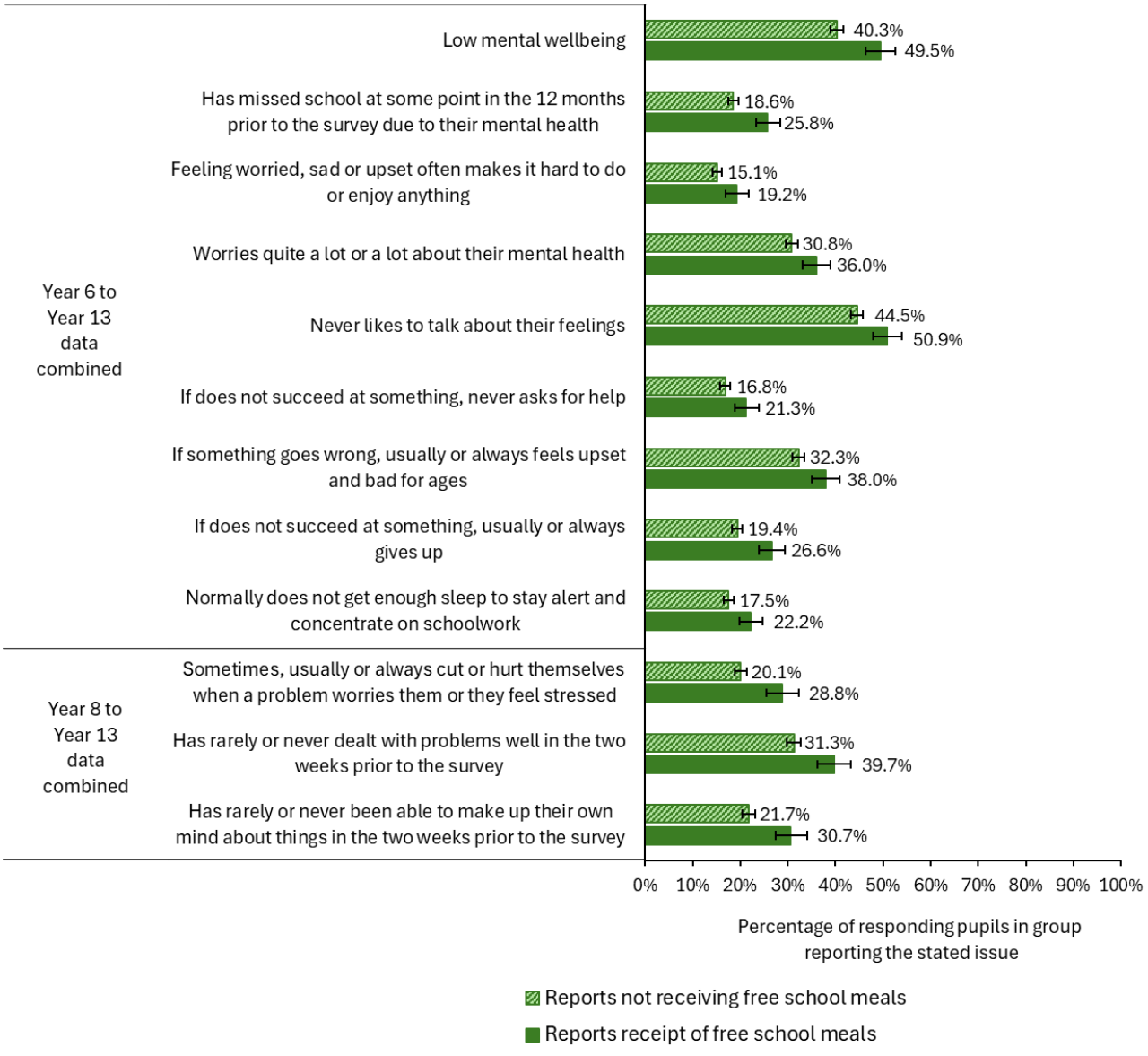
Yet, the proportions of sampled Year 8 to Year 13 pupils reporting that they have placed a bet online and/or who have sent undressed/sexual images of themselves (i.e. a ‘sext), together with the proportion of sampled Year 10 to Year 13 pupils reporting that they have had sex are not different in a statistically significant way between pupils who do, and pupils who do not, report receiving free school meals.

Mental wellbeing

Overall, sampled Year 6 to Year 13 pupils who report receiving free school meals are more likely to report low mental wellbeing than those who do not report receiving free school meals (49.5% vs 40.3%). However, any difference in the proportion of sampled Year 6 to Year 13 pupils reporting high mental wellbeing between pupils who report receiving free school meals and those who do not is not statistically significant.

Figure 4 shows that for a broad range of indicators related to mental health and mental wellbeing sampled pupils who report receiving free school meals are more likely to report issues than pupils who report not receiving free school meals.

Figure 4: Percentages of sampled pupils reporting different mental wellbeing indicators split by whether or not they report receiving free school meals - 2024 (Year 6 to Year 13 data combined, or Year 8 to Year 13 data combined)[20]



[20] Whether the data relates to Year 6 to Year 13 or Year 8 to Year 13 depends on which year groups were shown the relevant questions.

Each indicator results from pupils being asked to evaluate a separate question/statement.[21]

The indicators in Figure 4 suggest that not only are sampled pupils reporting receipt of free school meals more likely to report low mental wellbeing, they are also more likely to report indicators suggesting that their mental health is impacting their schooling; that they are less resilient to adversity; less likely to seek help; and have more difficulties with their decision making than sampled pupils who report not receiving free school meals. While Figure 4 only reports indicators where there is a statistically significant difference between those reporting receipt of free school meals and those who do not receive free school meals, the size of the differences could be viewed as moderate. None of the differences exceed 10 percentage points; in other topic reports, for different indicators and different groups of interest, e.g. those identifying as having SEND or as a young carer, the largest differences exceed this threshold.

