EDUCATION POLICY INSTITUTE

Characteristics, experiences and outcomes of children registered – and not registered, when entitled – for free school meals

Analyses of the Millennium Cohort Study

Nuffield Foundation

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with Dr Kerris Cooper

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Data citations

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A note on language and definitions

Throughout this report, we focus particularly on two groups of children.

The first group is those who are **registered for FSM.** This means that they are signed up to receive free school meals and recorded as such in the National Pupil Database (NPD). Their eligibility and entitlement are known, and they are recorded as entitled and eligible in the system.

The second group is those who, according to the detailed information on welfare benefits receipt and family income available in the Millennium Cohort Study (MCS), meet eligibility criteria for FSM, but are not recorded as such in the NPD. They are therefore **eligible for and entitled to FSM** — but they are **not registered for their entitlement**.

In our graphs and tables, we correspondingly present results across four main groups – those:

- Not in poverty[1]
- In poverty[2]
- Not registered for FSM but eligible (those who meet eligibility criteria for FSM-entitlement but who are not signed up and recorded as registered in the NPD)
- FSM-registered (those who are registered for FSM in the NPD)

[1] According to the measure in the MCS, which is receiving 'less than 60 per cent of median equivalised family income,' and is 'derived from the aggregate income of the MCS families, and hence is relative to other families with children of this age.' Platt (2014)
[2] Again, according to this measure in the MCS.

Executive summary

This report is part of a wider project, funded by the Nuffield Foundation: 'What has FSM measured and what are the implications?'[3] It is published alongside the project's main public output, 'Registration for Free School Meals (FSM): issues and implications for research, policymaking, practice and access,' available here:

https://epi.org.uk/publications-and-research/registration-for-free-school-meals-final-report

In this report, we investigate two main questions:

- What can we learn about the characteristics of children who are **not** registered for FSM when they meet eligibility criteria and are entitled to be registered?
    - We compare these children both to FSM-registered counterparts, and to children in higher-income families.
- How does registration and identification as FSM-eligible relate to children's experiences within the school system?
    - We look comprehensively at feelings about and reported experiences of school; self-esteem, efficacy and expectations; teachers' judgements of children; and attainment.

With newly available data, we build on previous literature that has begun to explore the detailed characteristics of FSM-registered and non-registered children. We also build on our work throughout this project utilising the National Pupil Database (NPD) and Households Below Average Income dataset.

We add to the growing evidence on the characteristics of children not registered for FSM when entitled, to aid understanding of the group for both policymaking and research. We also add to the evidence on FSM-registered children's journeys and experiences through education, which is important both in itself and in helping to unpick and understand the multifaceted reasons for lower attainment trajectories among this group.

In this report, we use linked data from the Millennium Cohort Study (MCS). The MCS has followed a large national sample of children from their birth around the turn of the century through their childhoods and teenage years, and into adulthood. MCS data includes detailed information on welfare benefits receipt and indicators of family income, spanning the school years, at ages five

[3] https://www.nuffieldfoundation.org/project/what-has-free-school-meals-measured

(Reception), seven (year one), 11 (year six), and 14 (year nine). The latest linked MCS data also includes yearly information directly from the NPD on FSM registration.

At each point we can construct indicators of whether a child looks as though they meet eligibility criteria and are entitled to and 'should be' registered for FSM.[4] We can examine whether children who appear eligible, entitled, and as though they 'should be FSM' are in fact registered – or not.

Key findings

Factors predicting non-registration for FSM when entitled

Across the four study waves, at ages five, seven, 11 and 14, we look at a range of family and home characteristics, parent and financial factors, and school and local area factors that represent probable relative advantage / disadvantage.

For many of these factors, there is a gradient. Children registered for FSM seem to be the most disadvantaged, followed by those who are entitled but not registered, followed by those not in poverty.[5]

Children registred for FSM are **less** likely than those not registered when entitled and **much less** likely than those not in poverty to:

- Have contact with their biological father
- Live in a home owned by their family (at older ages)
- Live in a home without damp
- Be read to every day
- Have a quiet area for homework
- Have their own computer
- Have no responsibilities for caring for others
- Have a parent with higher confidence in their own parenting
- Have a mother who works / has worked
- Have a mother with good health (at older ages)
- Have a mother with good mental health (at older ages)
- Have a mother who feels financially comfortable (at older ages)
- Have someone attend their parents' evening, or be involved with their school

[4] See our previous publication for a timeline of changes to eligibility criteria and factors impacting eligibility: https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf
[5] We use the measure of poverty in the MCS, which is receiving 'less than 60 per cent of median equivalised family income,' and is 'derived from the aggregate income of the MCS families, and hence is relative to other families with children of this age.' Platt (2014)

- Have paid extra lessons

For other factors, the main pattern is of a **stark difference** between those families not in poverty and the rest, regardles of whether they are registered or not (both children in poverty registered for FSM when entitled, and those in poverty but not registered when entitled).

All children in poverty (both children registred for FSM when entitled and those not registered when entitled) are **much less** likely than those not in poverty to:

- Live in a home owned by their family (at younger ages)
- Have their own bedroom
- Go on paid day trips and outings
- Attend classes and clubs outside of school
- Own many books
- Have a mother with educational qualifications
- Have a mother in a managerial position
- Have a mother with good health (at younger ages)
- Have a mother with better mental health (at younger ages)
- Have a mother without perceived financial difficulty, or who is behind with bills (at younger ages)
- Have not moved schools in recent years (at older ages)

A striking pattern at all four ages is a relationship beween registration for FSM when entitled and the percentage of pupils within a child's school FSM-registered, as well as the income deprivation level of their local area. When family and home characteristics, parent and financial factors, and other school and local area factors are controlled for, it is the percentage of pupils within a child's school who are registered for FSM that dominates. **The more peers registered within their school, the more likely an entitled child is to also be registered for FSM**.

A meaningful minority of children experience periods out of state education during the course of their school years.[6] The more times a child is not enrolled in a state school, the less frequently they are registered for FSM in the years that they are present. But there is little relationship between number of enrolments and poverty. Children who **miss more years are less likely to be registered for FSM** – but they are similarly likely as those who are enrolled more often to be in **long-term poverty**.

[6] https://epi.org.uk/publications-and-research/children-missing-from-education/

A fifth of MCS sample children who meet criteria for FSM eligibility at both the primary and secondary stages (and who by this definition can be conceived to be in consistently disadvantaged families) are not consistently registered at both stages. This suggests substantial unmet need and a system not working as intended.

Experiences and outcomes of children registered for FSM

Children in the MCS sample who are registered for FSM fare worst throughout their educational careers in terms of:

- their feelings about and reported experiences of school (e.g. their liking of school; feelings that their teacher is 'getting at them;' their unhappiness with and at school).
- their self-esteem, efficacy and expectations (although here there are also differences by gender) (e.g. feelings about their own capabilities and competence, plans for their future education).
- their teachers being more likely to judge them unfavourably, and to hold lower expectations for their progress – even when accounting for capabilities as proxied by cognitive test scores (e.g. teacher ratings of 'ability and attainment,' and of the child's likelihood of post-16 study and university attendance).
- being much less likely to pass key academic thresholds like attaining a C/level 4 in English and Maths GCSEs, compared both to those not in poverty and those in poverty but not registered for FSM when entitled (i.e., pupils who are similarly low-income and in receipt of the same qualifying welfare benefits).

Depression of trajectories and negative experiences within schooling seem particularly pronounced for the FSM-registered group – crucially, including when they are compared to other children in poverty and those who meet registration criteria for FSM, but are not signed up. This suggests a specific 'FSM penalty' on top of well-established 'poverty penalties,' because equivalent children who are FSM-registered fare worse than their counterparts.

Mechanisms through which this penalty may play out that are supported by this research and wider work within this area include:

- Poverty and related disadvantages being most profound among the FSM-registered group, which impacts multiple aspects of their families' resources and lives and consequentially educational attainment.

- Unnecessarily restrictive requirements and aspects of the school system (for example costs for extras within the school day) acting to most severely disadvantage and compound the disadvantage of those who are most deprived.

- Differentiating structures and practices within the education system acting to reproduce rather than mitigate social inequalities.

Recommendations and next steps

Our research in this report, and across our wider project and previous work, supports several recommendations.

In analysis and for other purposes where whether a child is FSM-registered or not is used as a key factor, periods of non-enrolment should be treated as equivalent to being enrolled and FSM-registered. For example, when the number of times a pupil has been FSM-registered is counted to proxy persistence of poverty, this approach should be taken. This is because non-enrolled children are likely to be in poverty (and to be disadvantaged within the system in other ways). While this will result in some false positives, it mitigates against many children being missed and missing out.

The clear gradient shown here particularly in attainment from those FSM-registered, to those entitled but not registered, to those otherwise in poverty, to those not in poverty, is a challenge once more to research that focuses solely on those FSM-registered vs non-FSM-registered when exploring the relationship between disadvantage and education (for example in order to map progress in closing the attainment 'gap'). Again, alongside findings in our other project reports,[7] this suggests a need to supplement FSM-based analysis with other measures.

As we have recommended previously, centralised national auto-enrolment for FSM should take place. Our findings here have shown that non-registered, entitled children are much more disadvantaged across multiple dimensions than their peers not in poverty – and so it is important that they can access the meals and other provisions to which FSM-registration is a gateway.

Child poverty should be alleviated at its source, so that its impacts are not felt throughout children's lives. Our analyses in this paper add to a longstanding evidence base on the depressed

[7] https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf

trajectories of those in poverty.[8] As we have argued in more detail elsewhere, the most immediate and obvious first step to alleviation is to revoke the 'two-child limit', which mechanically places substantial numbers of children into poverty.[9]

It is crucial to ensure the education system and schools work actively to counteract disadvantage in children's home lives, rather than to compound it. Demands and requirements (for example, in terms of expensive branded uniforms and equipment and extra payments) should be legislated against. There is a partial move towards this in the current Children's Wellbeing and Schools Bill, but it needs to go further. Revisions to the Bill should be informed by consideration of all requirements in schools through an equity and poverty lens to ensure removal of restrictive and damaging policies and practices.

It is important to think carefully about the enactment and implementation of targeted policies; to be aware of and mitigate against unintended consequences of well-intentioned initiatives, for example, in terms of impacts on teachers' perceptions and expectations. This is so that policies can be played out as fairly and effectively as possible and alleviate rather than reproduce disadvantage.

New data from studies of 2020s cohorts[10] will in time offer an opportunity to build on and update our analyses, and to see the extent to which the patterns we have indicated here, where FSM-registered children fare worst across multiple dimensions throughout their educational careers, and children not in poverty fare best, continue in the more recent years and in upcoming policy and social environments.

[8] https://link.springer.com/article/10.1007/s12187-020-09782-0
[9] https://epi.org.uk/publications-and-research/the-two-child-limit-ill-conceived-inefficient-and-misunderstood-2/
[10] https://fivetotwelve.org.uk/
https://cls.ucl.ac.uk/cls-studies/children-of-the-2020s-study/
https://www.annafreud.org/research/current-research-projects/growing-up-in-the-2020s-national-study/

Introduction

Introduction

This report is part of a wider project, funded by the Nuffield Foundation: 'What has FSM measured and what are the implications?'[11] During this study, we have reviewed the history of the FSM measure, including its use in research, policy-making, evaluation, monitoring, resource allocation, and practice (Campbell and Cooper, 2024a).[12] We have carried out new quantitative analyses of the National Pupil Database (NPD) and Households Below Average Income (HBAI) datasets to explore what more we can learn about which pupils are and are not registered for free school meals when they are entitled (Campbell with Cooper and Fowler, 2025).[13]

We have also conducted in-depth surveys and interviews with local authorities, schools and multi-academy trusts, and gathered information from government, to understand more about the processes of and barriers to registering children for FSM (Cooper with Campbell, 2025).[14] And we have convened a deliberative event, attended by experts across research, policy and practice, where we discussed and synthesised ideas to improve the uses of FSM going forward (Campbell, Cooper and Joseph, 2025).[15]

In this part of the project, we are interested firstly in understanding more about which children do not register for FSM when they are entitled, and secondly in exploring how identification and registration as FSM-eligible relates to children's experiences within the school system. To do this, we build on the previous literature and our work utilising the NPD and HBAI, using linked data from the Millennium Cohort Study (MCS).

The strength of the MCS data in examining patterns associated with registration and non-registration for FSM is that it includes information on welfare benefits receipt and family income, spanning the school years, at ages five, seven, 11, and 14. At each point, we can construct indicators of whether a child looks as though they are entitled to and 'should be FSM.' The latest iteration of the linked data[16] also includes yearly information from the NPD on FSM registration, so

[11] https://www.nuffieldfoundation.org/project/what-has-free-school-meals-measured
[12] https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf
[13] https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf
[14] https://epi.org.uk/wp-content/uploads/2025/06/Updated-FSM-registration-report_FINAL.pdf
[15] https://epi.org.uk/publications-and-research/registration-for-free-school-meals-final-report
[16] https://cls.ucl.ac.uk/wp-content/uploads/2021/05/MCS-linked-education-datasets-user-guide-3rd-edition.pdf

we can examine whether children who appear entitled and as though they 'should be FSM' are in fact registered – or not.

In the first half of the current report, we extend and develop work with previous iterations of the linked MCS-NPD data including that by Taylor (2018),[17] who, using the Welsh rather than the English MCS sample, looked among children classed as being in poverty at who was registered for FSM at age seven. Taylor's findings included indications that children who lived in poverty but who were not registered for FSM were, like their FSM-registered counterparts, more likely than those not in poverty to have parents with low or no educational qualifications.

Sutherland et al (2015)[18] also used the MCS, exploring the characteristics of children who had been registered eligible for FSM in one of the six years leading to the end of primary school. They found a general pattern of overlap between other measures of socio-economic disadvantage and FSM status, but that there is was variation within this. For example, fewer children registered for FSM had mothers with degree–level education – but some did. More children not registered for FSM had parents in managerial positions – but some FSM-registered children did.

We also build on work with earlier cohorts including the Longitudinal Study of Young People in England (LSYPE). This includes Iniesta-Martinez and Evans' (2012)[19] analysis which suggested that, among secondary school pupils, those who lived in more affluent areas or attended schools with a lower overall FSM rate were less likely to be registered for FSM when eligible. Ilie et al (2017)[20] also used the LSYPE and considered the overlap between ever being registered for FSM over a five-year period and other family characteristics. They found correlations between various measures of socio-economic disadvantage (including parental occupation, qualifications, and housing tenure) and FSM-registration – but, like Sutherland et al (2015), that the strength of this correlation varied. Particularly, they flagged that 'only 48% of those in low-income households' were registered for FSM.

[17] https://www.tandfonline.com/doi/full/10.1080/00071005.2017.1330464
[18] https://assets.publishing.service.gov.uk/media/5a74fe2540f0b6399b2afcf7/RR486_-_Factors_associated_with_achievement_-_key_stage_2.pdf
[19] https://assets.publishing.service.gov.uk/media/5a79faf540f0b66a2fbff077/DFE-RR235.pdf
[20] https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1002/berj.3260

The first part of this report is a comprehensive comparison of the characteristics (at the family, school, and local levels) of the children who seem as though they 'should be FSM-registered', but who are not, to other pupils, including those who are registered.

In the second part of this report, we go on to compare all MCS sample children who are FSM-registered in the NPD to three other groups. Firstly, again, to those who appear to be FSM-eligible based on the welfare benefits receipt and income recorded in the MCS survey data, but who are not FSM-registered. Secondly, to those who are recorded in the MCS as living in poverty, but who are not registered for FSM, nor are eligible. Thirdly, to those not in poverty. We are interested in differences between these groups in terms of self-perceptions and concepts, and feelings about experiences in school. We are also interested in how teachers' perceptions of children vary according to their FSM-registration and poverty status. Additionally, we examine how attainment at key stage 2 and key stage 4 differs across groups.

Being registered for FSM confers resources including meal provision and prioritisation within schools, particularly since the introduction of pupil premium. The policy intention is that this should benefit identified eligible children. Our evidence review (Campbell and Cooper, 2024)[21] suggested that the impacts of 'being FSM' may not, however, be so straightforward. For example, generalisations from the average known tendencies of children who are registered for FSM to attain lower levels may result in children who have the capacity to do just as well as their more affluent peers being underrated. It is also possible that stereotyping, labelling and stigma might result in negative self-perceptions or experiences.

All of this may have a cumulative impact on attainment. Ilie et al (2017) analysed the Longitudinal Study of Young People in England (LSYPE) and found that, even when controlling for a variety of demographic and socioeconomic characteristics known to be related to children's outcomes, being recorded as FSM-eligible predicted lower GCSE results. They suggested that 'FSM eligibility may capture something unique about the lived experience of deprivation.'[22]

Particularly, by comparing the group registered for FSM to those eligible but not registered and to other children in poverty, we can get a step closer to understanding some factors that may contribute to the experiences of FSM-registered pupils within the education system. Using national

[21] https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf
[22] https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1002/berj.3260

data from the MCS, we can further untangle whether, on average, registration for FSM seems to play out entirely positively – or whether there is any indication of an 'FSM-penalty': a higher likelihood of FSM-registered pupils to experience their schooling trajectories in a negative way. Pupil premium policy, for example, explicitly requires schools to make salient children's FSM status; this is intended as a positive targeting of resources and support, but it may also have unintended consequences.

In the second part of this report, we examine numerous measures within the MCS of children's self-perceptions and feelings, the perceptions of their teachers, and educational attainment outcomes. These stretch from age seven to age 16, with different measures available at different survey waves.

For more on previous work in this area using the cohort studies and other data, see our evidence review (Campbell and Cooper, 2024).[23]

[23] https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf

Section one: Data, approach and initial patterns

Section one: Data, approach and initial patterns

This report uses updated and extended linked data from the UK Millennium Cohort Study (MCS), spanning both the primary and secondary years. The MCS sampled babies born at the turn of the century, and these children were followed up over numerous waves.[24] Here we concentrate on data from:

- Wave 3 (2006; when children were aged 5, and in school reception)
- Wave 4 (2008; when children were aged 7, and in year 2)
- Wave 5 (2012; when children were aged 11, and in year 6)
- Wave 6 (2015; when children were aged 14, and in year 9)

We use data only for those children whose records were matched through linkage to the English NPD – sub-samples of each wave's main MCS sample.[25] In the NPD we have a marker each year spanning reception to year 11 showing whether the pupil was registered for FSM, as well as other data on the child and the school they attend, including the percentage of pupils within the school who are FSM-registered.

We construct and distinguish groups who appear to be entitled to FSM according to the information in the MCS, and distinguish those who are, and are not, registered as FSM-eligible in the NPD. We also look longitudinally, and compare groups according to factors previously under-researched in quantitative analyses on FSM registration. We consider novel predictors of falling into different groups, constructed according to apparent FSM-entitlement, FSM registration, and poverty.

At each wave, we construct variables combining information on:

- whether a child was **registered** for FSM in the NPD census concurrent to this wave, with;
- information on whether the data in the MCS suggests they **should be registered** for FSM (according to entitlement criteria at each given wave); and,

[24] https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/
[25] For more information on matching, see: https://cls.ucl.ac.uk/data_documentation/mcs-user-guide-to-linked-education-administrative-datasets/

- whether they are reported to live in **poverty**.

Based on our evidence review, which mapped criteria for entitlement at different time-points (Campbell and Cooper, 2024)[26] and the data available in the MCS, we construct the FSM entitlement indicators as follows.

Identifying children in the Millennium Cohort Study who appear to be entitled to FSM

At waves 3 and 4, our indicator captures families who report receiving income support or jobseekers' allowance – the latter only if they also receive housing benefit or council tax benefit, as their jobseekers' allowance is then likely to be income-based. This follows Hansen et al (2010).[27]

At waves 5 and 6, our indicator for FSM-entitlement again captures families who receive income support or jobseekers' allowance (the latter again only if they also receive housing benefit or council tax benefit); as well as those receiving child tax credit **without** working tax credit, the guaranteed element of state pension credit, or employment support allowance. We also condition at waves 5 and 6 on reported income, removing those who fall into the top three quintiles of the distribution among MCS families.