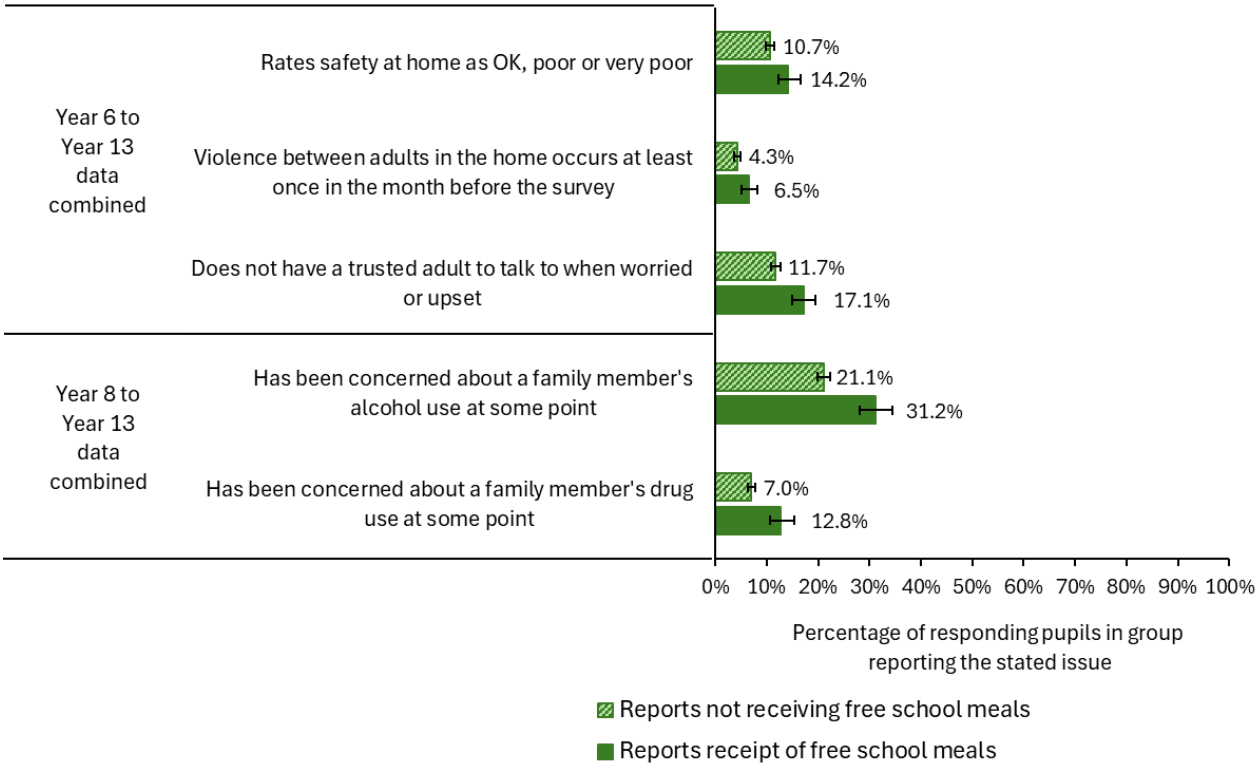
Beyond the aggregate low mental wellbeing indicator, in Figure 4 the largest differences involve indicators based on data from sampled Year 8 to Year 13 pupils. For example, 28.8% of sampled Year 8 to Year 13 pupils reporting receipt of free school meals report that they sometimes, usually or always cut or hurt themselves when a problem worries them or they feel stressed compared to 20.1% of pupils who report not receiving free school meals.

[21] The low mental wellbeing indicator aggregates responses to a range of statements including two that are reported as separate indicators in Figure 4, namely (i) rarely or never dealing with problems well in the two weeks prior to the survey, and (ii) rarely or never being able to make their own mind up about things in the two weeks prior to the survey.

Issues at home

Given that Figure 4 shows that sampled pupils who report receiving free school meals appear to have lower mental wellbeing than those who report not receiving free school meals, it is notable that Figure 5 shows that those reporting receipt of free school meals are also less likely to have a trusted adult to talk to when worried or upset. Among sampled Year 6 to Year 13 pupils reporting receipt of free school meals 17.1% report that they do not have a trusted adult to talk to when worried or upset compared to 11.7% of pupils who report not receiving free school meals.

Figure 5: Percentages of sampled pupils reporting indicators of issues at home split by whether or not they report receiving free school meals - 2024 (Year 6 to Year 13 data combined, or Year 8 to Year 13 data combined)



The largest difference in Figure 5 is that 31.2% of sampled Year 8 to Year 13 pupils who report receipt of free school meals also report having had concerns about a family member's alcohol use at some point compared to 21.1% of pupils who report not receiving free school meals. Figure 5 also shows that sampled pupils who report receiving free school meals are also more likely to report that they have been concerned about a family member's drug use at some point. For context (and not reported in Figure 5), any differences in the rates of reporting concerns about friends'

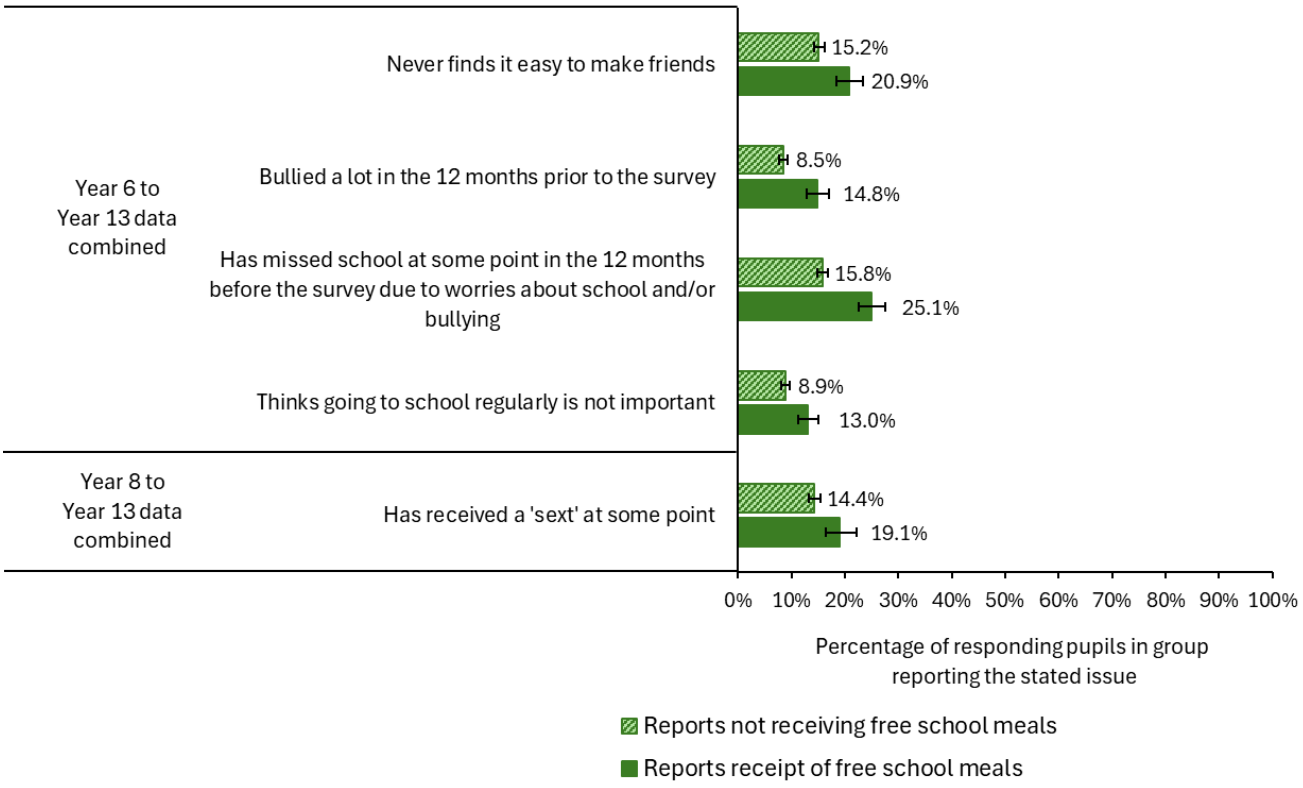
alcohol or drug use between pupils reporting receipt of free school meals and those reporting that they do not receive free school meals are not statistically significant.

That Figure 5 shows that sampled pupils reporting receipt of free school meals are more likely to report (i) violence between adults in the home in the month before the survey and (ii) that they rate safety at home as only OK, poor or very poor may relate to the about results about concerns regarding family members' alcohol and/or drug use. The topic report on drugs and alcohol notes that, looking across all pupils, those reporting concerns about a family member's drug and/or alcohol use are more likely to report violence in the home and/or rate their safety at home as OK, poor or very poor than pupils who report not having concerns about a family member's drug or alcohol use.

Friendships, relationships and school

Figure 6 shows that sampled Year 6 to Year 13 pupils who report receipt of free school meals are more likely to report that they never find it easy to make friends and that they have been bullied a lot in the 12 months prior to survey than pupils who report not receiving free school meals. It also shows 25.1% of sampled Year 6 to Year 13 pupils who report receiving free school meals have missed school at some point in the 12 months prior to survey compared to only 15.8% of pupils who report not receiving free school meals. Additionally, (and not shown in Figure 6) among sampled Year 6 to Year 13 pupils who report receiving free school meals and that they have been bullied a lot in the 12 months prior to survey 16.8% report that the reason for the bullying was their family background compared to only 9.9% of pupils who report being bullied a lot but who report not receiving free school meals.[22]

Figure 6: Percentages of sampled pupils reporting indicators related to socialising, school and electronic communications - 2024 (Year 6 to Year 13 data combined, or Year 8 to Year 13 combined)



[22] This indicator is not shown in Figure 6 because it involves a different denominator.

Furthermore, Figure 6 shows that pupils who receive free school meals are less likely to view regular school attendance as important. 13.0% of sampled Year 6 to Year 13 pupils who report receiving free school meals consider regular school attendance not to be important compared to only 8.9% of pupils who report not receiving free school meals.

Turning to romantic relationships, sampled Year 8 to Year 13 pupils who report receipt of free school meals are noticeably more likely to report having had a boyfriend, girlfriend or partner at some point than pupils that do not report receipt of free school meals (68.0% vs 57.3%). Also, we have reported that there is no statistically significant difference in the likelihood of reporting having had sex or sending a 'sext' between pupils reporting receipt of free school meals and those who report not receiving free school meals. While there may be no difference in the rate of sending sexts, Figure 6 shows that sampled Year 8 to Year 13 pupils who report receiving free school meals are more likely to report receiving a sext at some point than pupils who report not receiving free school meals (19.1% vs 14.4%).

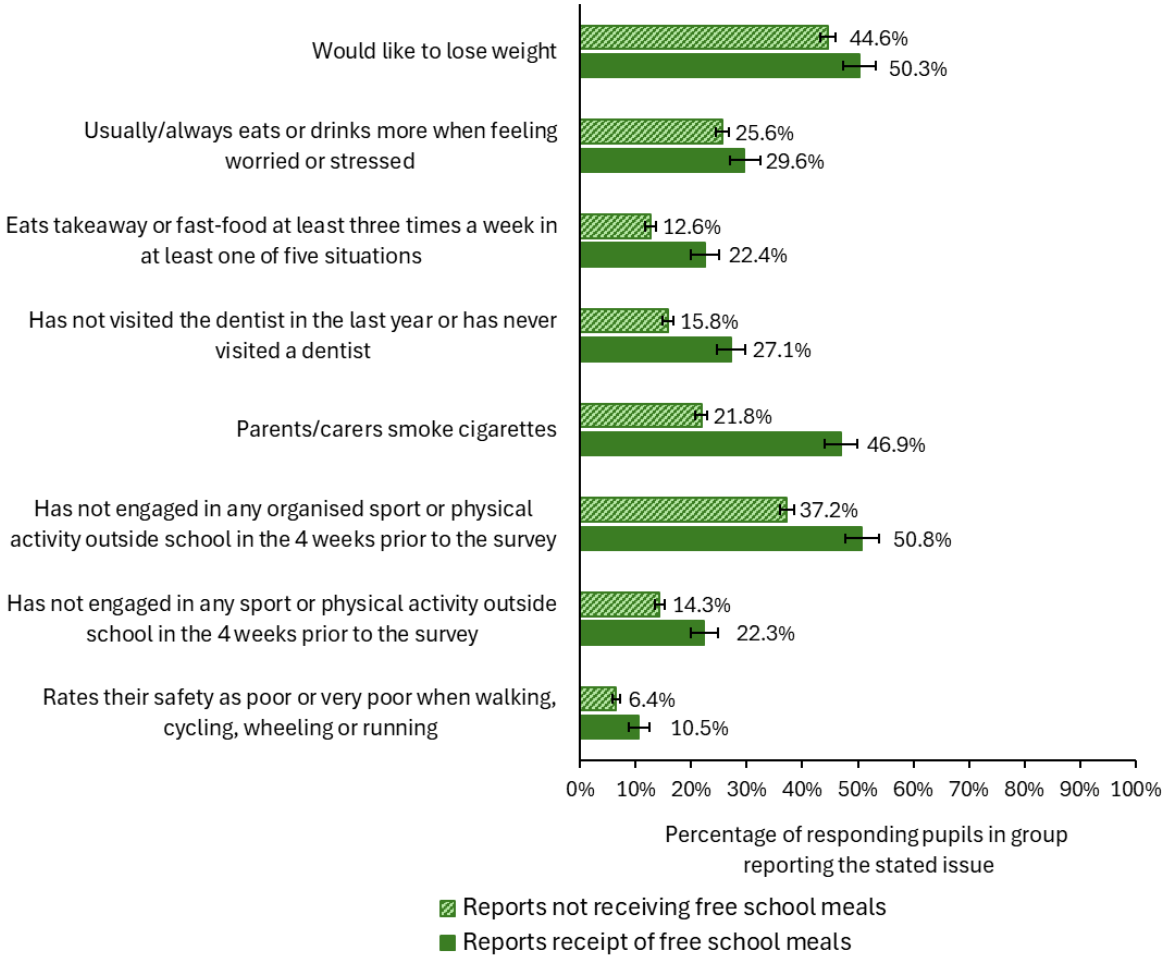
Among sampled Year 8 to Year 13 pupils who report having had a romantic relationship at some point, those who receipt of free school meals are probably more likely to report that they have experienced concerning relationship behaviours at some point than pupils who report not receiving free school meals.[23] 28.6% of sampled Year 8 to Year 13 pupils who report having had a romantic relationship at some point and who report receipt of free school meals report experiencing at least one of four concerning relationship behaviours at some point compared to 22.9% of equivalent pupils who do not report receiving free school meals. The four concerning behaviours forming this aggregate indicator are: (i) being slap or hit, (ii) being threatened with a slap or hit, (iii) being pressurised into doing sexual things, and/or (iv) being threatened with things being told to other people.