We do not condition on income at waves 3 and 4, because criteria for FSM entitlement were simpler at this time. There was no income threshold, and we think misreporting of income is more likely than misreporting of benefits receipt. Our measure of income at waves 5 and 6 is imperfect, particularly as families' reported income implicitly includes income from welfare benefits, whereas FSM entitlement criteria are based on income from work (Hansen et al, 2010). Our approach is therefore to include those families in the bottom two quintiles who most feasibly 'should be FSM.'

Based on patterns in the data, we initially categorised children into six groups, as shown in Table 1.

[26] https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf
[27] https://policy.bristoluniversitypress.co.uk/children-of-the-21st-century-volume-2

Table 1: Categories of children according to combined information on whether they 'should be FSM,' FSM registration, and poverty.

	In poverty			Not in poverty	
Should be FSM (appear to be entitled)	FSM-registered (and should be and in poverty)	Not FSM-registered (but should be and in poverty)		FSM-registered (but not in poverty)	Not FSM-registered (and not in poverty)
Should not be FSM (do not appear to be entitled)	FSM-registered (but should not be, though in poverty)	Not FSM-registered (should not be and in poverty)			

Number of children falling into entitled ('should be FSM') and other groups

Tables 2-5 show the number of children falling into each category at each age/wave. Note that these figures are reported for completeness and data transparency but that the children included are a sub-sample of uncertain representativeness of the main MCS, which even in its entirety produces survey estimates rather than census numbers. They do not necessarily reflect the population of this age at each given time point. [28]

Table 2: Numbers falling into each category of children, according to combined information on FSM registration, 'should be FSM,' and poverty: Age 5, reception (MCS Wave 3)

	In poverty			Not in poverty	
Should be FSM	FSM-registered: 676 (10.3%)	Not FSM-registered: 318 (4.3%)		FSM-registered: 142 (1.9%)	Not FSM-registered: 4,842 (64.8%)
Should not be FSM	FSM-registered: 237 (3.2%)	Not FSM-registered: 1165 (15.6%)			

[28] We do not use weights here because they do not take account of attrition from the main wave samples during NPD-linkage, but we check later analyses using weights

Table 3: Numbers falling into each category of children, according to combined information on FSM registration, 'should be FSM,' and poverty: Age 7, year 2 (MCS Wave 4)

	In poverty			**Not in poverty**	
Should be FSM	FSM-registered: 878 (11.2%)	Not FSM-registered: 198 (2.5%)		FSM-registered: 223 (2.8%)	Not FSM-registered: 5,186 (66.0%)
Should not be FSM	FSM-registered: 288 (3.7%)	Not FSM-registered: 1088 (13.84%)			

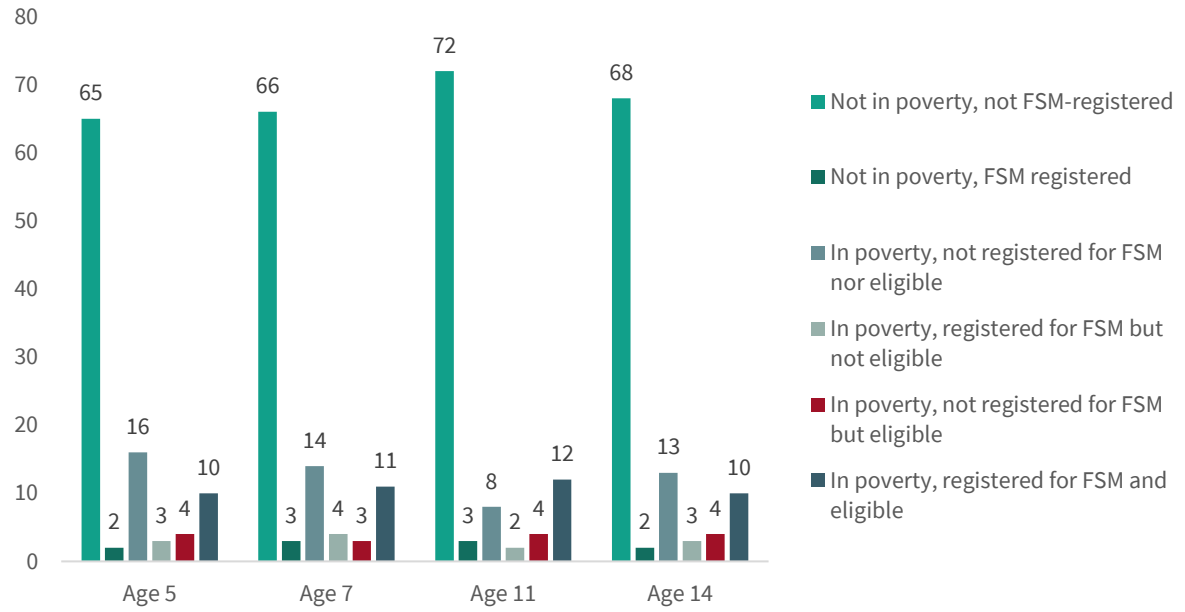
Table 4: Numbers falling into each category of children, according to combined information on FSM registration, 'should be FSM,' and poverty: Age 11, Year 6 (MCS Wave 5)

	In poverty			**Not in poverty**	
Should be FSM	FSM-registered: 817 (11.9%)	Not FSM-registered: 265 (3.8%)		FSM-registered: 215 (3.1%)	Not FSM-registered: 4,943 (71.7%)
Should not be FSM	FSM-registered: 124 (1.8%)	Not FSM-registered: 529 (7.7%)			

Table 5: Numbers falling into each category of children, according to combined information on FSM registration, 'should be FSM,' and poverty: Age 14, Year 9 (MCS Wave 6)

	In poverty			**Not in poverty**	
Should be FSM	FSM-registered: 609 (10.0%)	Not FSM-registered: 268 (4.4%)		FSM-registered: 142 (2.3%)	Not FSM-registered: 4,114 (67.8%)
Should not be FSM	FSM-registered: 164 (2.7%)	Not FSM-registered: 773 (12.7%)			

Figure 1:a Percentage within each wave falling into each category of children, according to combined information on FSM registration, whether they 'should be FSM,' and poverty



We can see from these tables and from Figure 1:a that in all waves but five (when children were in year 6), among those in poverty, the majority were not even entitled to be FSM-registered. This is because criteria are stringent and income thresholds for registration low.[29] We can also see that in each wave, there is a group of children who meet criteria for registration but who are not registered. At each wave, there is also a group of children who are not in poverty, according to the measure in the MCS, but who are FSM-registered. This is congruent with previous research (for example, Hobbes and Vignoles 2010).[30]

In the next chapter's analyses, we concentrate mainly on children who are:

- Not FSM, but should be FSM as they appear to meet criteria and to be entitled (and are in poverty)

We make comparisons to those who are:

- FSM, and should be FSM according to entitlement criteria (in poverty)

We also make some comparisons to the group who are:

- Not in poverty, and not FSM.

[29] See p20 and also here: https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf (P19 and p43) for more details of criteria at different times

[30] https://www.tandfonline.com/doi/abs/10.1080/01411920903083111

Section two: factors predicting non-registration for FSM when entitled

Section two: factors predicting non-registration for FSM when entitled

Comparing characteristics of children according to whether they 'should be FSM' but are not registered, are FSM registered, or are not in poverty

Table 6 shows the factors according to which we explore group membership. Some echo those examined in previous work with the cohort studies, and here what we add is nuance on whether they vary consistently according to children's age, or show different patterns at different waves. Some are novel variables, chosen because they are important markers or proxies for home and / or educationally relevant advantage or disadvantage, resourcing, and aspects of the lives and situations of children and their families. Information on many factors was repeated at each wave, but some questions were only asked at particular time points. In Table 6, 'X' indicates that this information is available in the data we used for analyses for the given wave.

Table 6: Factors examined at each MCS wave

	Wave 3 (age 5)	Wave 4 (age 7)	Wave 5 (age 11)	Wave 6 (age 14)
Family characteristics				
Mother's age	X	X	X	X
Home language	X	X	X	X
Numbers of siblings	X	X	X	X
Parent(s) single / cohabiting / married	X	X	X	X
Grandparent in home	X	X	X	X
Child has no contact with father	-	-	-	X
Housing				
Housing tenure	X	X	X	X
Time at address	X	X	X	-
Damp problem	X	X	X	-
Own bedroom	-	-	-	X
Home and family activities and environment				
No paid day trips	X	X	-	-
Attends clubs/classes out of school	-	X	-	-
Library visits	X	X	X	-
Reading to child	X	X	-	-
Number of books in home	-	-	X	-

Regular bed time	X	X	X	-
Home help with homework	-	-	X	-
Checks homework completed	-	-	X	-
Quiet area for homework	-	-	X	X
Child has own computer	-	-	-	X
Child cares for others	-	-	X	-
Parent factors				
Parenting competence (self-reported)	X	-	-	-
Mother's education	X	X	X	X
Occupational category (NSSEC) / if employed	X	X	X	X
Whether voted	X	-	-	-
Mother reads herself	-	X	X	-
Mother's health (self-reported)	X	X	X	X
Mother's depression (Kessler scale)	X	X	X	X
Mother's longstanding illness	-	-	-	X
Financial wellbeing				
Managing financially (self-reported)	X	X	X	X
Behind with bills	X	X	-	-
Cannot afford holiday	X	X	X	X
Home-school interactions and school activities				
Attend parents' evening	-	X	X	X
Involvement with school	-	X	-	-
Moved schools since last wave	-	X	X	X
Child has paid extra lessons	-	-	-	X
School factors				
Percent FSM	X	X	X	X
Percent English as an additional language (EAL)	X	X	X	X
Local area factors				
Rural / urban	X	X	X	X
Local income deprivation (IMD income domain)	X	X	X	X

Family characteristics

In terms of family characteristics, the **mothers** of the sample children who 'should be FSM' but who are not registered are, on average, **younger** than those in the other categories. This holds at all waves throughout primary school, but not at wave 6, when pupils are in year 9. For example, when the sample children are in reception, the mothers of those who are not FSM-registered but appear eligible average 29.9 years old, compared to 31.1 years old for those eligible and registered. At all waves, the mothers of the group who are not FSM-registered and not in poverty are older than all other groups.

The picture for the MCS-NPD sample children in terms of the relationships between **home language(s)** and FSM-registration is complex, and seems to vary according to the level of English spoken within the household, and by wave. What is clear, however, is that at all waves, the group who are not in poverty are more likely to speak English only. Bearing in mind that the last wave of the MCS we look at here is in 2014, this is congruent with our previous work using the NPD, which found that at this time, the non-FSM-registered group were less linguistically and ethnically diverse (although in the subsequent decade it becomes increasingly so) (Campbell with Cooper 2025).[31]

At age five, sample children who are not registered for FSM when eligible are more likely than any other groups to have **no siblings** (28% of this group have none, compared to 14% of the entitled and FSM-registered group, and 16% of the group not in poverty nor FSM-registered). This is also the case at wave six, age seven. Possibly this reflects things like lessened chances of being informed about the system and FSM eligibility when there are no siblings already in school, and suggests that it is particularly important to ensure that children whose families are newly entering education are aware of their entitlements and how to access them.

Another noticeable pattern across each wave is that the group not in poverty are most likely to have a single sibling – pronouncedly more so than all other groups. Generally, across waves, the percent of the group who are not in poverty who have one sibling is 20-30 percentage points higher than the groups in poverty.

In terms of other aspects of **family structure**, children who look like they should be FSM-registered but who are not are about as likely to live in single-parent households as those who are FSM-

[31] https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf

registered at age five and age seven (percentages in the 60s for both groups at both stages). But at ages 11 and 14, the parents of those who are not registered are around twice as likely to be married rather than single.

For a minority of sample children, **grandparent(s)** are reported to live in their family home. At all waves, the presence of a grandparent is more likely among children not FSM-registered when eligible compared to those who are registered. For example, at age seven, 7.2% percent of the former group are reported to live with a grandparent(s), compared to 4.3% of the latter. At wave six, when children were 14, the survey asked whether they had contact with their **father**, if he did not live in the same home. Children who were registered for FSM when eligible were more likely to have no contact than those who were unregistered when eligible (17.9% vs 7.5%). Possibly this is related to the tendency evidenced elsewhere for fathers to be less likely to pay mantainance and provide financial support for their child when they do not have contact with them, which can result in more hardship and need for the child and their mother (e.g. Wikeley et al, 2008).[32]

Housing

In terms of housing **tenure**, at ages five and seven, children who look like they should be FSM-registered are extremely similar to those who are FSM-registered. They are highly unlikely to live in a home that is owned (including with a mortgage), and most likely to live in social housing. In contrast, a very large majority of children not in poverty live in owned homes at these waves.

While at waves five and six it is children not in poverty who remain more likely to live in owned homes, at these waves children not FSM-registered when they are entitled are more likely to live in a home their parent(s) own(s) than those who are FSM-registered. For example, at age 11, 37% vs 11%. It is important to bear in mind cohort and period effects here as well as age and stage effects: because the criteria for FSM entitlement changed between waves four and five of the MCS, this may impact associations between tenure, registration, and eligibility.

Information on the length of time a family has lived at the **same address** is available at waves 3-5, and the picture here is mixed. At ages five and seven, eligible children not registered for FSM have been resident in their home for a shorter time than both those FSM-registered and those not in poverty, but at age 11, they have been resident for a longer period than those who are FSM

[32] https://lx.iriss.org.uk/sites/default/files/resources/rrep503.pdf

registered. Families move for a variety of reasons, related to both advantage and disadvantage,[33] so this mixed picture is not surprising.

Information on whether the home has a **damp** problem – a key indicator of housing quality – is also available in waves 3-5, and children who are not FSM-registered when eligible are slightly more likely to be reported to live in homes with no damp than those who are registered. But the biggest contrast is with children not in poverty, who are much more likely to live in homes with no damp reported. At age seven, for example, 75% of the group not registered reported no damp, compared to 72% of those who are registered, but 89% of those not in poverty.

At age 14, information was collected on whether the sample child had their own **bedroom**. Those who are FSM-registered look fairly similar to those eligible but not registered: 45% of the former and 50% of the latter group do not have their own room. This contrasts with just 18% of the group not in poverty nor FSM-registered.

Home and family activities and environment

At waves three and four, families were asked about taking their child on various **trips** and activities outside the home (most of which would require payment). A small minority of children are reported to go on no such trips, and this is more likely in the FSM-entitled groups whether registered or not; the group not in poverty are extemely unlikely to report not going on trips. At age seven, a question on attending **clubs** and classes outside of school was also included. Children entitled to FSM, both in the groups registed and not, were similarly likely not to attend any such classes (76% in both groups). This contrasts to 53% of children not in poverty.

Families were also asked about trips to the **library** at the first three waves. Here, patterns are much more similar across groups, with regular attendance at least weekly generally being as likely for FSM-entitled children as those not in poverty. In fact, at age 11, it is FSM-registered and non-registered but entitled children who are mostly likely to be reported to visit the library at least once a week (34% of both groups). This compares to 24% of the group not in poverty and not FSM-registered. At this wave, parents were also asked about the number of books in the home, and those not in poverty tended to report owning more books. Together, this suggests that some parents in poverty compensate for owning fewer books by accessing the library with their child.

[33] https://pubmed.ncbi.nlm.nih.gov/35343717/

In terms of reports of **reading** with the child, which was asked about at ages 5 and 7, the majority of parents report doing this at least once a week (93% at age five, and 89% at age seven). Parents not in poverty are most likely to report reading every day (for example, 52% at age five), followed by those who should be FSM-registered but who are not (45% at age five), and those who are FSM-registered (40%). While there are some differences here, together with patterns of library usage, these findings indicate that when activities are free and accessible, parents of all income-levels are quite likely to participate in them with their children. Reports of whether the sample child has a regular **bedtime** are also similar across groups, in all waves where this question was asked (3-5).

This is congruent with and explored further in our previous work which additonally found that some positive parenting behaviours in the early years (not analysed in the current report) are increasingly likely in lower-income groups (Cooper, 2020).[34]

Parents were asked whether their child receives help with **homework** at home at wave five, and patterns here are somewhat ambiguous. While roughly the same percentage of parents whose children are eligible for FSM, not registered but eligible, and not in poverty report the child is 'always' helped (19-20%), more of those FSM registered (19%) and not registered when eligible (14%) than those not in poverty (7%) report they are 'never' helped. There is a slightly clearer patterning in response to a question at the same wave about whether someone at home checks the child has done their homework. Those not in poverty are more likely to state someone 'always' checks (56%) than those FSM-registered (49%), with children not registered when eligible even more likely to be reported to 'always' be checked (59%). This is reflected inversely in responses that homework completion is 'never' checked. These differences are relatively small, however.

At both ages 11 and 14, families are asked whether the sample child has a **quiet place** in which to do homework. At both waves there is a pattern where those not in poverty are least likely to say no (for example, 5% at age 14), followed by those eligible but not claiming FSM (12%) and those FSM-registered (15%). The pattern is similar at age 14 when families are asked if the child has their own computer: 30% of those not in poverty say no, 21% of those FSM-eligible but not registered, and 15% of those eligible and registered.

[34] https://journals.sagepub.com/doi/full/10.1177/0038038520939397

Again this provides some suggestion that, on average, those children who are slightly more resourced that their FSM-registered counterparts are less likely to be registered when entitled. Additionally, at age 11, families were asked, how often the child helps 'look after elderly, sick or disabled family members.' Children not in poverty were most likely to be reported never to do this (88%), followed by those FSM-eligible but not claiming (82%), and those registed for FSM (78%). This is congruent with other research showing that young carers are disproportionately likely to expereince poverty (Vizzard et al, 2019).[35]

Parent factors

At age five, mothers were asked about their own parenting **self-competence**. Those not in poverty were least likely to reply that they are not good at parenting (6%), compared to those not FSM-registered when eligible (16%) and those FSM-registered (21%).

In terms of mothers' reported **education** level, at every wave, it is those not in poverty who are most likely to have a degree or equivalent, and least likely to report no qualifications. There are some small variations between the groups FSM-registered and not registered when eligible, but they are minor compared to the difference from the group not in poverty. For example, by the time sample children are age 14 (by which point, sample mothers are generally relatively more highly educated than the earlier waves), only 4% of mothers not in poverty report holding no qualifications. Of those whose children are FSM-registered, 27% report the same, and 24% of those not registered when eligible. This pattern of a small difference in 'favour' of the group not registered when eligible is the same at other ages.

The MCS data includes derived variables constructed to indicate the **occupational** category of the mother. At waves three and four, this is for her last known job; at waves five and six, for her current job. They also indicate if the mother has not **worked** / is not working. Overall, at all waves, those who are not in poverty are vastly less like than those FSM-registered and those eligible but not registered to never have worked / not to be working. The non-registered group are then less likely in turn than the registed group, though this difference is somewhat smaller.

For example, at age five, just 5% of sample mothers not in poverty have not worked, compared to 26% of those not registered when eligible and 39% of those registered for FSM. At age 14, 12% of

[35] https://sticerd.lse.ac.uk/CASE/_NEW/PUBLICATIONS/abstract/?index=6817

those not in poverty are not working, compared to 62% of those not registered and 93% of those registered for FSM. Mothers not in poverty are vastly more likely to be in management positions than the other groups (e.g. 38% at age 14) while those not claiming FSM when eligible are somewhat more likely than those claiming, at all waves (though numbers here are very small, so cannot be reported).