[23] This indicator is not shown in Figure 6 because it involves a different denominator. The statement refers to 'probably' being more likely to report concerning behaviours because the confidence intervals for pupils who report receiving free school meals and pupils who report not receiving free school meals overlap by a very small amount; further statistical testing would be required to confirm this finding.

Diet, physical health and physical activity

Across a range of indicators, Figure 7 suggests that sampled pupils who report receipt of free school meals are more likely to report indicators suggesting issues with their diet and low physical activity. Regarding diet, sampled Year 6 to Year 13 pupils are more likely to report that they (i) would like to lose weight; (ii) usually or always eat or drink more when feeling worried and stressed; and/or (iii) eat takeaways or fast-food frequently than pupils who report not receiving free school meals.

Figure 7: Percentages of sampled pupils reporting different indicators of poor diet, physical health and physical activity by whether or not they receive free school meals - 2024 (Year 6 to Year 13 combined)[24]



[24] The five situations for the takeaway and fast-food statement are: (i) before school lessons, (ii) at school lunchtime, (iii) after school on the way home, (iv) at home as a main evening meal, and (v) at home as an extra snack or meal.

Additionally, (and not shown in Figure 7) sampled Year 6 to Year 13 pupils who report receiving free school meals are less likely to report that they eat at least five portions of fruit and vegetables a day than pupils who report not receiving free school meals (20.6% vs 25.2%).

The largest difference in Figure 7 between pupils receiving and pupils not receiving free school meals relates to pupils' potential exposure to secondary smoke. Sampled Year 6 to Year 13 pupils receiving free school meals are more than twice as likely to report that their parents or carers smoke cigarettes than pupils who report not receiving free school meals. 46.9% of sampled Year 6 to Year 13 pupils who report receiving free school meals report that their parents or carers smoke cigarettes compared to only 21.8% of pupils who report not receiving free school meals.

The next largest differences between sampled Year 6 to Year 13 pupils who report receiving free school meals and those who do not report receiving free school meals relate to: (i) not visiting a dentist in the last year or never visiting a dentist (27.1% vs 15.8%), and (ii) not engaging in organised sport or physical activity outside school in the 4 weeks prior to the survey (50.8% vs 37.2%).

In terms of possible reasons why pupils may engage in less physical activity, Figure 7 shows that a higher proportion of pupils receiving free school meals report that they view their safety as poor or very poor when walking, cycling, wheeling[25] or running than among pupils who report not receiving free school meals. That pupils reporting receipt of free school meals are less likely to feel safe than pupils reporting not receiving free school meals extends to other situations not reported in Figure 7. Sampled Year 6 to Year 13 pupils who report receipt of free school meals are more likely to rate their safety after dark as poor or very poor (25.7% vs 20.9%) and the ability of the police to keep them safe as poor or very poor (16.3% vs 10.9%) than pupils who report not receiving free school meals.

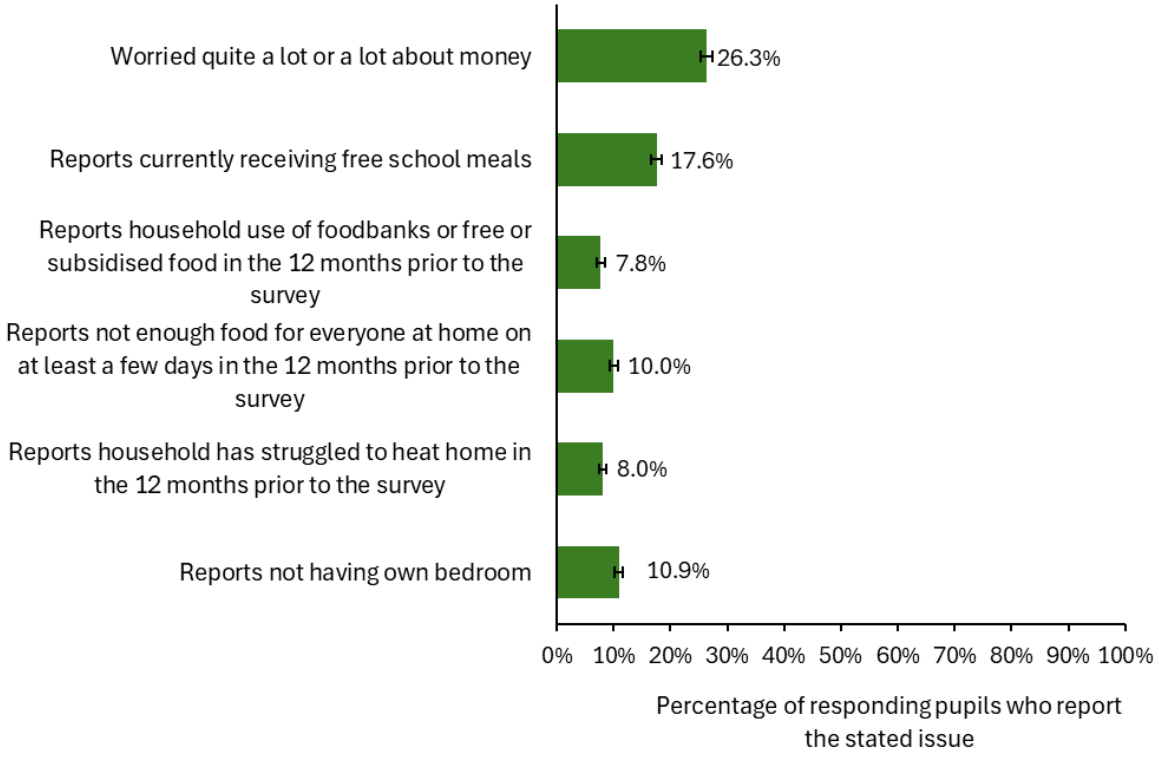
[25] The equivalent term to walking when using a wheelchair or other wheel-based mobilities.