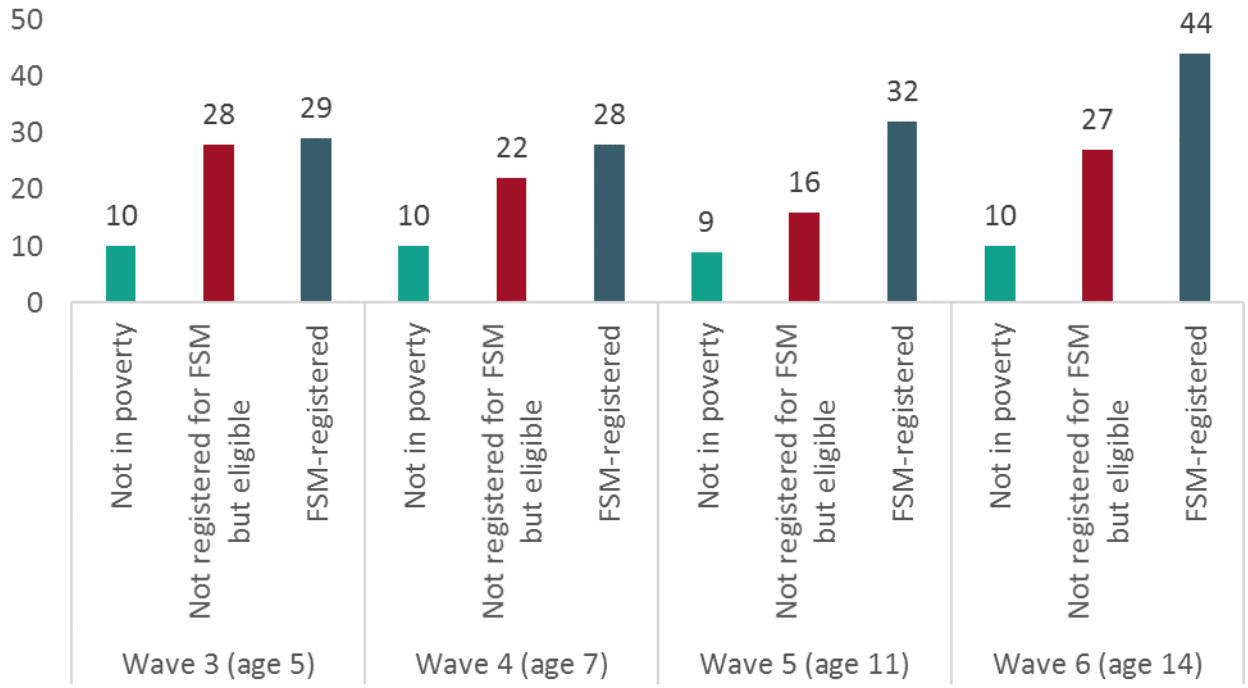
At wave three, when children were five, their mothers were asked if they **voted** in the last election. Those not in poverty were most likely to say they voted (66%), followed by those FSM-registered who were much less likely (38%) – but more so than those eligible but not registered (32%). Possibly this may reflect some contribution of wider tendencies to interact with or understanding of state institutions and / or bureaucratic processes to patterns of FSM-registration. If so, it potentially supports recommendations from our previous work that centralised auto-enrollment would help eligible children access FSM.[36]

At waves four and five, mothers were asked whether they **read** for pleasure themselves. Differences between the FSM-registered and entitled but not registed groups are generally small. The larger difference is from the group not in poverty. For example, at wave four, when children were seven, 40% of mothers not in poverty reported reading to themselves every day, compared to 33% of those FSM-registered, and 30% of those entitled but not registered.

Mothers were asked at each wave about their own **health**, and could report that it was 'excellent,' 'very good,' 'good,' 'fair,' or 'poor.' At each wave, the percentages of mothers not in poverty reporting their health is only 'fair' or 'poor' remain stable, at 9-10%. However, there is a growing gap between this group and those who are FSM-eligible and not registered, and those FSM-registered, as shown in Figure 1. By the time their sample child is aged 14, 44% of mothers whose child is registered for FSM report their health to be only 'fair' or 'poor,' compared to 27% of those eligible but not registered, and 10% of those not in poverty.

[36] https://epi.org.uk/wp-content/uploads/2025/06/Updated-FSM-registration-report_FINAL.pdf

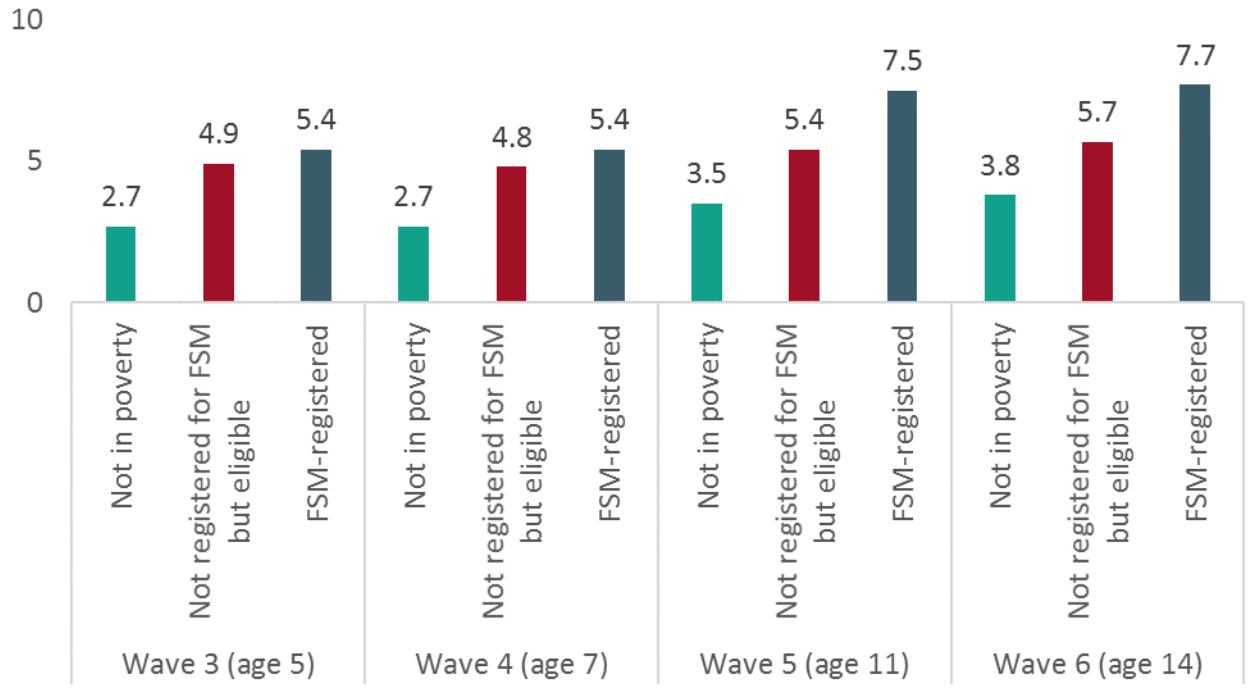
Figure 1: Percentage of mothers not in poverty, FSM-eligible but not registered, and FSM-registered who report their health to be 'fair' or 'poor'



A similar gradient can be seen at all waves in terms of mothers' scores on the Kessler 6 scale, which intends to measure psychological **distress**.[37] At all waves, mothers not in poverty have, on average, the lower score (a higher score here indicates more distress), followed by those eligible but not registered for FSM, and those FSM-registered (Figure 2).

[37] https://cls.ucl.ac.uk/wp-content/uploads/2018/10/mcs6_user_guide_28march2017.pdf

Figure 2: Average psychological distress score (Kessler 6) of mothers not in poverty, FSM-eligible but not registered, and FSM-registered

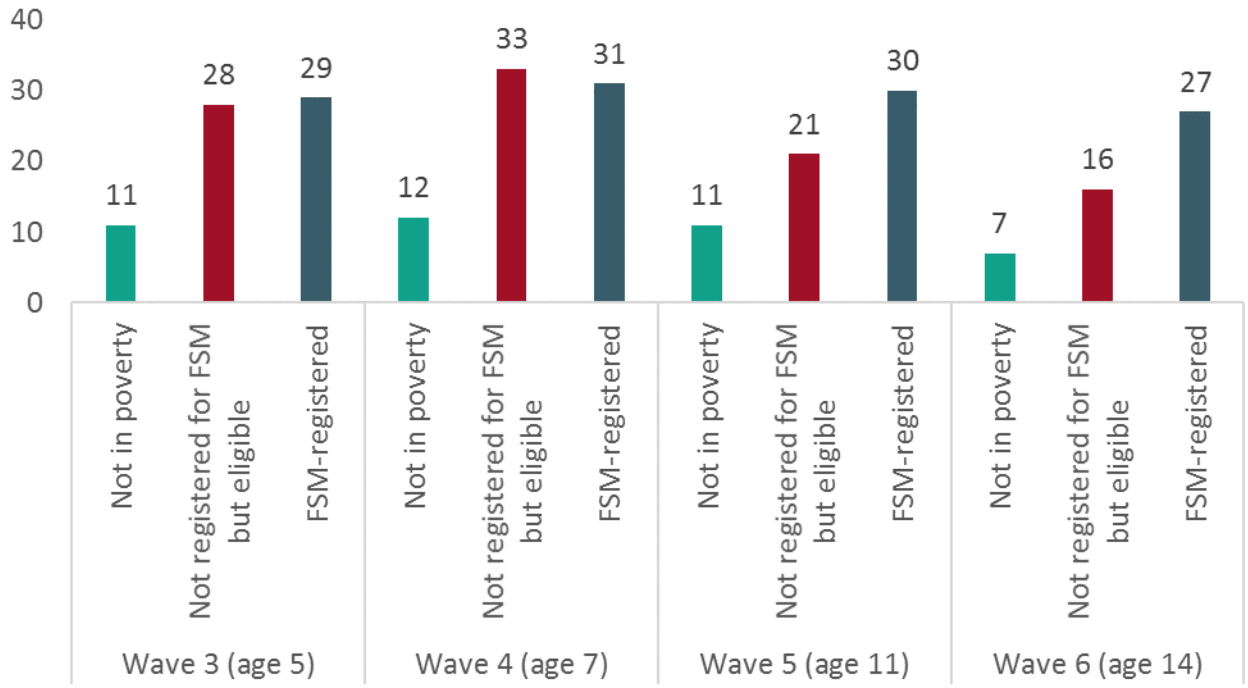


Correspondingly, when mothers were asked at wave six whether they had a longstanding **illness**, 21% of those not in poverty indicated they did, compared to 29% of those FSM-eligible but not registered, and 47% of those FSM-registered.

Financial wellbeing

At every wave, mothers were asked about how well they would say they were 'managing **financially** these days.' Figure 3 shows that when children were aged five and seven, families FSM-registered and eligible but not registered were similarly likely to say they were finding things difficult. But at ages 11 and 14, it is families who are FSM-registered who are most likely to report this, while those not in poverty remain least likely at all waves. Congruent with this, families were asked at the first two waves whether they were behind with **bills** – and the large contrast is between those not in poverty and the others, with families not in poverty much less likely to report this than those FSM-eligible, whether registered or not.

Figure 3: Percentage of mothers not in poverty, FSM-eligible but not registered, and FSM-registered who say they are finding finances 'quite difficult' or 'very difficult'



The picture is also very similar when other measures of financial wellbeing that are available at all waves are considered. In the first two waves, FSM-eligible families are all much more likely to report not being able to **afford a holiday** than those not in poverty, whether registered or not. But at ages 11 and 14, it is those who are registered who are most likely. At age 14 for example, 18% of those not in poverty report this, compared to 49% of those eligible but not registered, and 66% of those who are FSM-registered. Different patterns across age groups again highlight that reasons for non-registration for FSM are likely to vary according to stage within the educational process, and align with our previous findings of differential patterns of underregistration according to age (Campbell with Cooper, 2025).[38] They also highlight the contexual challenges and barriers to participation and thriving faced by children of different ages and at different times.

Home-school interactions and school activities

At the latter three waves familes were asked about attendance at **parents' evening**. Those not in poverty were always more likely to have someone attend, and those not registered when eligible

[38] https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf

were very slightly more likely at waves two and three. When the sample child is 14, the difference is more pronounced, with 3% of families not in poverty reporting no one attends, compared to 7% of those eligible but not FSM-registered and 12% of those registered. Correpondingly, when asked when the child was seven about involvement with the school, 40% of families not in poverty reported no involvement, compared to 54% of those not registered for FSM when eligible and 62% of those FSM-registered.

Families were asked at ages seven, 11 and 14 whether the sample child had **moved schools** since the previous wave. The relationships between answers to this question and poverty, FSM registration and eligibility vary by age, like those described earlier with length of time at home address. At age seven, it is children who are FSM-eligible but not registered who are most likely to have moved, but at age 11 and 14 there is little difference between the FSM-eligible groups, and the difference from the group not in poverty is smaller – though at all ages this group is least likely to have moved.

At age 14, families were asked whether their sample child had **extra lessons** paid for outside of school, and it is those not in poverty who are most likey (8%), followed by those not FSM-registered when eligible (7%) then those who are FSM-registered (3%).

School factors

The linked data in the NPD includes information for each sample child on the percentage of **peers** within their school who are FSM-registered. Figure 4 shows that, at each wave, those who are FSM-eligible but not registered have, on average, a lower proportion of school-mates registered for FSM, compared to those who are registered. Those not in poverty have, on average, the fewest schoolmates registered for FSM. This is congruent and consistent with previous research, including earlier outputs from this project.[39]

As shown in Figure 5, patterns in terms of the percentage of schoolmates recorded in the NPD with English as an additional language (EAL) vary according to wave.

[39] https://epi.org.uk/publications-and-research/whats-cooking-a-review-of-evidence-and-discussion-on-the-free-school-meals-fsm-measure-in-the-national-pupil-database/

Figure 4: Among children living families not in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children in school child attends who are FSM-registered

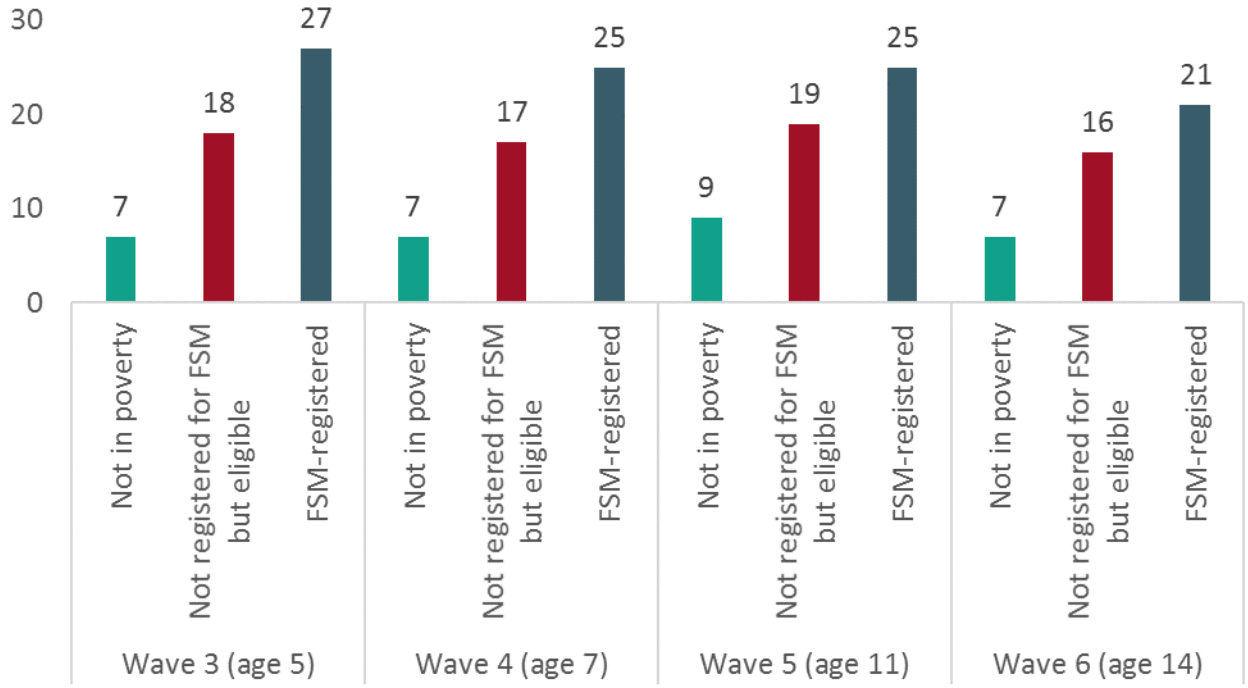
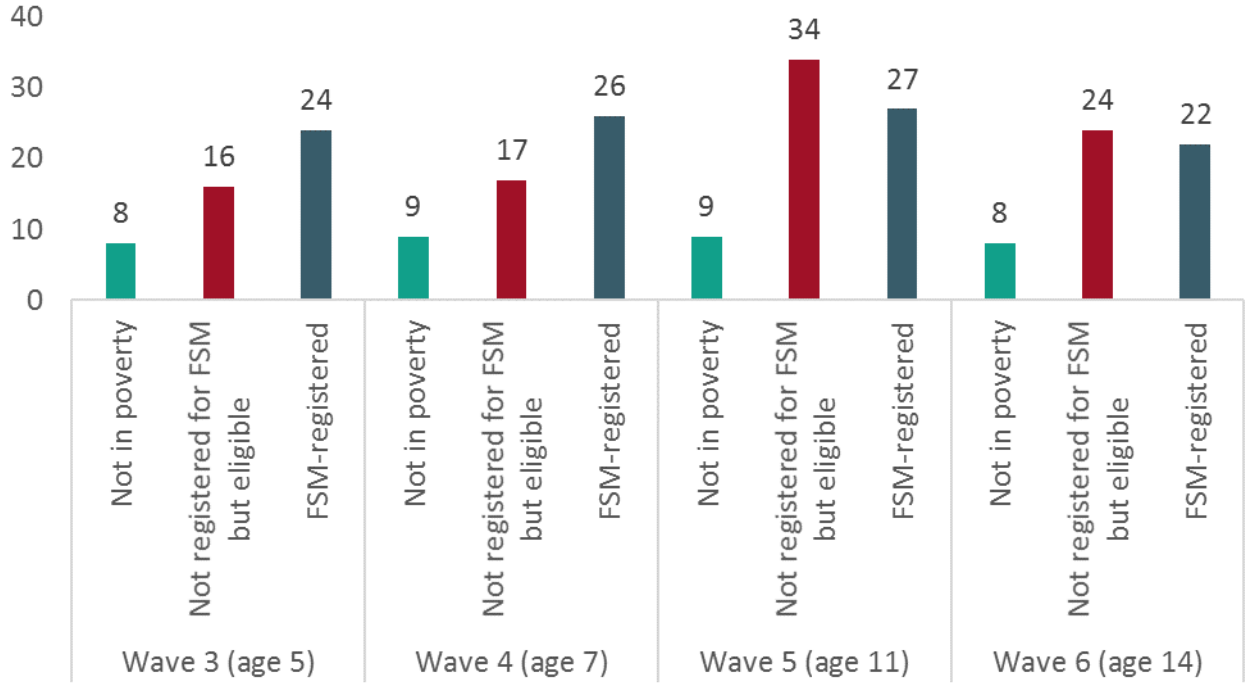


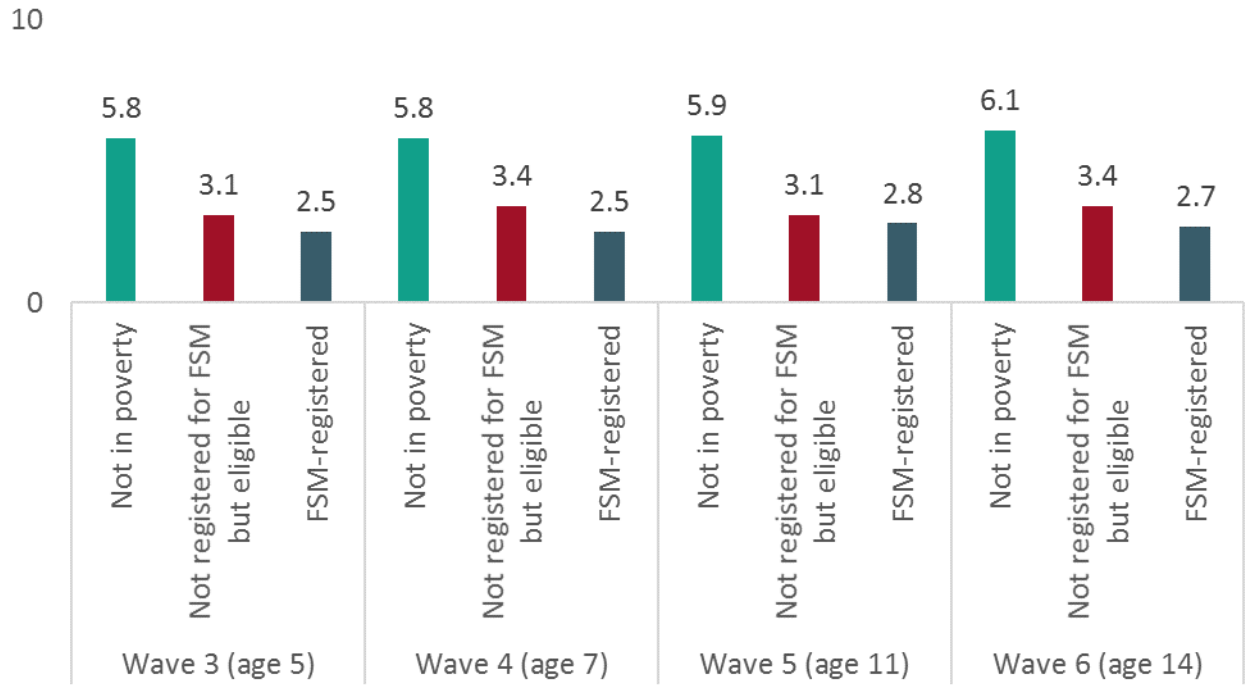
Figure 5: Among children living families not in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children in school child attends who are recorded with EAL



Local area factors

At all waves, families not in poverty are much more likely to live in **rural** areas, and those not registered for FSM when eligible more likely than those who are registered to live rurally. In terms of local area deprivation, patterns are similar whether an overall measure combined across domains incorporating all deprivation measures included in the Indices of Multiple Deprivation[40] is used, or whether the income **deprivation** measure is considered in isolation. Figure 6 shows the average rank of the area of residence of children falling into each group. The lower the number, the more income-deprived the area (as coded in the data provided, min possible=0 and max possible=10). FSM-registered children are most likely to live in an income-deprived area, followed by those not registered when eligible. Children not in poverty are least likely to live in an income-deprived area.