Alternative deprivation indicators

Overview

As discussed earlier, there are a number of other variables within the Flourish survey that are potential indicators of deprivation. Figure 8 shows that the most frequently reported indicator of potential deprivation among sampled Year 6 to Year 13 pupils is being worried quite a lot or a lot about money (reported by 26.3% of pupils), and the least commonly reported indicator is pupils reporting that their household has used foodbanks or free or subsidised food in the 12 months prior to the survey (reported by 7.8% of pupils).[26]

Figure 8: Percentage of sampled pupils reporting different potential deprivation indicators - 2024 (Year 6 to Year 13 data combined)



In terms of changes over time, beyond the free school meals indicator, the two other indicators referencing food and the indicator referencing heat were only asked in 2024

[26] We restrict attention in Figure 8 to Year 6 to Year 13 pupils as this is the only data available on receipt of free school meals, however, for the other indicators, data is also available for Year 4 and Year 5 pupils.

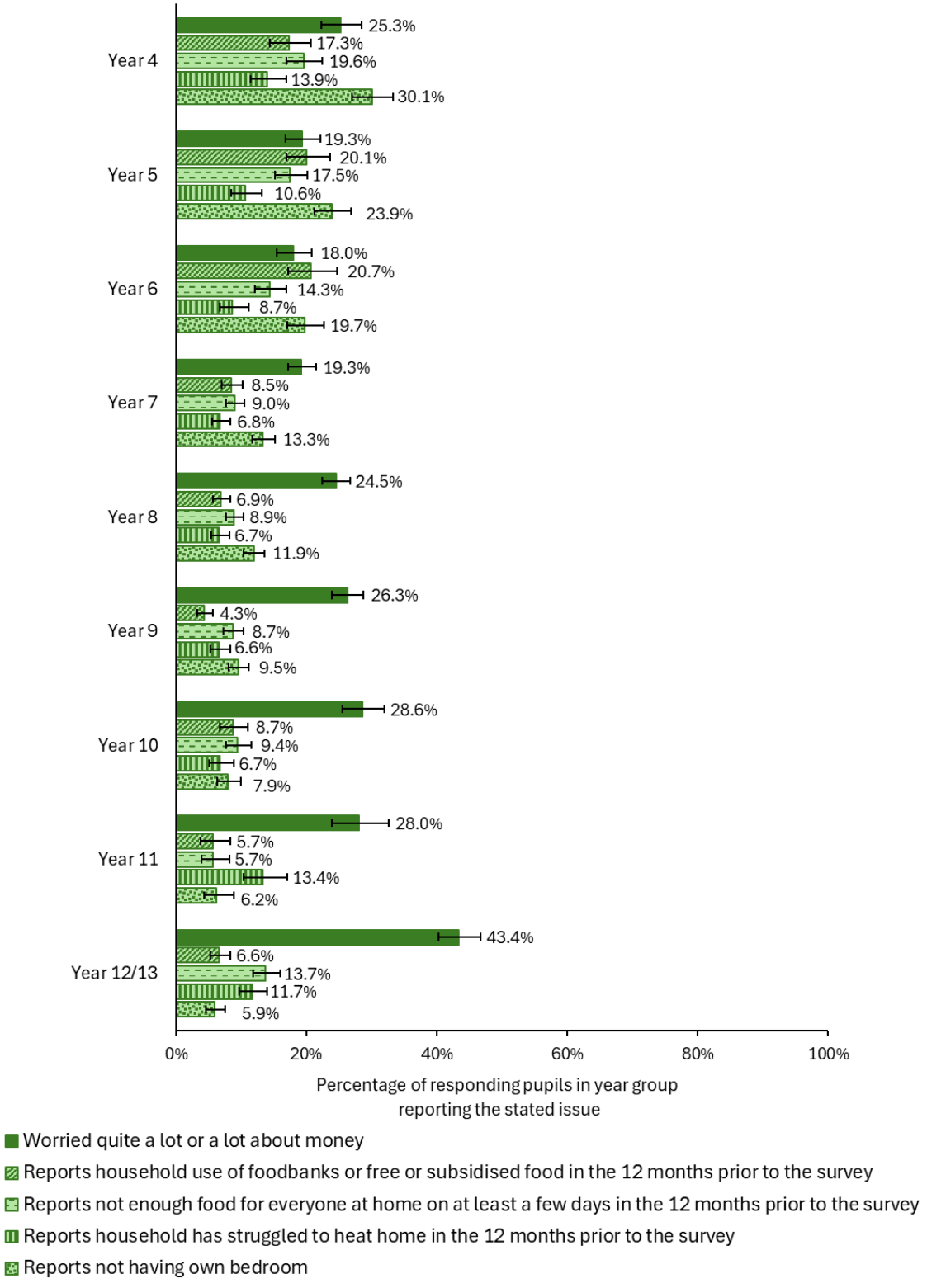
and so time comparisons are unavailable. For worries about money and reporting not having a separate bedroom the picture is one of stability between 2017 and 2024. When looking at Year 6, Year 8, Year 10 and Year 12/13 separately, none of the differences between 2017 and 2024 in the proportions of sampled pupils reporting worrying quite a lot or a lot about money and/or not having their own bedroom are statistically significant.

Prevalence by age

Figure 9 (on the following page) shows that the different deprivation indicators have quite different relationships with age, although generally, the prevalence of the various issues are lowest for pupils in secondary school before Year 11. First, the proportion of sampled pupils reporting that they do not have their own bedroom declines with age from 30.1% in Year 4 to 13.3% in Year 7 and then to 5.9% in Year 12/13. Also, the percentage of sampled pupils reporting that their household used food banks or another source of free/subsidised food in the 12 months prior to the survey is noticeably lower among sampled secondary pupils than among primary pupils. For example, 20.7% of sampled Year 6 pupils report that their household used food banks or other free/subsidised food in the 12 months prior to the survey compared to 8.5% of sampled Year 7 pupils.

The other indicators all have a pattern where it is the youngest and oldest pupils that are most likely to report the indicator. For example, 19.6% of sampled Year 4 pupils report that on some days in the 12 months before the survey there was not enough food for everyone in their household falling to 9.0% of sampled Year 7 pupils before increasing back to 13.7% of Year 12/13 pupils. The largest increase in prevalence among the oldest pupils involves pupils reporting that they worry quite a lot or a lot about money. Sampled pupils in Year 8 to Year 11 are more likely to report worrying quite a lot or a lot about money than pupils in Year 5 to Year 7; for example, 24.5% of sampled Year 8 pupils report this issue compared to 19.3% of Year 7 pupils. However, the increase between Year 11 and Year 12/13 pupils is noticeably larger: 43.4% of Year 12/13 pupils report worrying quite a lot or a lot about money compared to only 28.0% of Year 11 pupils.

Figure 9: Percentages of sampled pupils reporting each of five potential indicators of deprivation - 2024 (Year 4 to Year 13 separately)

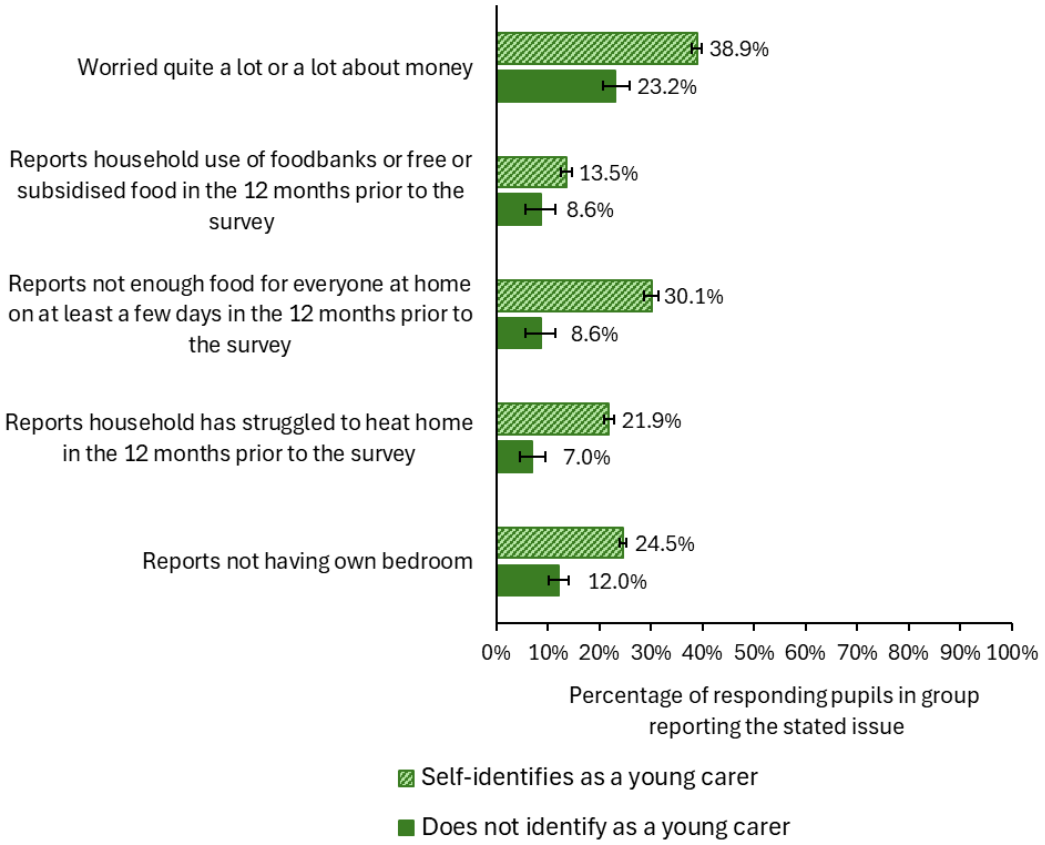


Variations by group

We now look at which groups are more likely to report the different deprivation indicators. As before, this and the following subsections only identify associations between indicators, the current data does not demonstrate that one indicator causes another. As one might expect, sampled Year 6 to Year 13 pupils who report receiving free school meals are more likely to report each of the other deprivation indicators in Figure 8 than pupils who report not receiving free school meals. However, in all cases less than 25% of sampled Year 6 to Year 13 pupils who report receipt of free school meals report one of the other deprivation indicators listed in Figure 8. This limited overlap between the deprivation indicators is discussed further in the following subsections.

Among the groups considered, identifying as a young carer is the only other group, beyond reporting receipt of free school meals, which reports a higher rate for all the alternative deprivation indicators than among those who are not in the group. Not only are sampled pupils who identify as young carers more likely to report the different deprivation indicators, they do so by large margins compared to pupils who do not identify as young carers. Figure 10 shows that sampled Year 6 to Year 13 pupils who identify as young carers are more than three times more likely to report there not being enough food for everyone at home and/or there being struggles to heat their home in the 12 months prior to the survey than pupils who do not identify as young carers. Similarly, sampled Year 6 to Year 13 pupils who identify as young carers are around twice as likely to report not having their own bedroom than pupils who do not identify as young carers.

Figure 10: Percentages of sampled pupils reporting different deprivation indicators split by whether or not pupils identify as young carers - 2024 (Year 6 to Year 13 data combined)



The levels of the deprivation indicators among young carers are also notable; almost 4 in 10 sampled Year 6 to Year 13 pupils who identify as young carers report worrying quite a lot or a lot about money, while almost a third report that their household did not

have enough food for everyone at home on at least some days in the 12 months prior to the survey, and almost a quarter report not having their own bedroom.

Turning to the other groups of interest, reporting worrying quite a lot or a lot about money is also more likely to occur among sampled Year 6 to Year 13 pupils identifying as having SEND or reporting low mental wellbeing. Also, pupils identifying as from Mixed or multiple ethnic groups are more likely to report money worries than White pupils, while pupils who describe their gender in another way are more likely to report money worries than those identifying as male or identifying as female. Aside from young carers, the largest difference in reporting money worries is according to mental wellbeing; 33.8% of sampled Year 6 to Year 13 pupils who report low mental wellbeing report that they worry quite a lot or a lot about money compared to only 20.0% of pupils reporting average or high mental wellbeing.