Figure 6: Among children living in families not in poverty, FSM-eligible but not registered, and FSM-registered: Average local area income deprivation (IMD income domain; lower number = more deprived)



[40] https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

Summary: What does this all suggest about the characteristics of children entitled to FSM but not registered? How do they compare to children registered for FSM as well children who are not in poverty?

Across these different characteristics and circumstances, several overriding patterns emerge. The first is that, for numerous factors that may be conceived as representing probable relative advantage / disadvantage, there is a gradient: where children registered for FSM seem to be the most disadvantaged, followed by those who are entitled but not registered, followed by those not in poverty. Children registred for FSM when entitled are **less** likely than those not registered when entitled and **much less** likely than those not in poverty to:

- Have contact with their biological father
- Live in a home owned by their family (at older ages)
- Live in a home without damp
- Be read to every day
- Have a quiet area for homework
- Have their own computer
- Have no responsibilities for caring for others
- Have a parent with higher confience in their own parenting
- Have a mother who works / has worked
- Have a mother with good heath (at older ages)
- Have a mother with good mental health (at older ages)
- Have a mother who feels financially comfortable (at older ages)
- Have someone attend their parents' evening, or be involved with their school
- Have paid extra lessons

On the one hand, it may therefore be argued that, given known underregistration for FSM, it is to some degree reassuring that it is those children who seem most extremely and consistently under-resourced and disadvantaged in life outside school who seem more likely to be signed up.

On the other, because the gradient indicates that those who are not signed up when entitled are still more disadvantaged than those not in poverty, patterns point to problems with a system that does not result in inclusive sign-up of all those entitled: children who are still in worse circumstances than the majority of their peers, who are not in poverty. This is reinforced by other factors explored here, for which the main pattern is of a **stark difference** between those families not in poverty and the rest: both children registered for FSM when eligible, and those not registered when eligible. These factors include:

- Living in a home owned by their family (at younger ages)
- Having their own bedroom

- Going on paid day trips and outings
- Attending classes and clubs outside of school
- Owning many books
- Having a mother with educational qualifications
- Having a mother in a managerial position
- Having a mother with good health (at younger ages)
- Having a mother with better mental health (at younger ages)
- Having a mother in perceived financial difficulty, or behind with bills (at younger ages)
- Having moved schools in recent years (at older ages)

So the eligible but not registered group are still far less advantaged than the group not in poverty – and patterns here emphasise that those children missing out on FSM-receipt are among the less resourced and advantaged.

There are notable exceptions to these gradients of disadvantage and differences between families not in poverty and FSM-entitled. The likelihood of a child having a regular bedtime is similar across groups, and so is the likelihood of regular library attendence. These are free (assuming a local library) activities and indicate a parity of parenting behaviours when the behaviour can be performed without financial cost.

There are a few factors among those examined here which pull against the gradient and patterns indicated above. Mothers of children who are not registered for FSM when eligible are on average younger than those FSM-registered (until secondary-age); they are more likely to be married (at older ages); more likely to live with a grandparent within the home; and more likely to have soemone within the home checking the cohort child's homework is completed. This may suggest that other aspects of home and family circumstances and resourcing may influence propensity to register for FSM when entitled; a complex intersection of influences and predictors. It is also important to remember that the findings here are for a sub-sample of a survey which in itself can produce only estimates with some error, so there is potential for less representative or unusual responses.

Mothers whose child is registered when entitled are slightly more likely to have voted than those not registered, and slightly more likely to report reading for pleasure: possibly pointing towards literacy as a facilitator of registration.

The last, striking overall pattern across all waves is a relationship beween registration for FSM when entitled and both the percentage of pupils within a child's school FSM-registered, and the income deprivation level of their local area. Previous research has suggested that immediate local

norms, prevalence of knowledge and infromation, peer effects or stigma may prevent entitled famililes from registering for FSM when eligible;[41] superficially at least, the very clear patterns here support these possibilities.

Moving towards identifying possible key factors predicting lack of registration for FSM when entitled

The analyses so far are purely descriptive and tell us about the characteristics of the MCS sample children who are not in poverty, who appear as through they are entitled to FSM but are not registered, and who are signed up for FSM. To take this one step further, and delve into possible drivers and potential key factors in non-registration, we undertake regressions at each wave.

Here we look at the children who are entited to FSM according to information on welfare benefits receipt and family income, as described earlier, but who are **not registered**. We compare them in our analyses to all children at the same wave who **are registrered** for FSM. So not being registered (as opposed to being registered) is the binary outcome in each regression.

We work through several stages. For each cluster subset of predictors, as described in Table 6, we estimate a first set of models. We retain from each the variables that remain associated with FSM-registration once all the other variables in that cluster are controlled for together.[42] Then we include only these retained variables in a final stage regression, across subsets. For this, we perform sensitivity checks: with and without sampling and attrition weights for the given wave,[43] and using logistic models. Below, we report results without weights from linear probability models, but only for those findings that are consistent across the other checks.[44] We think that these consistent results are those most likely to generalise to the wider population outside the MCS samples, though of course some uncertainty and potential for error remains.

Table 7 shows the variables retained at each wave as consistently statistically significant predictors of **not** being registered for FSM when meeting the criteria for entitlement. Note that because the variables and information available for analysis are not always the same across waves, we avoid

[41] https://epi.org.uk/wp-content/uploads/2024/01/FSM-Report-Strand-1-FINAL-1.pdf
[42] We use a significance level of 0.1 – factors whose estimated significance is above this are discarded
[43] For more information on weights, see: https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/mcs-age-14-sweep/
[44] We chose not to use weights in our preferred specification because attrition weights are to the main sample each wave, and we have introduced further attrition and potentially different biases through using the linked NPD data, which is for a sub-sample of each wave

making definitive comparisons of associations across waves. Note also the potential for omitted variable bias in these analyses: they are an opportunistic usage of the information collected in the MCS, for the pupils with linkage to the NPD, so there may be important factors that it is not possible to consider here.

Table 7: Factors consistently associated with non-registration for FSM when entitled, accounting for covariates

Wave three (age five)	Wave four (age seven)	Wave five (age 11)	Wave six (age 14)
Younger mothers			Younger mothers
Families with a grandparent in the home			
Children with NO siblings			
Mothers with only overseas qualifications			
Mothers who did not vote			
	Mothers who report themselves as managing financially less well than 'comfortably'		
		Families with married parents	Families with married or cohabiting parents
		Families who own their home	Families who own their home
		Mothers with better mental health	
			Families where the child has contact with their father
Children attending schools with fewer FSM-registered peers	Children attending schools with fewer FSM-registered peers	Children attending schools with fewer FSM-registered peers	Children attending schools with fewer FSM-registered peers

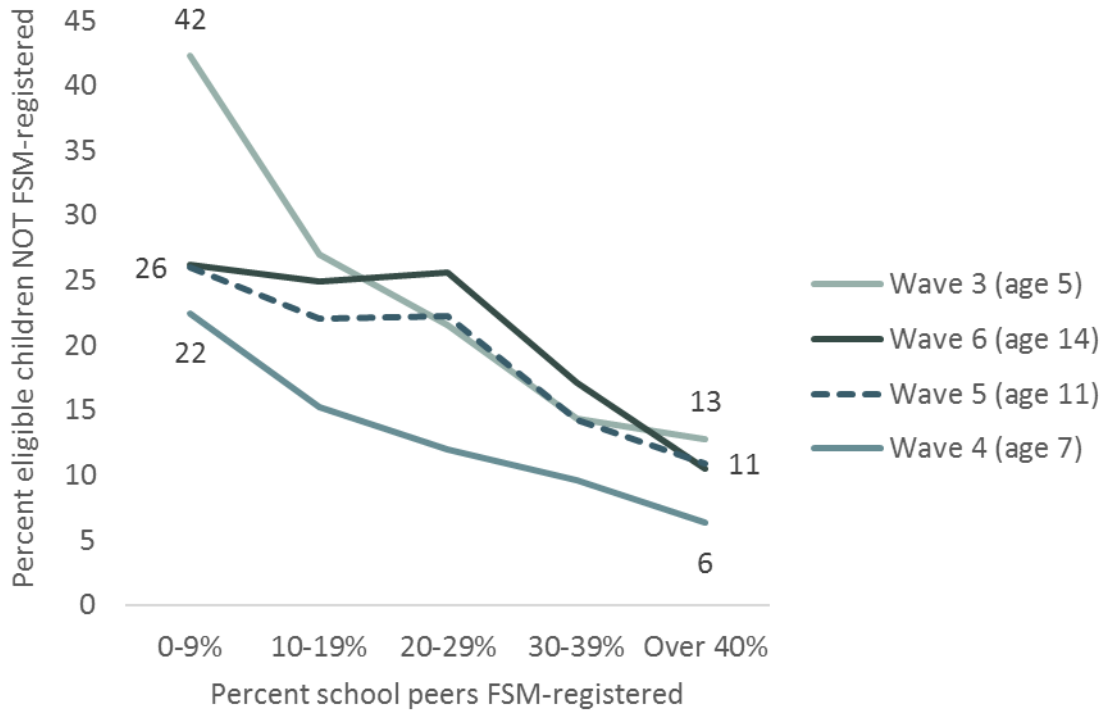
Notwithstanding these caveats, it is striking that, at each wave, the percentage of peers within a child's school who are registered for FSM are strongly predictive of registration. The lower the

percentage of FSM-registered children in their school, the more likely a child is not to be registered when entitled.

Given this finding at each age, we also looked at whether the relationship between percentage peers FSM-registered and non-registration varied according to other characteristics found to be related, by re-running models with an interaction between the characteristic of interest and percentage FSM. At both age 5 and age 14, we found that the relationship is stronger for younger mothers, and at age 5, for children with no siblings.

We also checked whether the relationship between percentage peers in a school FSM-registered and propensity to register is linear. Figure 7 shows the percentage of apparently FSM-eligible children in the sample at each wave who are not registered, according to the percentage of children in their school registered for FSM. This reports unattenuated percentages, but we also checked in regressions with controls, entering categorical cuts of percentage FSM, and results are similar. The gradient is steepest for children in early primary school. For those in late primary and secondary school, it seems to hold predominantly when the percentage of peers who are registered exceeds 20%.

Figure 7: Relationships between not registering for FSM when eligible and percentage school peers registered for FSM



The longitudinal picture

We also look at the data longitudinally, constructing measures of persistence: firstly suggesting that the child persistently appears entitled and 'should be FSM;' secondly indicating they are persistently registered for FSM; and thirdly that they are persistently in poverty, respectively. We define persistence as falling into the given category at least once in the primary phase and once in the secondary phase.

We then categorise children according to two discrete binary measures, among subgroups of interest (again focusing on children in poverty):

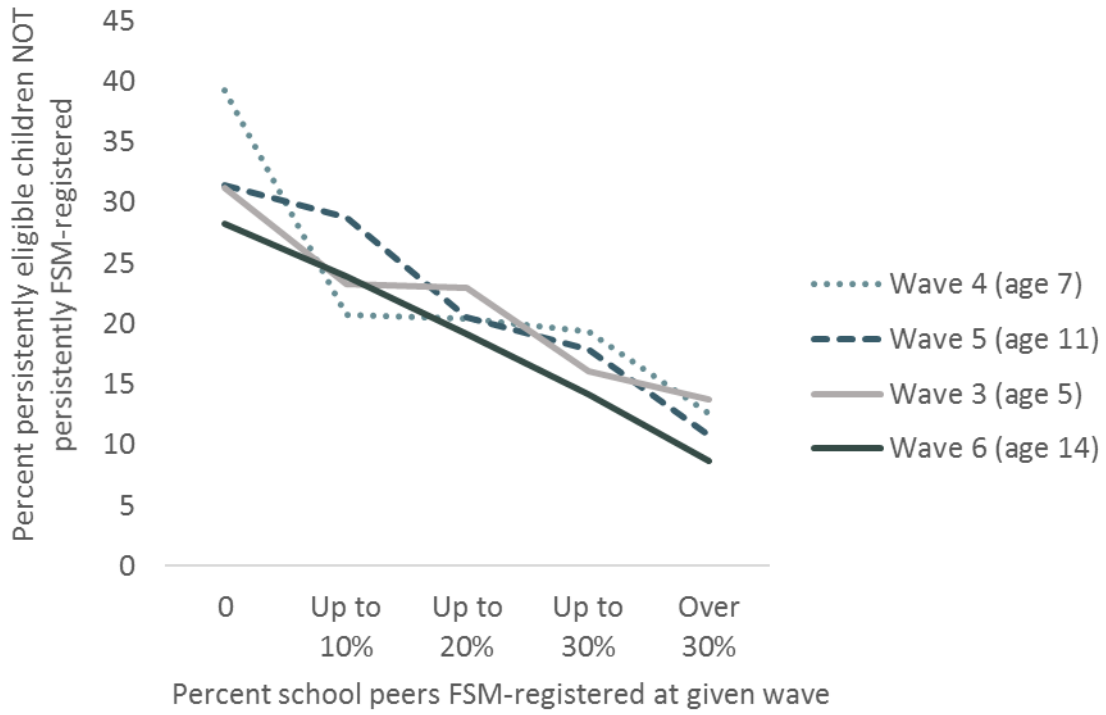
- The first is among those persistently indicated as 'should be FSM,' and indicates whether the child also persistently registered for FSM, or not
- The second is among those persistently indicated to be in poverty, and indicates whether the child also persistently registered for FSM, or not

Among the 744 MCS sample children who are indicated to meet criteria for FSM registration across the primary and secondary phases, and who 'should be FSM,' 79 per cent are indeed also registered for FSM in the NPD at both phases – though 21 per centare not. In the sample, then, a fifth of children in very disadvantaged families who meet criteria for FSM at both the primary and secondary stages are not consistently registered for FSM.

Among the 2,905 sample children indicated to be in poverty across both the primary and secondary phases, 44 per cent are registered for FSM at both phases – but 56 per cent are not. So over half of these pupils experiencing long-term poverty are not consistently registered for FSM.

Figure 8 shows, in line with Figure 7, that at each wave, children who are persistently entitled for FSM but not persistently registered are more likely to be in schools with fewer FSM-registered peers.

Figure 8: Percentage of persistently entitled children not persistently registered for FSM according to percentage children FSM-registered in school at each wave

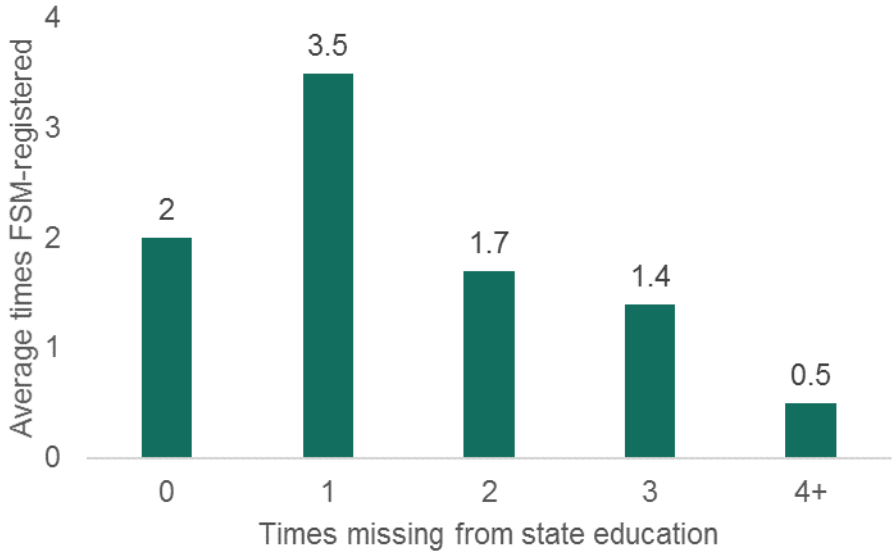


Missing years and FSM

We are also interested in the relationship between missing periods of school enrolment and FSM registration, because our work with the NPD suggested that children who are out of school for a period are more likely to be disadvantaged, and that fewer enrolments in school mean that a child has less 'chance' of ever being picked up and registered as FSM-eligible.

Figure 9 shows that, congruent with our previous analyses with the NPD, overall, the more times a child is missing from the NPD data (and therefore not enrolled in a state school), the less frequently they are registered for FSM. There is also, as with our previous analysis, an exception to this for those who are missing only once – who tend to be registered more frequently.

Figure 9: Associations between times missing from state education and average times registered for FSM



We hypothesised based on previous analyses and other research that a) children who miss a year of education are more likely to be in poverty and/or otherwise disadvantaged, and b) that the longer a child is in education, the more opportunities there are for them to be identified or signed up as FSM-eligible. In Figure 10, we show the percentage of children who are missing from education for each duration who are classed as being in persistent poverty (defined as being in poverty in both the primary and secondary phases).

Figure 10: Percentage of children missing each number of times from state education who are in persistent poverty

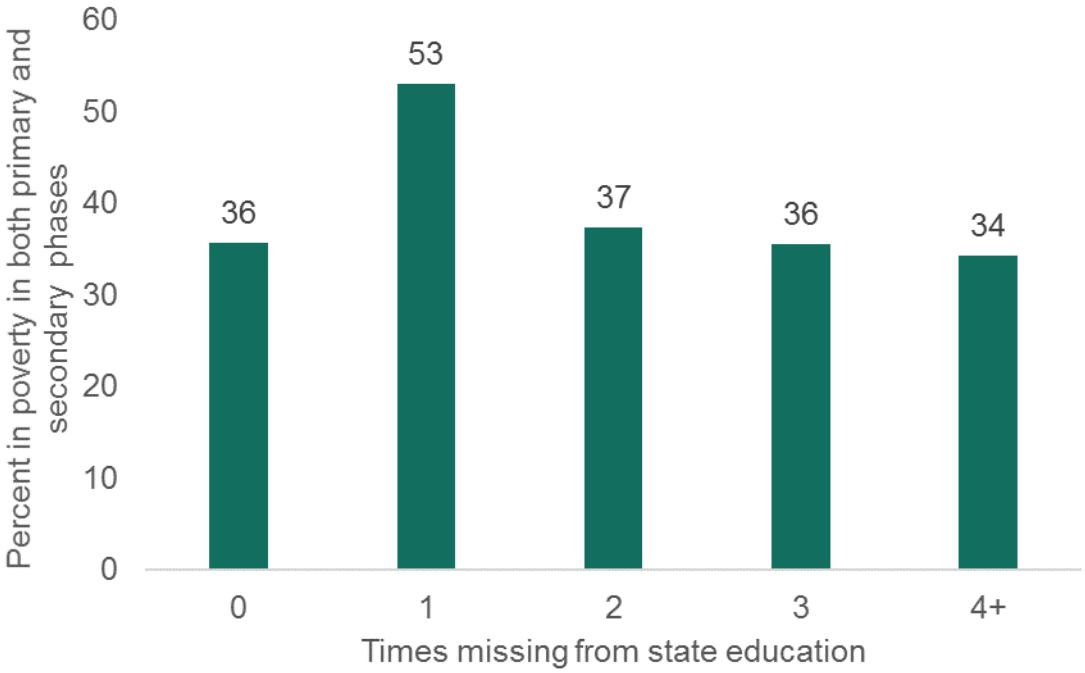


Figure 10 supports both our hypotheses. It shows that children who miss one instance of enrolment in the NPD are more likely to be in poverty across the primary and secondary phases. It also shows, aside from this, little relationship between number of enrolments and poverty. So, children who miss more years are registered for FSM fewer times – but they are similarly likely to be in long-term poverty.

This supports the idea discussed in our previous paper that missingness should be taken into account when using frequency of FSM-registration as a measure of disadvantage, potentially defaulting to treating periods of non-enrolment as equivalent to being enrolled and FSM-registered. It also supports the case for auto-enrolment for FSM so that all entitled children access the food and other provisions that are dependent on registration.

Section discussion

In this section we have found, in line with previous research (e.g. Hobbs and Vignoles, 2010; Iniesta-Martinez and Evans, 2012; Taylor, 2018),[45] that many children in poverty are not registered or even eligible for FSM. We find additionally that a fifth of children in very disadvantaged families who meet criteria for FSM at both the primary and secondary stages are not consistently registered at both stages: suggesting substantial unmet need and a system not working as intended.

We have found that for numerous factors that may be conceived as representing probable relative advantage / disadvantage, there is a gradient: where children registered for FSM seem to be the most disadvantaged, followed by those who are entitled but not registered, followed by those not in poverty. These factors include home tenure and environment, maternal health, and maternal mental health.

The gradient indicates, on the one hand, that it is those children who seem most extremely and consistently under-resourced and disadvantaged in life outside school who seem more likely to be signed up for the FSM to which they are entitled. But on the other hand, it suggests that that those who are not signed up when entitled are still more disadvantaged than those not in poverty. So patterns again point to problems with a system that does not result in inclusive sign-up of all those entitled, who may still benefit from registration.

Compounding this is our finding that, for many other factors predictive of educational progress, the main pattern is of a stark difference between those families not in poverty and the rest: both children registered for FSM when eligible, and those not registered when eligible. This includes factors such as maternal education, employment, and job type.

In line with previous research, we find a very consistent association between the percentage of peers in a child's school who are signed up for FSM and a child's own chances of being signed up when entitled. The more peers registered, the more likely the child also to be registered.

[45] https://www.tandfonline.com/doi/full/10.1080/00071005.2017.1330464
https://www.tandfonline.com/doi/abs/10.1080/01411920903083111
https://assets.publishing.service.gov.uk/media/5a79faf540f0b66a2fbff077/DFE-RR235.pdf

Together, this all adds weight to the argument for centralised auto-enrolment for FSM: because many children who are under-resourced and disadvantaged across multiple dimensions are not registered for their entitlement.

Our last key finding, adding to our previous analyses of the NPD, is that children who miss multiple periods of schooling are less likely to be FSM-registered – but as likely to be in poverty. This supports our previous recommendation that it is better to default to treating children as though they are FSM-eligible in years where information on their situation is not available, both analytically and in some practice and provisions. While this will result in some false positives, it mitigates against many children missing out.

Section three: Experiences and outcomes of children registered for FSM

Section three: Experiences and outcomes of children registered for FSM

In this section, we examine numerous measures within the MCS of children's self-perceptions and feelings, the perceptions of their teachers, and educational attainment outcomes. These stretch from age seven to age 16, with different measures available at different survey waves and through the linked NPD data.

As described in the introduction, we compare all MCS sample children who are **FSM-registered** in the NPD to three other groups. Firstly, again, those who appear to be FSM-eligible based on the welfare benefits receipt and income recorded in the survey data, but who are **not registered**. Secondly, those who are recorded in the MCS as living **in poverty**, but who are not registered for FSM, nor eligible. Thirdly, those **not in poverty**.

The general tendency, as we shall illustrate below, is for FSM-registered children to fare worst across these measures, and for children not in poverty to fare best. However, there are also some interesting patterns where those eligible but not registered are more similar in their experiences and outcomes to those registered for FSM, and those not in poverty stand out as more clearly distinct.

Analytical approach

To look at these experiences and outcomes, we work through a series of regression models.[46]

Specification one

This is the raw model and simply tells us about the differences between the four mutually exclusive groups: FSM-registered; not registered for FSM but eligible; others in poverty; those not in poverty – without accounting for anything else.

Specification two

This controls for the percentage of children within the pupil's school who are FSM-registered. We use this key control because we found this to be the factor most consistently associated with

[46] Linear regression models and linear probability models

children who are eligible not being registered for FSM (see page 42), and because it might also be associated with the majority of our outcome measures of interest.

Specification three

This adds controls for cognitive tests administered within children's homes by MCS survey interviewers at age seven. Taken outside of the school system, scores from these tests are intended to represent children's capacities and capabilities. We use scores from the NFER Progress in Maths Test, the British Ability Scales Word Reading Test, and the British Ability Scales Pattern Construction Test.[47] This model specification tells us whether children who had similar-looking early academic 'potential' seem to be faring differently as they progress through the system, according to their FSM-status and whether they live in poverty.

We use weights from the appropriate wave in the analyses reported below, although we also check all models without weights, and results are consistent. Despite this, it is important to caveat that although the MCS is a national survey, there is attrition over time, and non-response to questions. Multiple datasets within the MCS are combined for analyses here, and information particularly from the teacher survey suffers additional non-response because not all families gave permission for their child's teacher to be contacted, and not all contacts were successful.[48] Additionally, linkage between the MCS and the NPD was not complete for all children.[49] Therefore weights (which are constructed to the main sample for each wave, not to the teacher survey nor to the sample with linked NPD data) may not entirely rebalance the subsamples, which are a selected group of pupils with complete information on all variables used in the regression models. We use a common sample across model specifications for each respective outcome so that the same children are included in each.

In the charts below, figures presented are estimated marginal means. These are the model-estimated average for each group[50]. Stars indicate that the estimate for the group was statistically

[47] https://closer.ac.uk/cross-study-data-guides/cognitive-measures-guide/
[48] https://cls.ucl.ac.uk/wp-content/uploads/2017/07/MCS4-Guide-to-the-Teacher-Survey-Data.pdf
[49] https://doc.ukdataservice.ac.uk/doc/8481/mrdoc/pdf/mcs_linked_education_datasets_user_guide_3rd_edition.pdf
[50] Other factors in the model are held constant at their means.

significantly different at the 10 per cent level from the reference category, which is always children not in poverty.

Findings

Feelings about and experiences of school

At ages 11 and 14, MCS children were asked numerous questions about school. We examine reports of being unhappy at school at both ages, of unhappiness with schoolwork and with the school itself, at both ages, and of disliking the school at age 11. Also at age 11, we examine reports that the child perceives their teacher as 'getting at' them, and feelings that school is a waste of time.

FSM-registered children are the most likely, across the variety of questions, to report negative feelings and perceptions. Figure 11, for example, shows the percentage of sample children who report they do not like school, at age 11.

In answer to this question, and for the others shown in Figures 12 through 15, responses from FSM-registered children tend to be the most negative. Often they are similar (on average) to children FSM-eligible but not registered, but in several areas, they are more negative. Note that the group of children eligible but not registered is smaller than those FSM-registered (see tables in Annex), so this accounts for the statistical significance of the result for the estimates for the latter as opposed to the former.

Figure 11: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, 'Not at all' to question, 'How much do you like school?' – age 11 (n=6562)

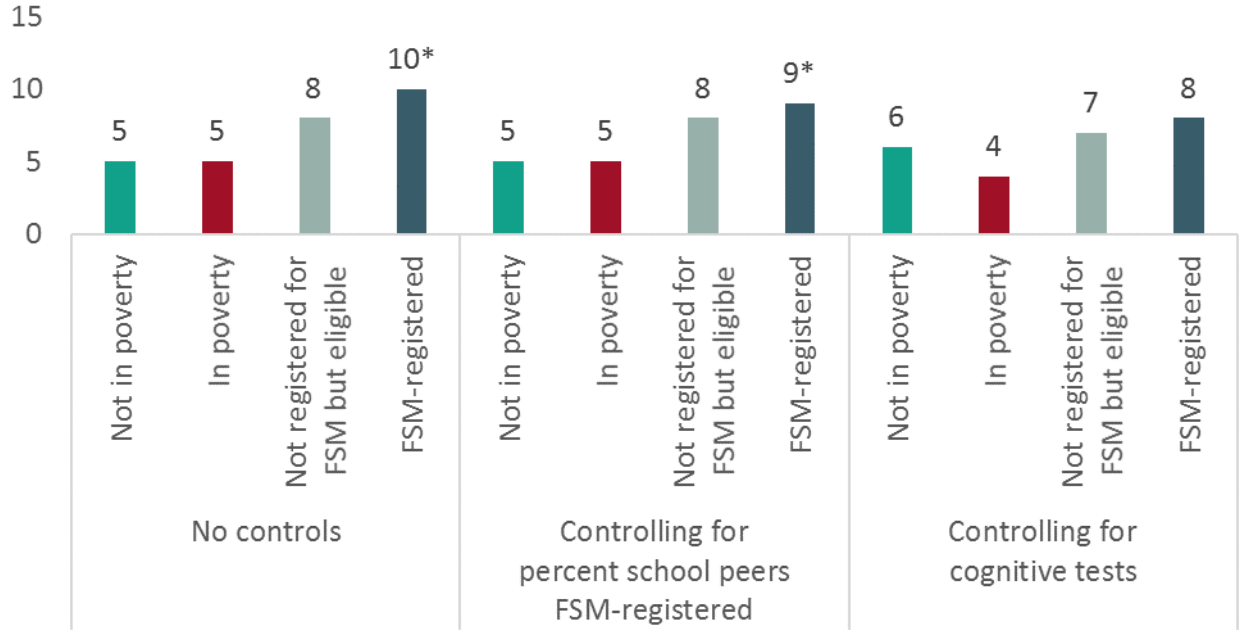


Figure 12: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, 'All' or 'Most of the time' to the question, 'How often do you feel school is a waste of time?' – age 11 (n=6565)

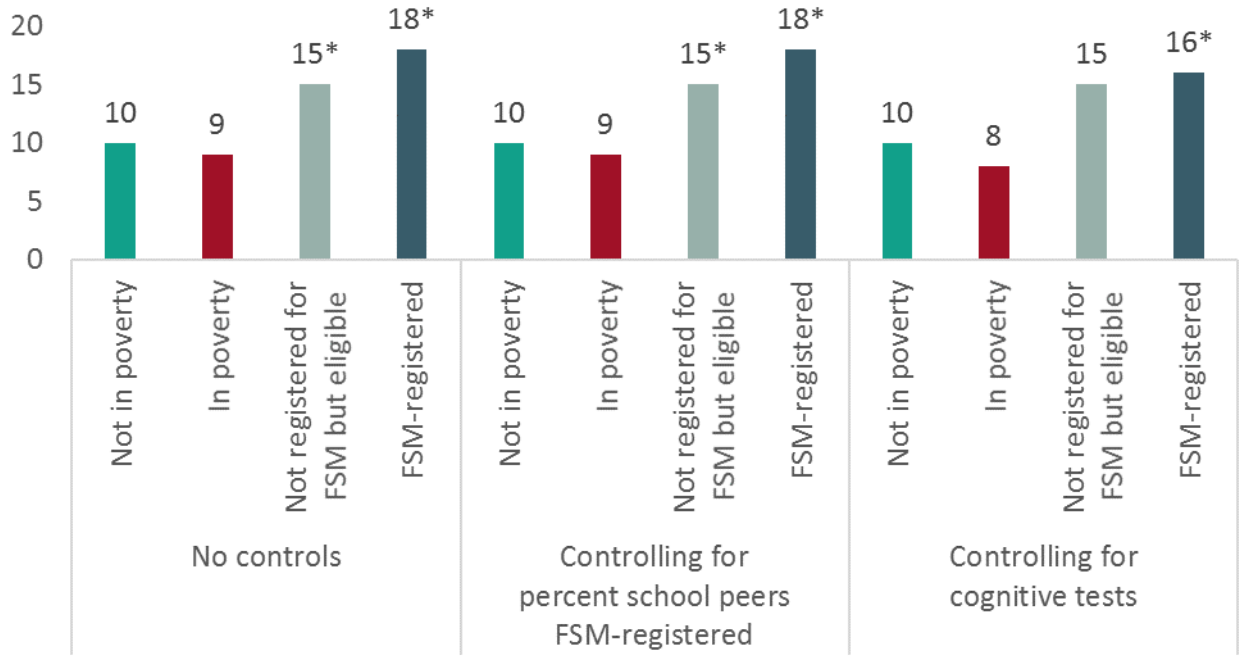


Figure 13: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, 'Always' to the question, 'How often do you think your class teacher is getting at you?' – age 11 (n=6407)

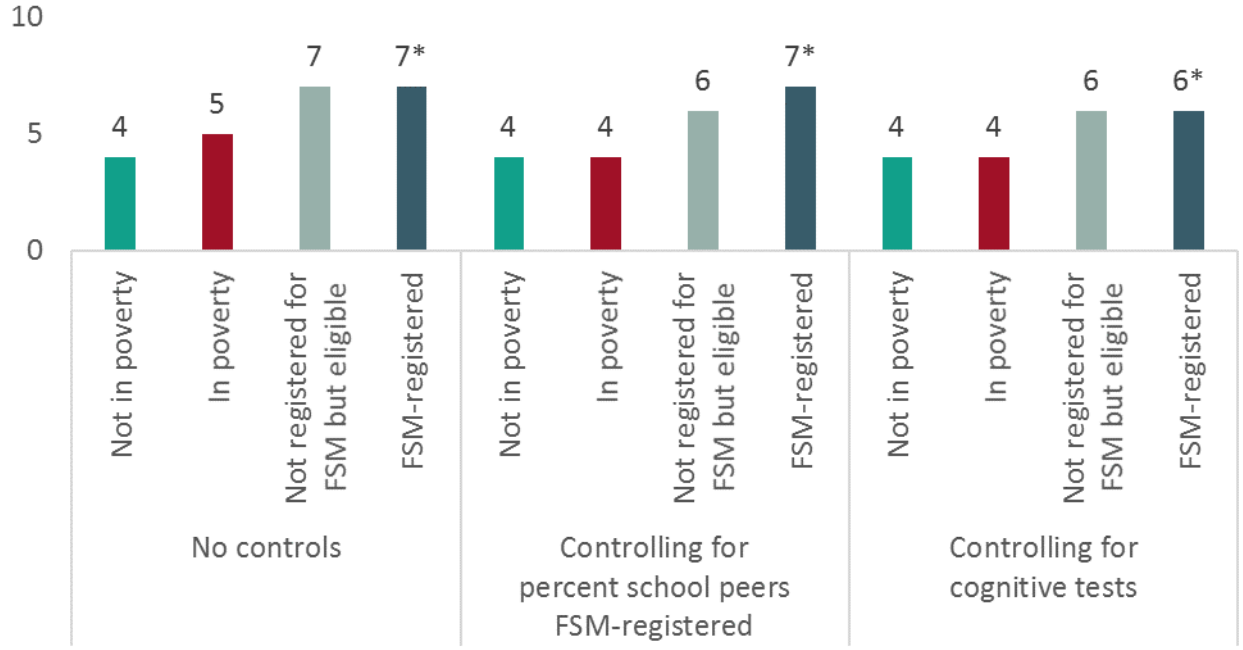


Figure 14: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average rating of unhappiness with school (1-7; 7= 'not at all happy') – age 14 (n=5721)

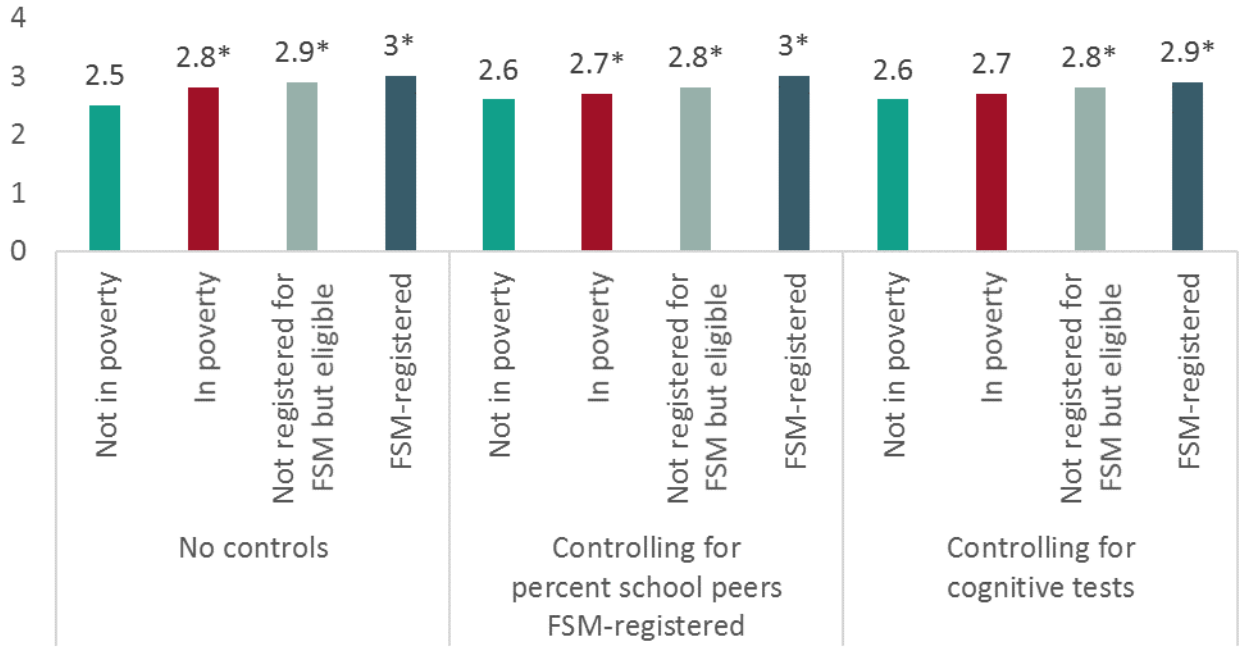
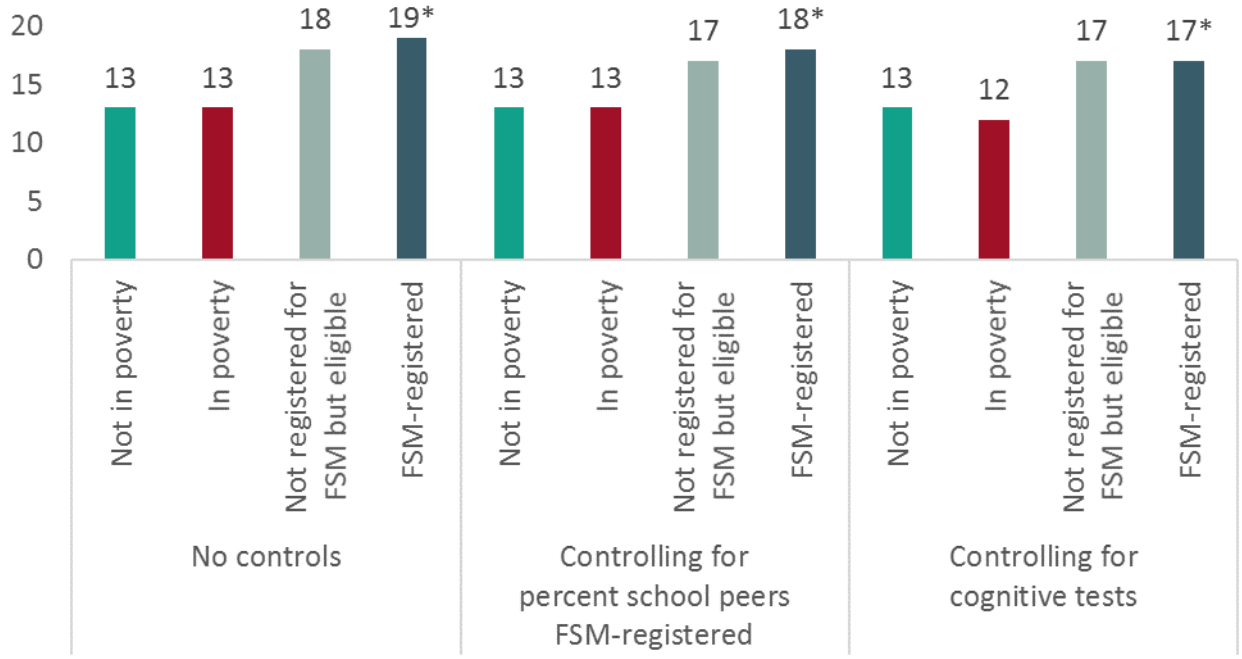