In terms of other variations, both pupils reporting low mental wellbeing and those identifying as having SEND are more likely to report that their household struggled to heat their home and/or that there was not enough food for everyone at home on somedays during the 12 months prior to the survey than pupils not identifying as having SEND and/or reporting average or high mental wellbeing. Additionally, sampled Year 6 to Year 13 pupils who describe their gender in another way are more likely to report that their household used foodbanks or other sources of free or subsidised food in the 12 months prior to survey than pupils identifying as female or identifying as male. Finally, pupils identifying as Black, Black British, Caribbean or African are more likely to report that they do not have their own bedroom and/or that on somedays in the 12 months before the survey their household did not have enough food for everyone than White pupils.

Again, the size of some of these differences are large. Sampled Year 6 to Year 13 pupils who identify as Black, Black British, Caribbean or African are more than twice as likely to report not having their own bedroom than White pupils (31.3% vs 12.8%). Also, sampled pupils who identify as having SEND are more than twice as likely to report that their household struggled to heat their home (15.0% vs 6.4%) and/or did not have enough food for everyone on some days in the 12 months prior to the survey (18.6% vs 8.5%) than pupils who do not identify as having SEND.

Overlaps between indicators

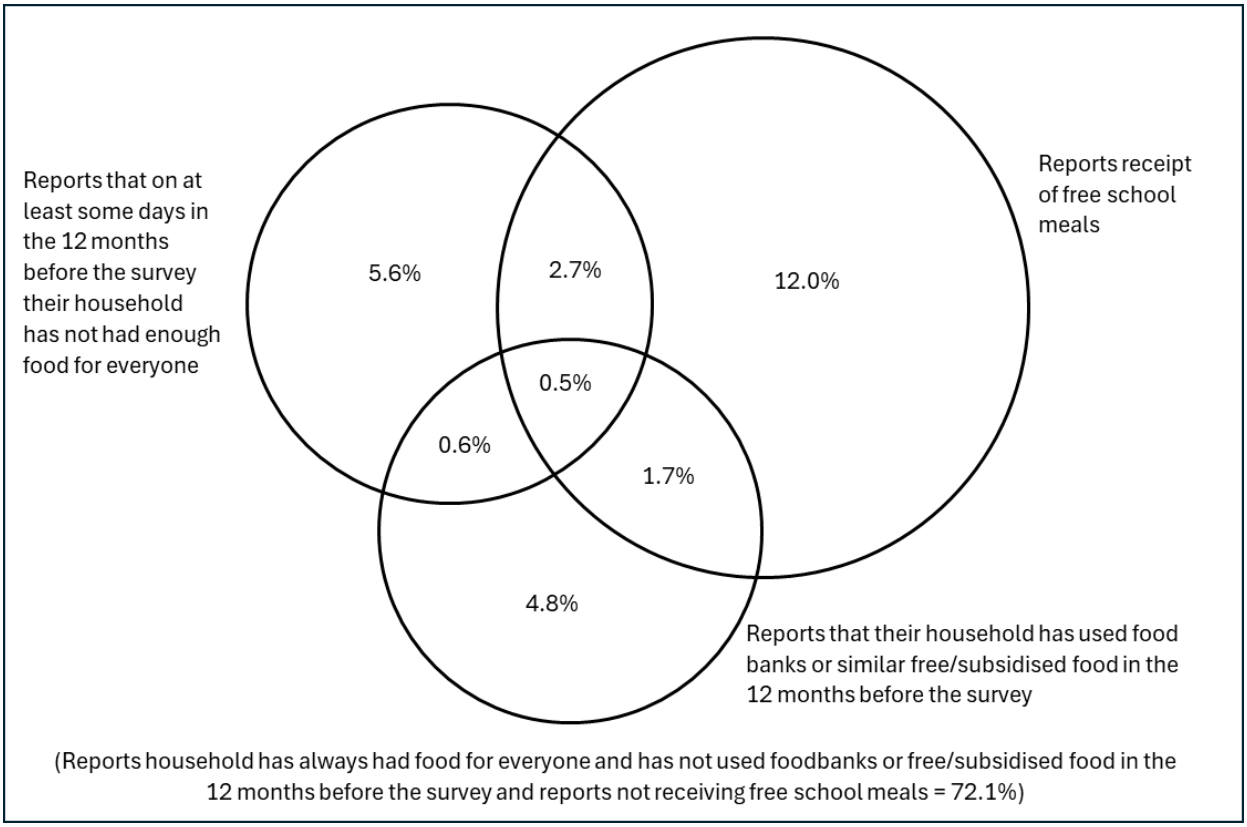
A key question is whether the different potential deprivation indicators identify the same pupils as suffering from deprivation. In short, while there is some overlap between the indicators, it appears relatively low. This suggests that the different indicators likely identify different issues. This means that if one used one of the indicators listed in Figure 8 instead of receipt of free school meals as the main proxy for deprivation, a different set of pupils with different characteristics would be identified as deprived.

One way to understand the potential associations between the variables is to look directly at the extent to which pupils report more than one of them. We first do this for the following four indicators, namely pupils: (i) reporting receipt of free school meals, (ii) reporting not having their own bedroom, (iii) reporting that their household has struggled to heat their home in the 12 months prior to the survey, and (iv) reporting that at least on some days in the last 12 months there has not been enough food for everyone at home.

Among sampled Year 6 to Year 13 pupils 70.8%, or over two-thirds, report none of the four issues listed in the previous paragraph. Another 21.2% of sampled Year 6 to Year 13 pupils report one of the four indicators; by definition, none of this group of pupils report an overlap of indicators. As such, only 8.0% of sampled Year 6 to Year 13 pupils report more than one of the four listed indicators. The most common combination of pupils reporting more than one indicator is when a pupil reports that they do not have their own bedroom and they also report that they receive free school meals; this combination is reported by 2.8% of pupils.

A second way to highlight that while the deprivation indicators overlap, the extent of the overlap is limited, is to look specifically at the three indicators related to the affordability of food. As such, Figure 11 is a Venn diagram showing the percentage of pupils reporting that they receive free school meals, their household has used foodbanks or free/subsidised food in the 12 months prior to survey and/or on at least some days their household has not had enough food for everyone in the 12 months prior to survey.

Figure 11: A Venn diagram showing the overlap of sampled pupils reporting that they receive free school meals, their household has used foodbanks or free/subsidised food in the 12 months prior to survey and/or on at least some days their household has not had enough food for everyone in the 12 months prior to survey – 2024 (Year 6 to Year 13 data combined, circles are not to scale)



In terms of what Figure 11 shows, first, 72.1% of sampled Year 6 to Year 13 pupils report none of the three indicators of food affordability issues. Second, reporting receipt of free school meals is more common than reporting the other two indicators: in total 17.6% of sampled pupils report receipt of free school meals compared to 10.0% who report that their household has not always had enough food for everyone and 7.8% who report that their household has used food banks or other free or subsidised food. Third, only a relatively small proportion of pupils report multiple indicators of food affordability issues; 5.5% of sampled Year 6 to Year 13 pupils report at least two out of the three

indicators of food affordability issues while only 0.5% all three indicators of food affordability issues simultaneously. In contrast to these last two percentages, 22.4% of sampled Year 6 to Year 13 pupils report only one of the three indicators of food affordability issues.