Figure 15: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, 'All of the time' to the question, 'How often do you feel unhappy at school?' – age 14 (n=5806)



Self-esteem, efficacy and expectations

Children were asked at ages 11 and 14 about whether they think they are good at different school subjects; about whether they think they do things well, and feel they are 'good,' including compared to others; and about expectations for staying on in education at age 16. Again, patterns here generally tend towards FSM-registered children having more negative perceptions of themselves, but there are variations by age and between girls and boys. For example, Figures 16 and 17 show children's responses to the statement, 'I am good at English,' in the age 11 and age 14 samples respectively. At age 11, it is among girls that the potential 'FSM penalty' seems to emerge – but at age 14, the gradient is smaller and apparent among boys. This is congruent with our previous research suggesting that differences in academic self-concepts caused by structural factors can vary by gender (Campbell, 2021).[51]

[51] https://www.tandfonline.com/doi/full/10.1080/0305764X.2021.1877619

Figure 16: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, '(Strongly) disagree' to the statement, 'I am good at English' – age 11 (n=6612)

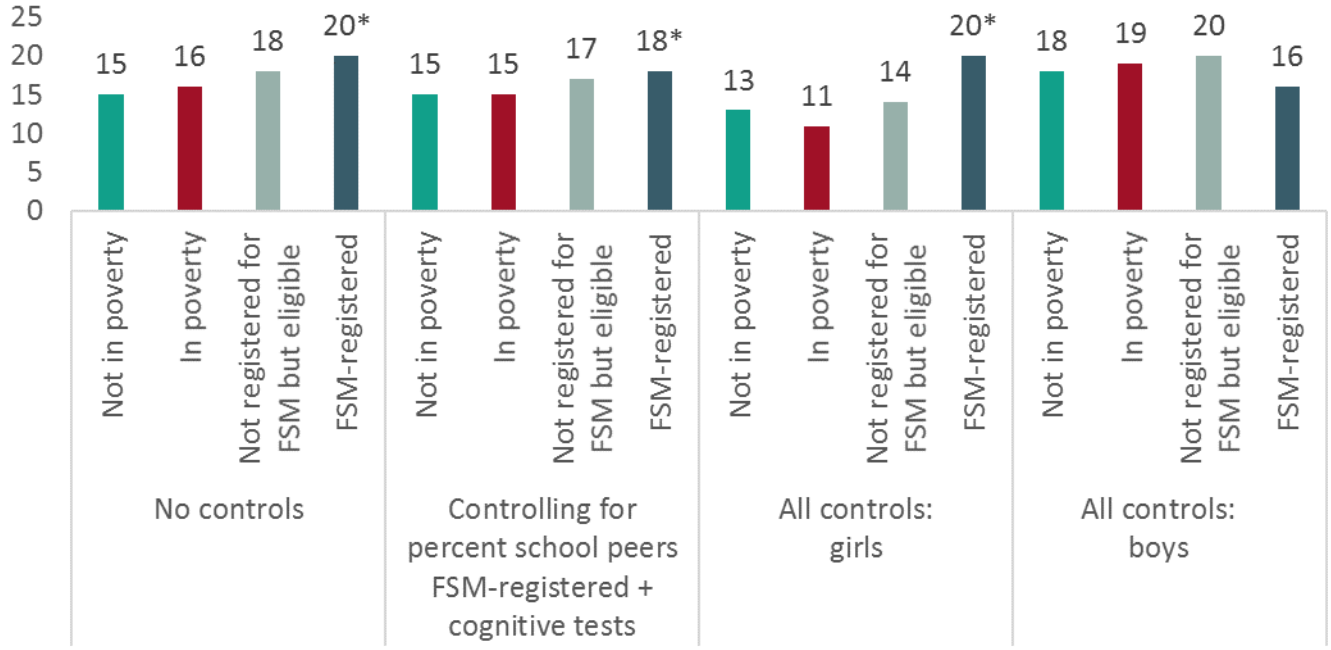


Figure 17: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, '(Strongly) disagree' to the statement, 'I am good at English' – age 14 (n=5855)

Responses to the statement, 'I am able to do things as well as most other people' also vary by age and gender. Figures 8 and 9 show that at age 11, it is FSM-registered boys who are most likely to disagree; at age 14, FSM-registered girls.

Figure 18: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, '(Strongly) disagree' to the statement, 'I am able to do things as well as most other people – age 11 (n=6520)

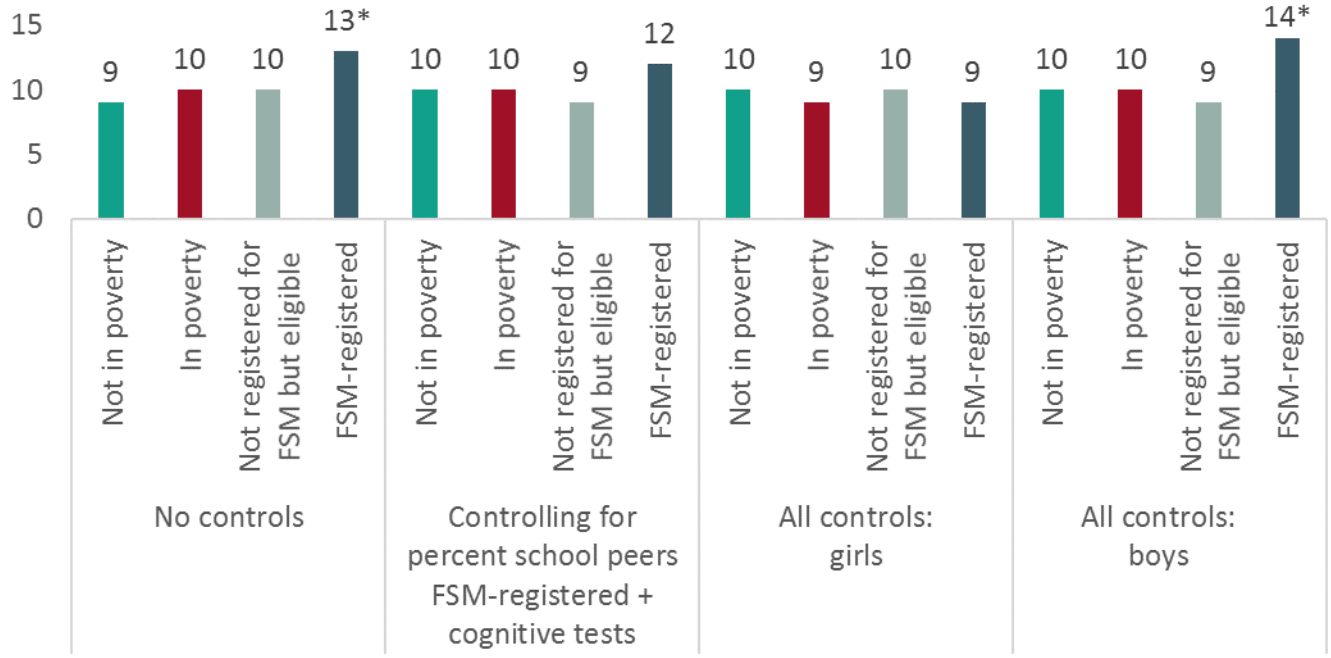
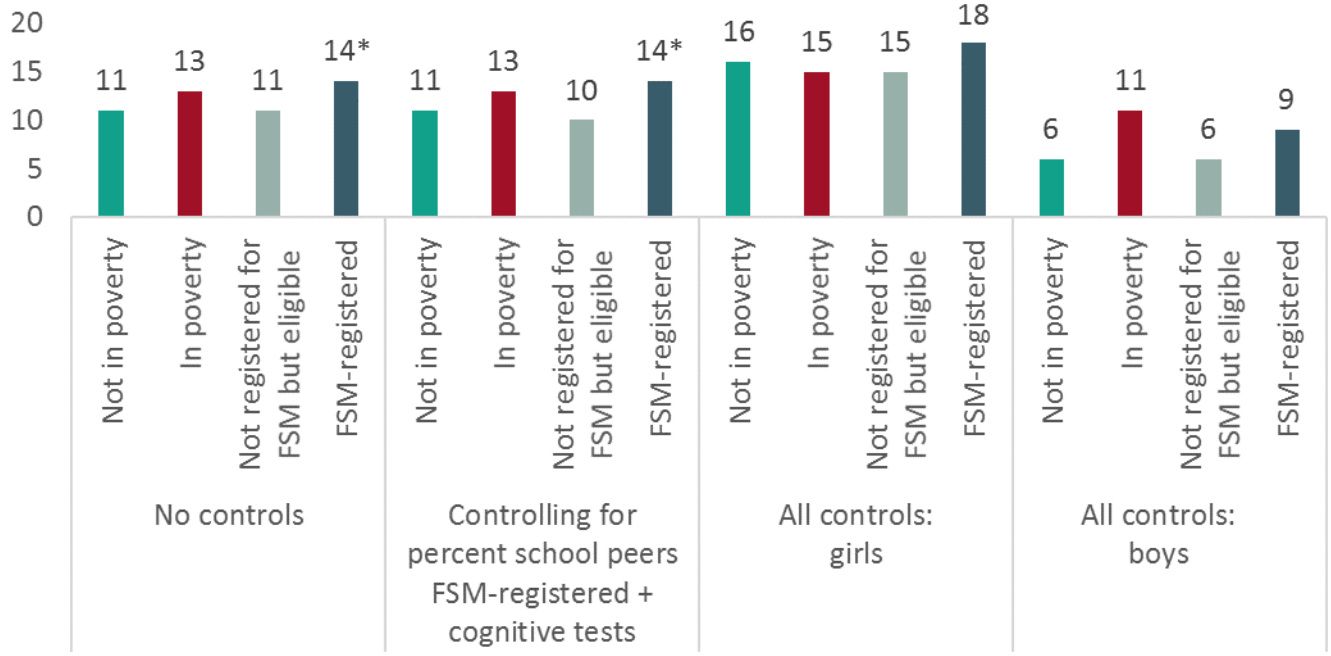


Figure 19: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, '(Strongly) disagree' to the statement, 'I am able to do things as well as most other people – age 14 (n=5709)



And when girls and boys were asked at 11 and 14 whether they 'want to' (at age 11) or 'will' (age 14) stay on in full-time education at age 16, there are also variations by gender. Figures 20 and 21 show that at age 11 it is FSM-registered boys who are most likely to say they do not want to stay on at 16, and at age 14 it is still FSM-registered boys who, on average, rate their chances of staying in education as lowest. Note that age 11, the higher the percentage, the more pupils in the group respond negatively – and say they do not want to stay on at school. Inversely, at age, 14, the higher the percentage, the more likely the group to think they are likely to stay on at the end of year 11.

Figure 20: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage of children answering, 'No' to the question, 'Do you want to stay on at school or college full time when you are 16? – age 11 (n=6750)

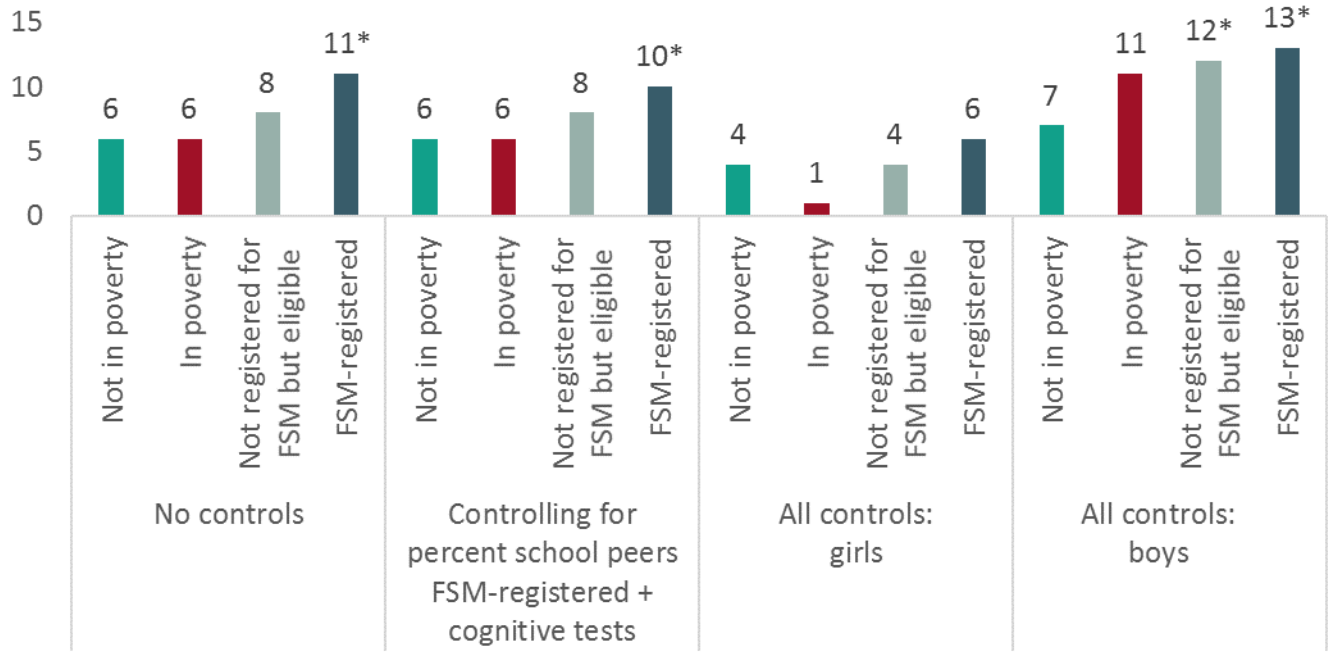
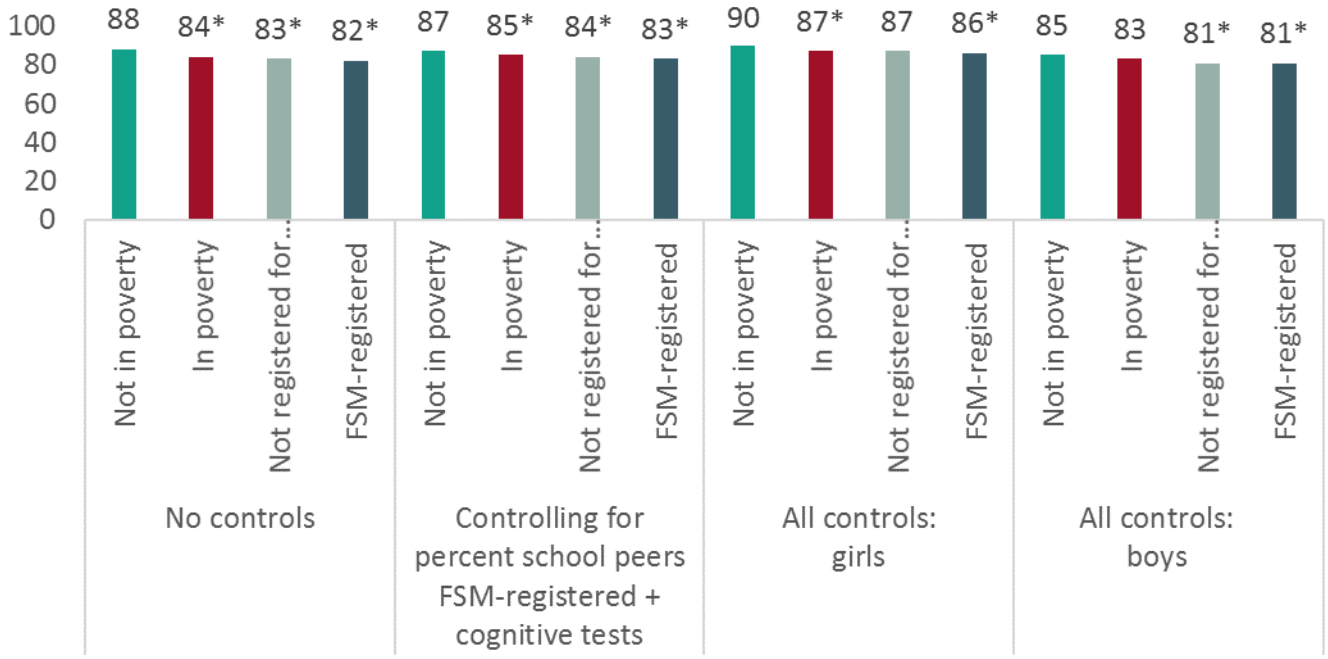


Figure 21: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage scored by children answering the question, 'How likely (0-100%) do you think it is you will stay on in full-time education at the end of Year 11? – age 14 (n=5751)



Teacher perceptions of children

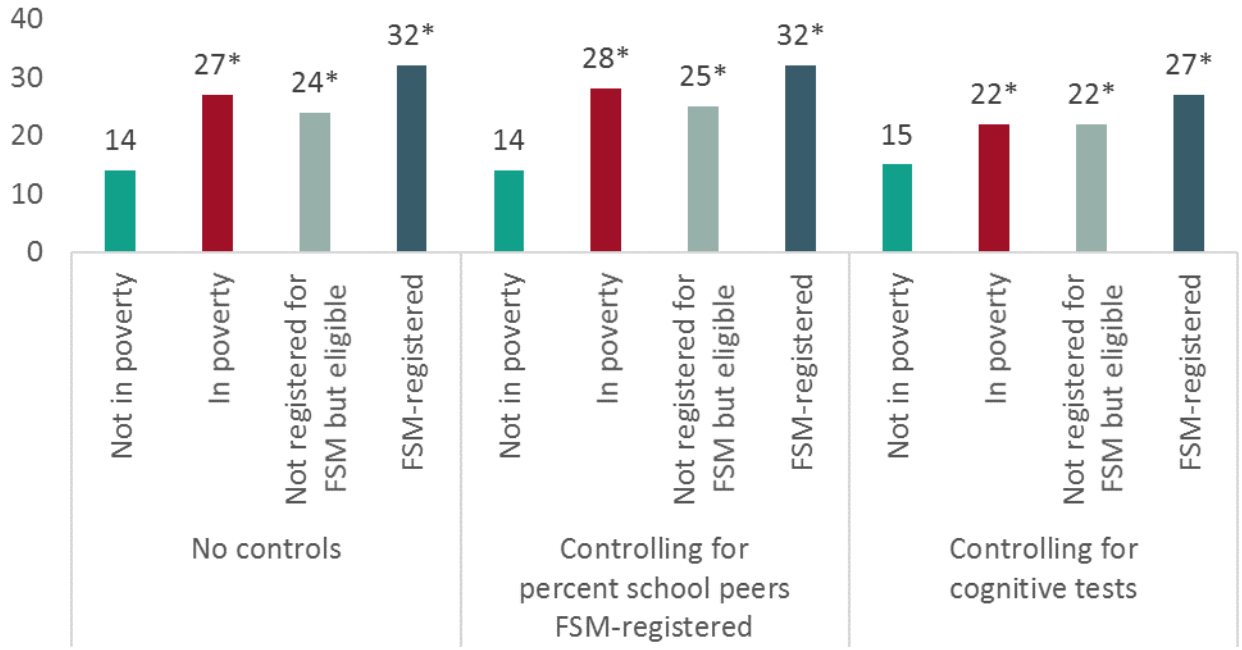
Teachers were asked when MCS children were age seven and age 11 how they rated them across a range of subjects, including maths and reading (at age seven) and maths and English (at age 11). At age 11, they were also asked whether they thought children would stay on in school post-16, and whether they thought the child would go to university. For most of these questions, teachers' responses were least favourable towards FSM-registered children. At age 11, this holds across both girls and boys. At age seven, patterns are less clear for girls, and it is FSM-registered boys who are most likely to be judged 'below average' for both maths and reading by their teachers, even controlling for performance on the relevant cognitive test and the percentage of peers registered for FSM in their school.