To understanding why the indicators identify different groups of pupils one needs to consider the points raised in the section on measuring deprivation, namely: (i) the specific eligibility criteria for receiving free school meals, (ii) that free school meals and foodbanks are interventions that are designed to at least partially alleviate food affordability issues, and (iii) pupils may only have a partial picture of their households' true economic situation.

Testing for associations between indicators

To more formally investigate the extent of associations between the different deprivation indicators we can again perform chi squared tests of independence and calculate the phi co-efficients. We do this for the 15 possible pairs of indicators that can be formed from the indicators listed in Figure 8. The chi-squared tests indicate that among sampled Year 6 to Year 13 pupils there are two pairings of indicators listed in Figure 8 that have associations that are not statistically significant. In other words, the indicators are not related to each other. The first pairing for which this is true is between pupils reporting that they do not have their own bedroom and pupils reporting that they worry a lot or quite a lot about money. The second pairing is between pupils reporting that they worry quite a lot or a lot about money and pupils reporting that their household used foodbanks or other free or subsidised food in the 12 months prior to the survey.

The 13 other possible pairings of indicators in Figure 8 are all found to have associations that are statistically significant. However, while statistically significant, the size of these associations are all small. Generally, the phi co-efficient for these statistically significant associations is between 0.03 and 0.17. The only association which is a bit larger is between pupils who report that their household has struggled to heat their home in the 12 months prior to the survey and pupils who report that on at least a few days in the 12 months prior to the survey there was not enough food for everyone at home. In this case, the phi co-efficient is 0.28.

Appendix 1: Assessing the representativeness of the sample

A separate topic report provides a detailed comparison of the 2024 Flourish sample with data for the population of schools and pupils in Norfolk. While the sample data is broadly in line with the population data for some characteristics, such as ethnicity, for other characteristics there are differences to the population data. These differences are clearest in terms of the age distribution of responding pupils and the geographic distribution of schools taking part in the survey.

Regarding age, the data is concentrated in Year 7 to Year 10 (pupils aged 11 to 15) rather than being evenly distributed across year groups. To avoid differences in age distributions impacting comparisons between years, and with the wider SHEU comparator data for 2022, we generally make these comparisons according to individual year groups.

Regarding the geographic distribution of the 2024 data, only primary schools chose to take part in the Borough of Great Yarmouth and in Norwich none of the Year 7 to Year 11 data comes from state-funded schools. Furthermore, pupils from King's Lynn and West Norfolk are over-represented in the data for secondary schools and colleges, while pupils from Norwich are over-represented in the primary data and pupils from Breckland are under-represented in the primary data. This uneven geographic distribution of data means that we do not break out results by district.

Also, it appears that the sample probably under-represents pupils who are eligible for free school meals. This, combined with the geographic distribution of the data, means that the sample may under-represent children from deprived backgrounds. However, this does not mean the data should be ignored, rather thought should be given to whether a particular variable is more or less likely to be observed among pupils from deprived backgrounds. For example, where a behaviour is thought to be more common among pupils from a deprived background, the results in this report are likely to be a minimum for the true prevalence of the behaviour among the full population of Norfolk pupils.

In terms of the validity of comparisons between 2015, 2017 and 2024, as noted previously, we control for differences in the age distribution of pupils.[27] Nevertheless, there are other differences in the compositions of the samples between years. The slightly greater ethnic diversity of the sample and the large increase in the proportion of pupils reporting receipt of free school meals between 2017 and 2024 are broadly mirrored by changes in population data between 2016-17 and 2023-24. In other words, for these two characteristics, the population of pupils in Norfolk is changing rather than it being a clear issue with the sample's representativeness. Regarding the gender breakdown of the sample and the proportion of pupils identifying as having SEND, it is possible that there are changes in the sample composition between years that do not match the population data; although, in both instances, methodological issues cloud the picture.[28]

Overall, the analysis is representative of the subset of pupils who are educated within schools with management that might consider undertaking a pupil health survey worthwhile. The Norfolk population data indicates that the sample under-represents pupils taught in schools rated by Ofsted as Requires Improvement. We cannot rule out the possibility that differences in results between years, and with SHEU data from other parts of the country, occur due to differences in the characteristics of pupils being sampled.

The results in this and the other topic reports are all unweighted.

[27] The size of the Flourish sample has also varied considerably between years being 3,155 in 2015 and 11,417 in 2017; however, these changes in sample size are reflected in the size of the confidence intervals reported in figures and they should not have a clear impact on the sample's representativeness.
[28] For gender, the sample appears to becoming less representative over time with the proportion of females in the sample increasing. However, drawing firm conclusions is complicated by the population data being about sex rather than gender identity; in other words, the population data only records pupils as male or female. For SEND status, the increase in the proportion of the sample self-identifying as having SEND exceeds the increase observed in the population data between 2016-17 and 2023-24 by some margin; the large increase in the Flourish data probably relates to the question wording in the Flourish questionnaire changing between 2017 and 2024.

Appendix 2: Mapping year groups to age

Generally, the topic reports based on the Flourish Survey break data out by school year group rather than age for two reasons: (i) key events in pupils' lives are determined by school year group, e.g. the switch from primary to secondary school and GCSE exams, and (ii) SHEU reports comparator data from other parts of the country for selected year groups.

For readers who are unfamiliar with school year groups Table 1 provides a mapping to the age of pupils. Year 6 marks the end of primary school, while Year 7 marks the start of secondary school. GCSE exams are taken in Year 11 with pupils moving to sixth form or further education providers for Year 12/13. As discussed in the first section of the report, the questions pupils see in the Flourish Survey vary to some extent by the year group they are in.

Table 1: Age of pupils in school year groups included in the Flourish Survey

School year group	Age of pupils
Year 4	8-9
Year 5	9-10
Year 6	10-11
Year 7	11-12
Year 8	12-13
Year 9	13-14
Year 10	14-15
Year 11	15-16
Year 12/13	16-18

The Flourish Survey questionnaire does not enable pupils in Year 12 and Year 13 to be separated. Also, in rare circumstances individual pupils of a particular age may be in a different year group if they have been moved up or down a year.