Figures 22 and 23 show the percent of children falling into different groups classed by their teachers as 'below average' at maths and at English at age 11. Figures 24 and 25 show the percentage of children perceived by their teacher to be 'not very / not at all likely' to stay on post-16, and to go to university, respectively. Looking at the models controlling for percentage of school peers registered for FSM, and for cognitive test scores, it is FSM-registered children who are most

likely to be judged 'below average' and likely not to progress in post-16 education and to university.

For judgements of English 'ability and attainment' and on likely progression, it is children in poverty but not FSM-eligible who are second most likely to be judged negatively, on average, followed by those eligible but not registered. Children not in poverty are least likely to be judged to have lower skills and to be unlikely to progress. This chimes with findings from our qualitative work (Cooper with Campbell, 2025),[52] indicating that the poverty level of families is known and salient to many teachers, regardless of whether a child is registered for FSM.

Figure 22: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage rated by their teachers as 'below average' at maths – age 11 (n=4972)



[52] https://epi.org.uk/wp-content/uploads/2025/06/Updated-FSM-registration-report_FINAL.pdf

Figure 23: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage rated by their teachers as 'below average' at English – age 11 (n=4958)

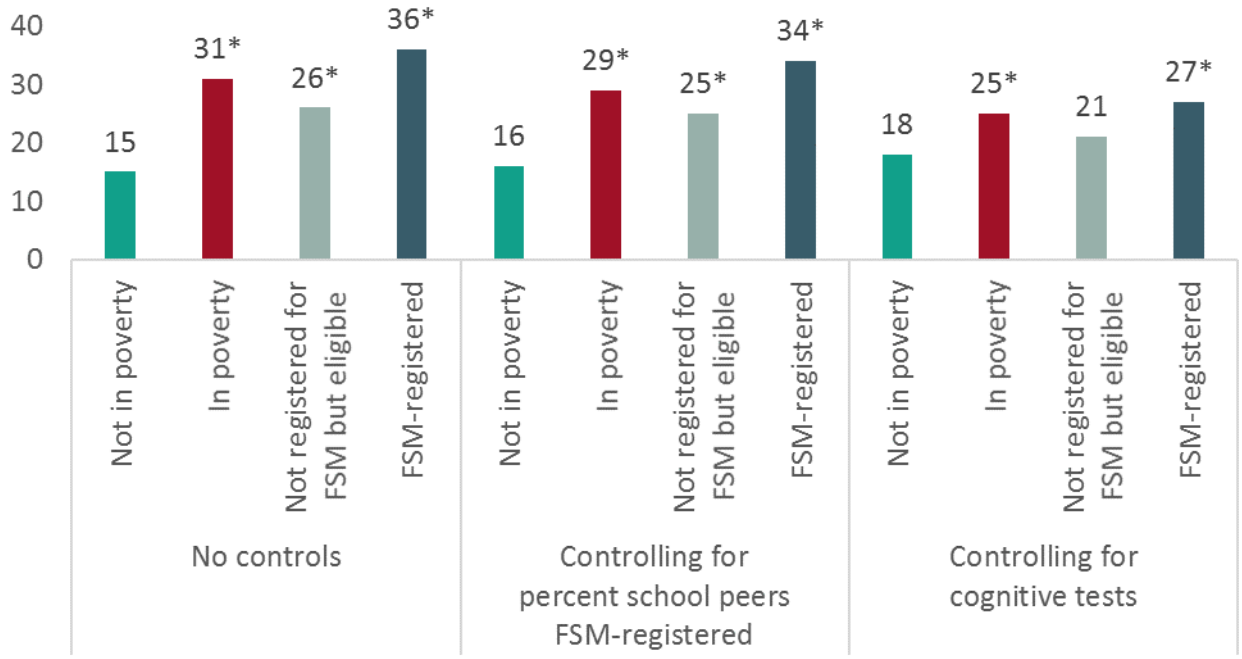


Figure 24: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage rated by their teachers as 'not very / not at all likely […] to stay on in full-time education after age 16'– age 11 (n=4930)

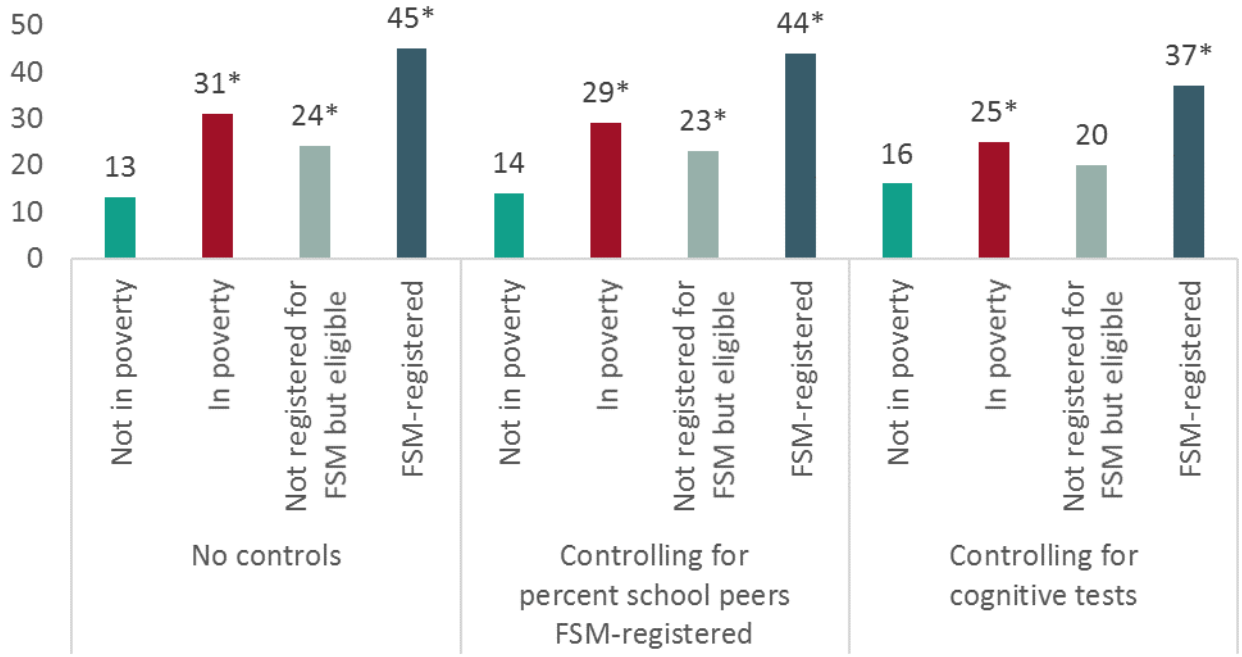
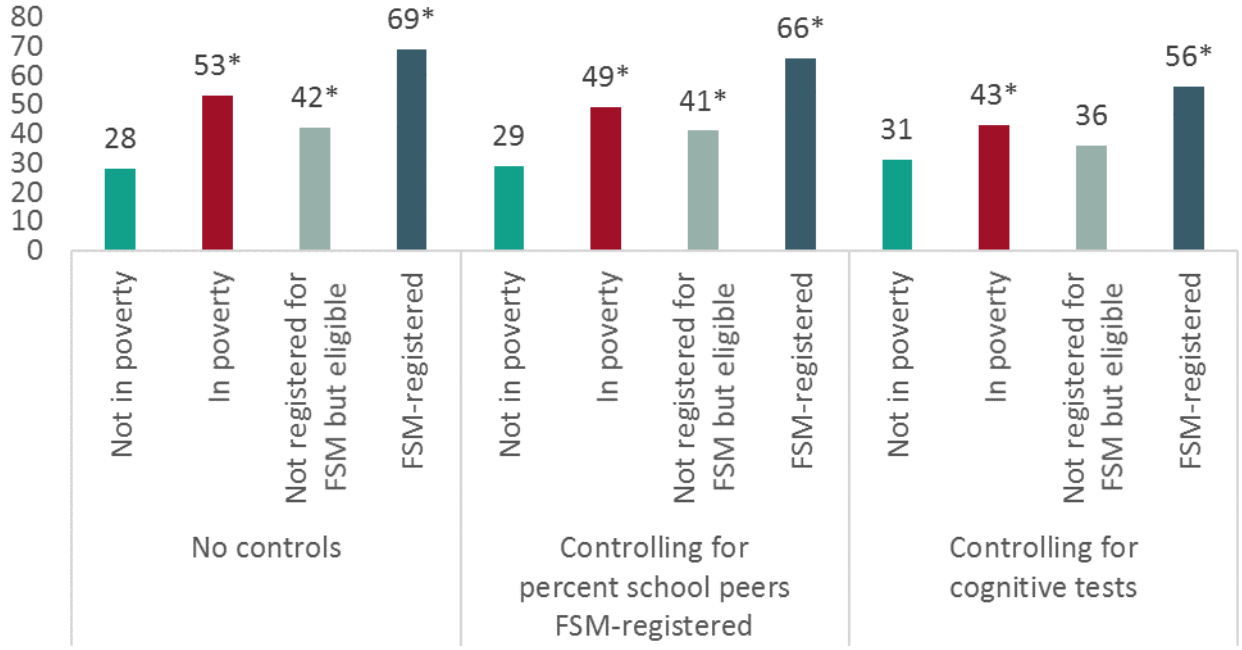


Figure 25: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage rated by their teachers as 'not very / not at all likely […] to go to university' – age 11 (n=4897)



Attainment

Figures 26 and 27 show the average percentage of children in each group who are recorded as not meeting the 'expected level' for reading and maths in key stage 2 assessments at 11. Once controls are added, for reading, there is little difference between the groups in poverty and FSM-registered, though the group not in poverty are least likely to meet the 'expected level'. For maths, however, there is a gradient where FSM-registered children are the least likely to reach the 'expected level.'

Figure 26: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage not reaching the 'expected level' at key stage 2 reading – age 11 (n=6795)

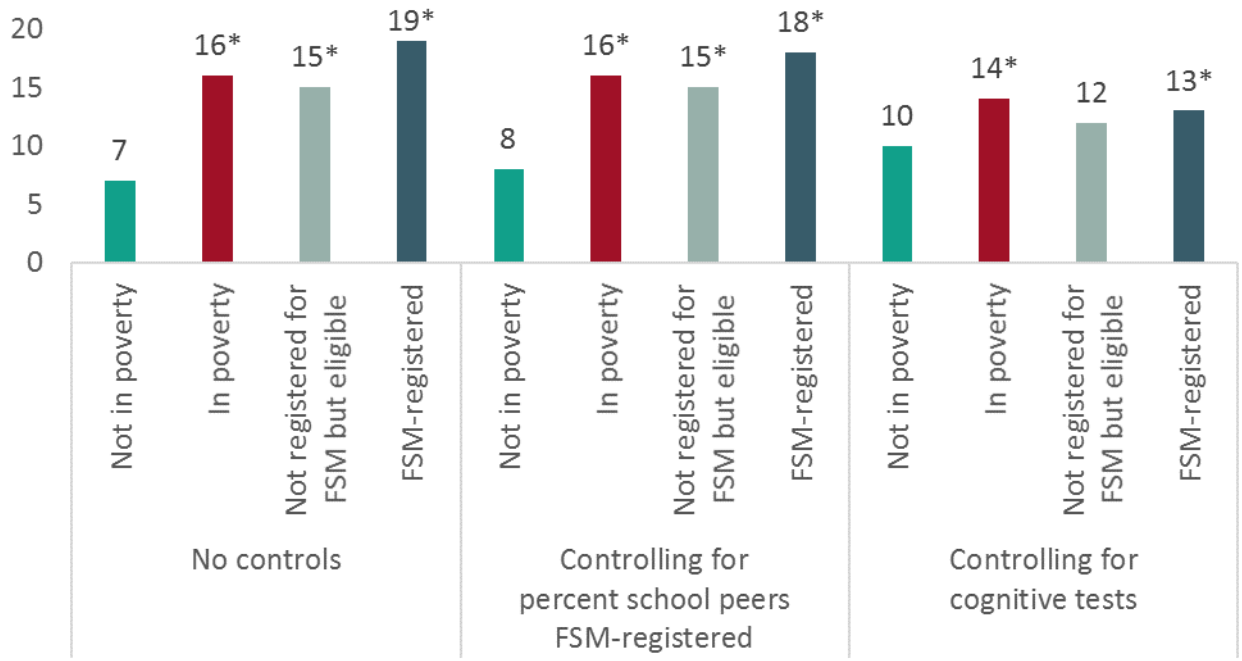


Figure 27: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage not reaching the 'expected level' at key stage 2 maths – age 11 (n=6548)

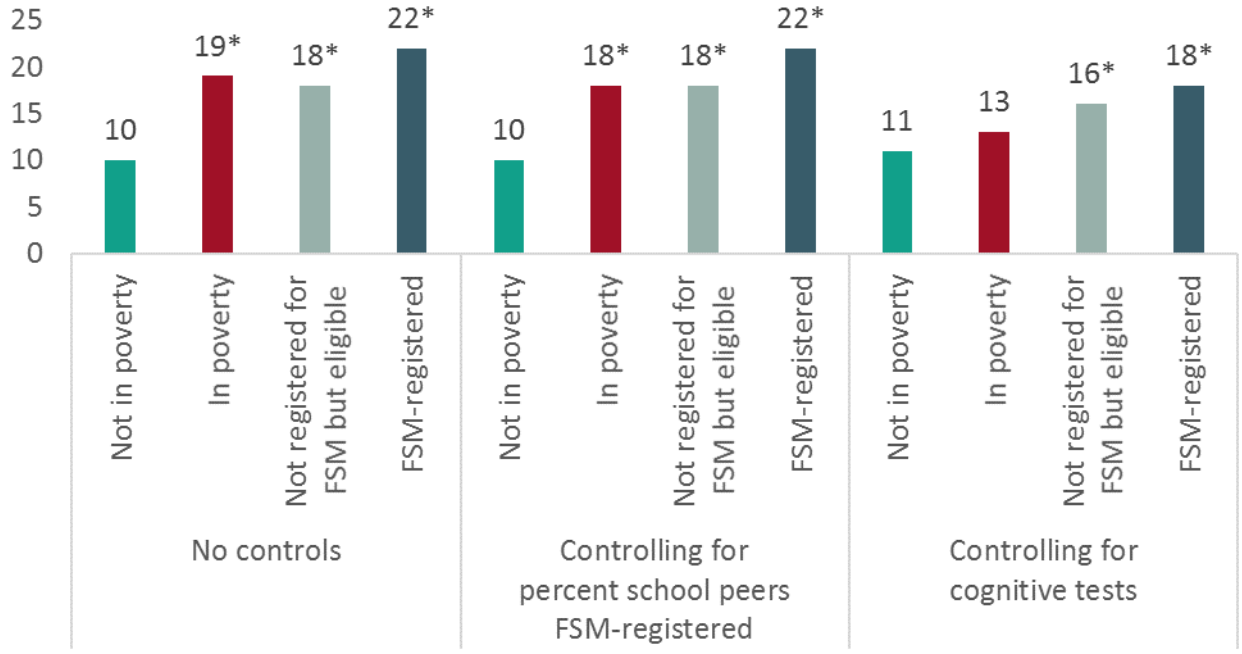


Figure 28 shows the estimated average percentage of children in each group recorded as not attaining five GCSEs at C(/4) or above, including English and Maths (we also checked with a measure of any five GCSEs, and patterns are equivalent). In these models of GCSE attainment, we control both for children's cognitive tests at age seven, and for whether they reached the 'expected level' at key stage 2, at 11. Therefore, our final model specification focusses on differences that emerge during secondary school, after key stage 2.

Children registered for FSM are the most likely to not attain this GCSE benchmark, including when previous performance in cognitive tests and attainment in primary school is controlled for. Differences remain stark in the third specification with these controls, though they are attenuated to some extent. As many children who are FSM registered in secondary school were also FSM registered in primary school (see Figure A2 in Annex), this attenuation may be interpreted as a mediation where FSM-registered children's trajectories are depressed and the 'FSM penalty' accumulates as they progress through education. Considering estimates with and without controls for previous cognitive test performance and KS2 results allows us to illustrate to some extent the way that disadvantage begins in primary school and continues to deepen in secondary school.

If we look separately at English and Maths GCSEs in isolation (Figures 29 and 30), patterns are similar – again, for both, it is FSM-registered children who are least likely to pass these GCSEs, and children not in poverty who are most likely. This holds both without controls and when pupils with equivalent results on earlier cognitive tests and at key stage 2 are considered, and when children who attended schools with similar levels of peers registered for FSM are compared.

Figure 28: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage not attaining five GCSEs at C/4 or above, including English and Maths – age 16 (n=5802)

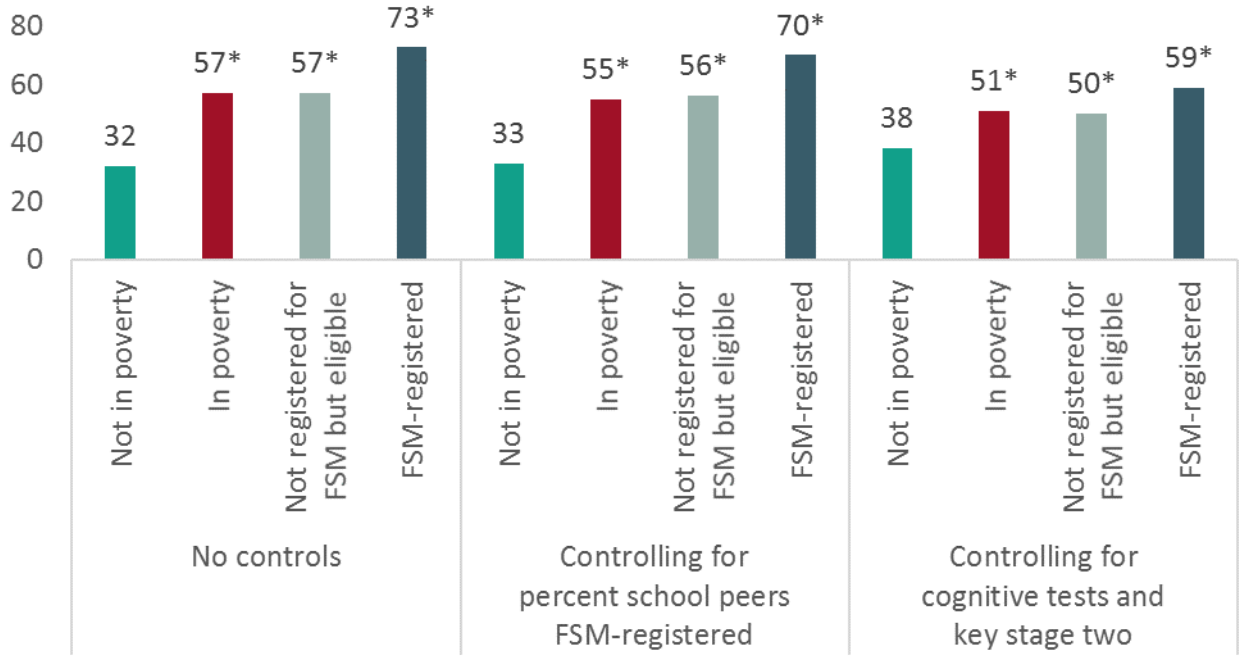


Figure 29: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage not attaining C/4 or above at GCSE English age 16 (n=5846)

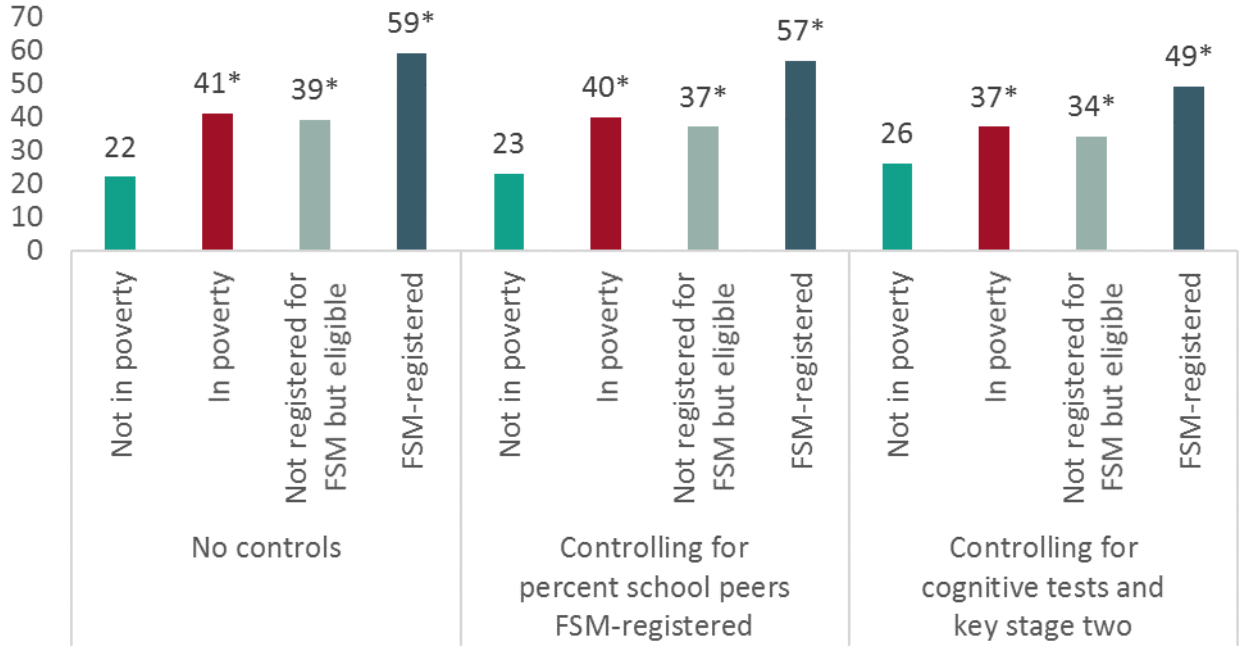
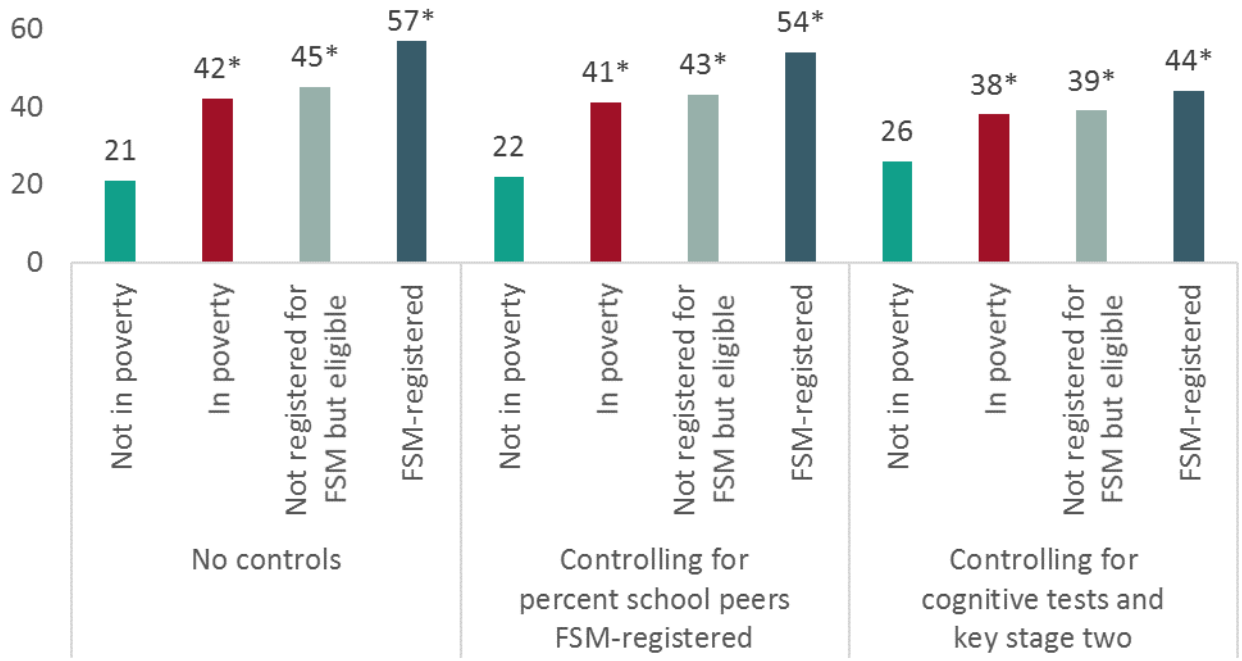


Figure 30: Among children living in families not in poverty, in poverty, FSM-eligible but not registered, and FSM-registered: Average percentage not attaining C/4 or above at GCSE Maths age 16 (n=5847)



Section discussion

The overriding finding in this section is that children registered for FSM fare worst throughout their educational careers, in terms of their feelings about and reported experiences of school and their self-esteem, efficacy and expectations. Their teachers are more likely to judge them unfavourably, and to hold lower expectations for their progress – even when accounting for capabilities as proxied by cognitive test scores. By the time they take GCSEs, children registered for FSM are much less likely to pass key thresholds, both compared to those not in poverty and those in poverty but not registered for FSM, even when entitled: pupils who are similarly low-income and in receipt of the same qualifying welfare benefits.

As our findings hold when controlling for early cognitive test performance, they are congruent with a wider body of work, including research showing that 'pupils from poor backgrounds who are higher achievers in primary school fall behind their better-off but lower-achieving peers during secondary school' (Crawford et al., 2017).[53] What we add particularly is an explicit distinction between those low-income children who are FSM registered and those who are similar but not

[53] https://www.tandfonline.com/doi/abs/10.1080/03054985.2016.1240672

registered, showing that depression of trajectories seems particularly pronounced for the FSM-registered group.

As our findings hold across measures at both the pupil and the teacher level, and in terms of assessment, they are arguably congruent with a longstanding, cross-disciplinary body of work that indicates that there are aspects of the education system that enact differentiated treatments, embedding or exacerbating children's positions within a stratified environment, and reproducing inequalities. For example, Elliot Major, Machin and Bahl (2025) have concluded recently that, '[f]ar from acting as a leveller, the education system has been exploited to retain advantage from one generation to the next.'[54] Reay (2022) contends that, '[i]nequality is at the very core of our educational system, sedimented into its values and ethos.'[55] Frances and Wong (2013) argue that, 'education is often seen as a driver of social mobility. Yet, in fact, the evidence shows that in the UK, education at best replicates, and at worst exacerbates, existing inequality.'[56] Findings here that FSM-registered children tend to be rated and perceived least favourably by their teachers – crucial to their education – in particular indicate their position within this unequal system and suggests an 'FSM penalty,' potentially underpinned at least in part by stereotyping, labelling, or stigma.

Alongside and interacting with this, given that analyses in Section Two of this paper showed that according to some measures, FSM-registered children are more disadvantaged in their home lives than those entitled but not registered, there are also at least two additional possible mechanisms through which this depression of FSM-registered pupils' trajectories may play out.

One is that under-resourcing and various different aspects of poverty directly influence children's lives at home and at school, with those who are FSM-registered most acutely experiencing and being impacted by this.[57] Our findings in Section Two that differences in maternal health and mental health, and perceived financial difficulties become particularly pronounced in the later years when MCS children are aged 11 and 14 support this. They might reflect an accumulation of hardship, stress and disadvantage over time, as the cohort families age, which could influence

[54] https://cep.lse.ac.uk/_NEW/PUBLICATIONS/abstract.asp?index=11614
[55] https://ifs.org.uk/inequality/measuring-and-understanding-contemporary-english-educational-inequalities/
[56] https://www.researchgate.net/profile/Billy-Wong/publication/272164028_What_is_preventing_social_mobility_A_review_of_the_evidence/links/54dca41f0cf28a3d93f82011/What-is-preventing-social-mobility-A-review-of-the-evidence.pdf
[57] https://link.springer.com/article/10.1007/s12187-020-09782-0

children's educational attainment (as well as their wellbeing and other outcomes). Alongside much other work, this points to a need to alleviate child poverty at source, so that its impacts are not felt throughout children's lives.

The other related potential mechanism is that restrictive aspects of the school system most severely disadvantage and compound the disadvantage of those who are most deprived. For example, the Child Poverty Action Group has documented barriers to education presented by unnecessary costs and requirements which can impact children's attendance, the nature of their experiences and ability to participate, and which can compound family poverty and stress.[58] We agree that it is crucial to ensure the education system and schools work actively to counteract disadvantage in children's home lives, rather than to compound it.

Patterns in terms of attainment in this report are congruent with Ilie et al's (2017) and Sutherland et al's (2015) conclusions that FSM status in itself predicts outcomes at key stage 2 and key stage 4, on top of other key social and demographic factors, including parents' qualifications, occupations and employment.[59] Sutherland et al posit that, 'eligibility for FSM captures distinct aspects of socio-economic disadvantage over and above the risks from low income,' and our findings here that FSM-registered children are more likely to be perceived negatively by their teachers, and to have negative self-perceptions and views of school, also make a contribution to understanding some of the aspects that may play into to this.

Note that these findings do not lead us necessarily to say that targeted provision through FSM and associated policies should not take place, nor that resourcing for pupils within schools should not be premised upon economic or social disadvantage. But it is important to think carefully about enactment and implementation, and to be aware of and mitigate against unintended consequences of well-intentioned policies, so that they can be played out as fairly and effectively as possible and mitigate rather than reproduce disadvantage.

[58] https://cpag.org.uk/policy-and-research/findings-our-projects/cost-school-day-reports-blogs-and-briefings

[59] https://bera-journals.onlinelibrary.wiley.com/doi/epdf/10.1002/berj.3260?saml_referrer https://assets.publishing.service.gov.uk/media/5a74fe2540f0b6399b2afcf7/RR486_-_Factors_associated_with_achievement_-_key_stage_2.pdf

Lastly, in terms of measurement of relative disadvantage for research, the clear gradient in attainment from those FSM-registered, to those entitled but not registered, to those otherwise in poverty, to those not in poverty, is a challenge once more to analyses that focus solely on FSM when exploring the relationship between disadvantage and education (for example in order to map progress in closing the attainment 'gap'). Again, alongside findings in our previous reports for this project,[60] this suggests a need to supplement FSM-based analysis with other measures.

Our analyses of NPD data indicated a need also to account for language background and ethnicity in research using FSM, and that there are regional differences;[61] we were not able to fully incorporate these factors here due to sample sizes in the MCS data, so this is a limitation of the current report. Other pupil characteristics beyond gender (as incorporated here) may moderate or mediate the patterns we find.

A final limitation of the work here is that it is of course cohort specific, and it is important to note for example that changes over MCS waves may reflect changing economic and social conditions (including austerity in the later years) as well as tendencies to difference as families age. In itself this is interesting, but requires caution in interpretation.

New data from studies of 2020s cohorts[62] will in time offer an opportunity to build on and update our analyses, and to see whether the patterns we have indicated here, where FSM-registered children fare worst throughout their educational careers, and children not in poverty fare best, continue in the most recent years and in upcoming policy and social environments.

[60] https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf
[61] https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf
[62] https://fivetotwelve.org.uk/
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Annexes

Annex A: Descriptive statistics for models in Section three

Descriptive statistics underlying illustrative models, and for key variables by our four-level categorisation of FSM/poverty.

Figure A1: Percentage of children in the key stage 2 reading outcome model who fell into each categorisation of FSM/poverty at age 11, who fell into each category at age 7[63]

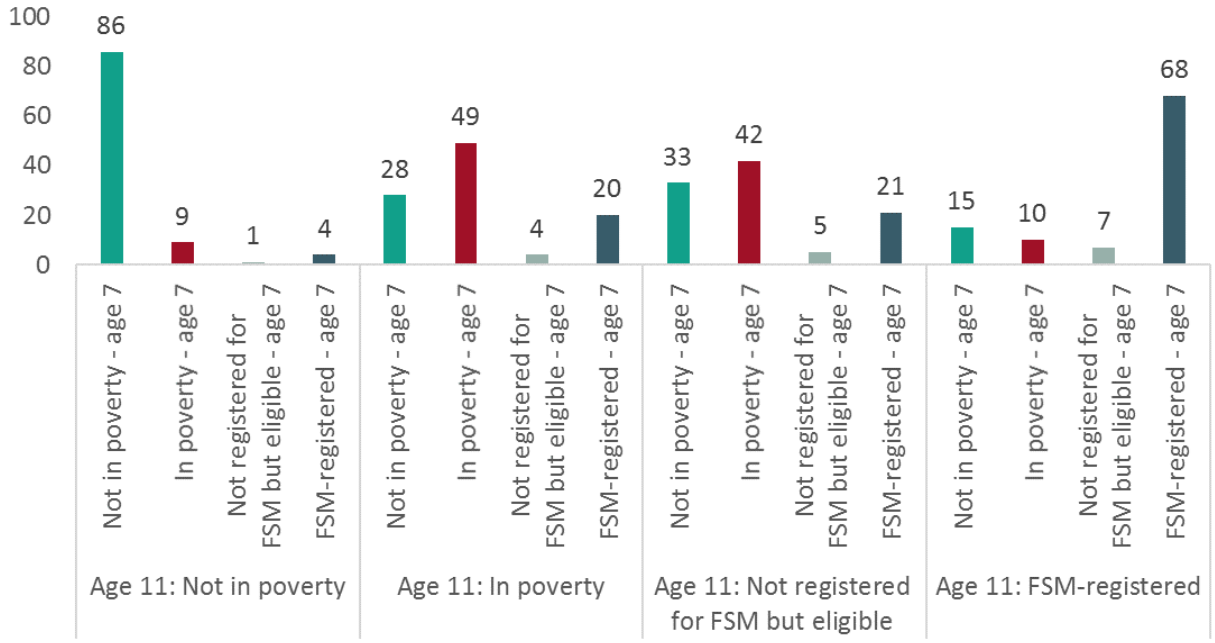
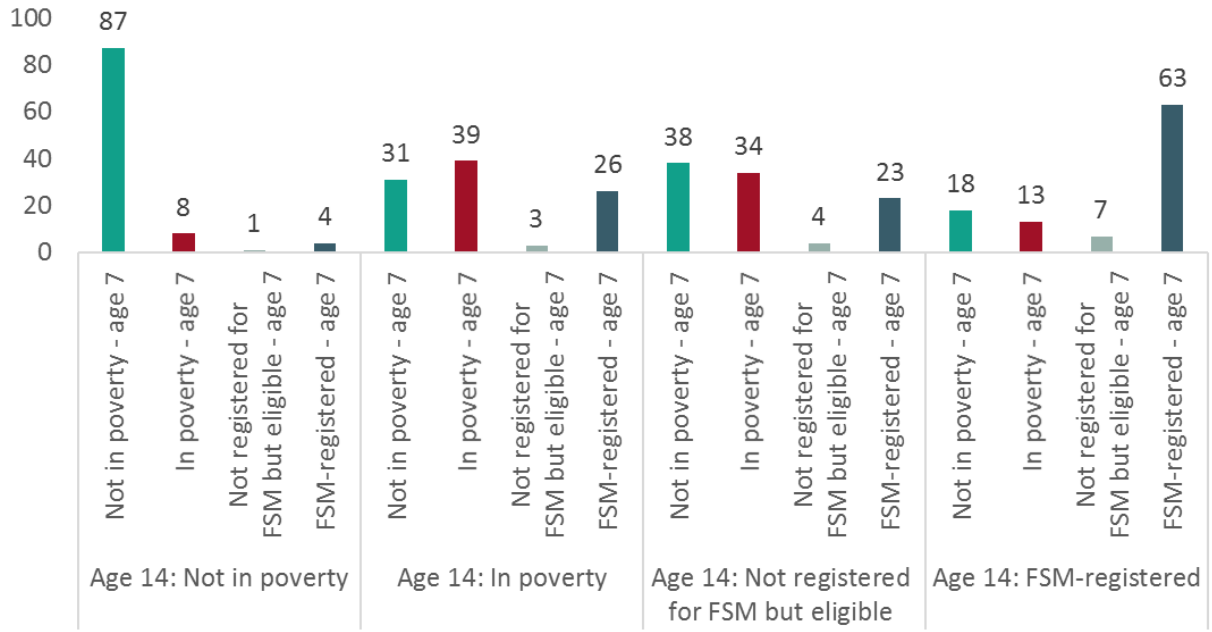


Figure A1 shows descriptive statistics for the sample of children included in our key stage 2 reading outcome model (see Figure 26 earlier). It shows the proportion of those in each category of FSM-registration/eligibility/poverty at age 11 who fell into each category previously, at age seven. For example, 86 per cent of those classed as not in poverty at age 11 had also not been in poverty at age seven. Sixty-eight percent of those FSM-registered at age 11 had also been FSM-registered at age seven.

Figure A2 shows the equivalent information for the sample of children included in the five GCSEs outcome model, comparing their classification according to FSM-registration/eligibility/poverty at age 14 to their previous situation at age seven.

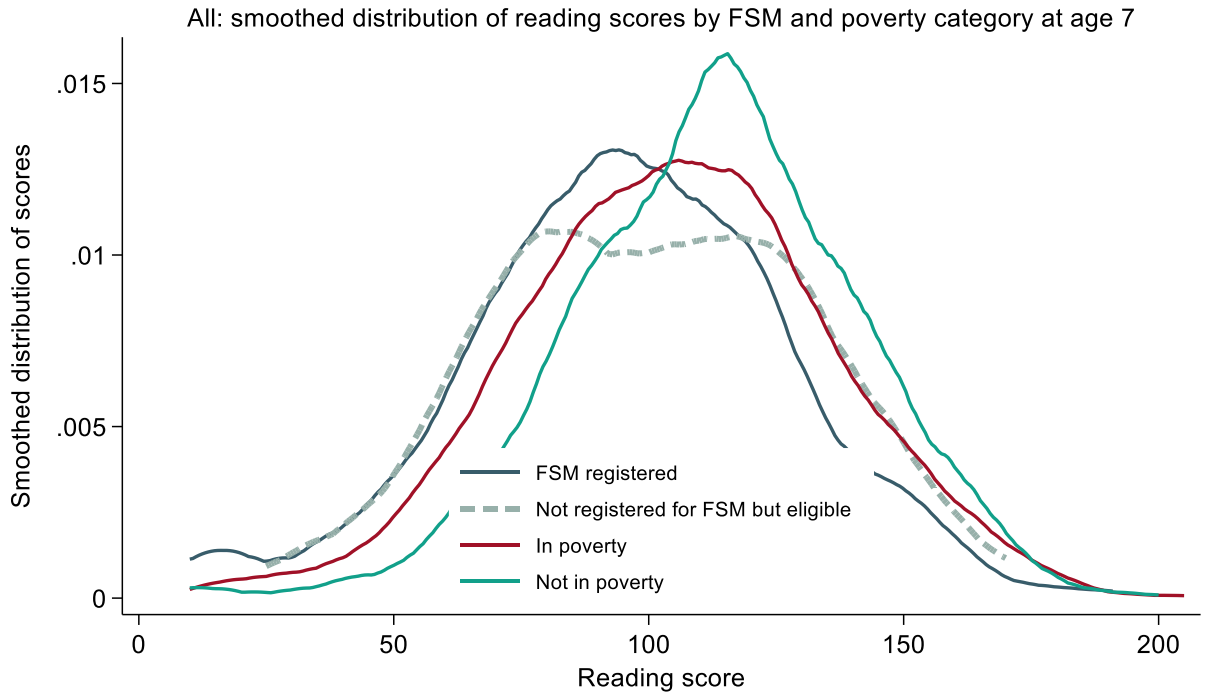
[63] N Not in poverty age 11 = 4,557; In poverty age 11 = 915; Not registered but eligible age 11 = 163; FSM age 11 = 1,093

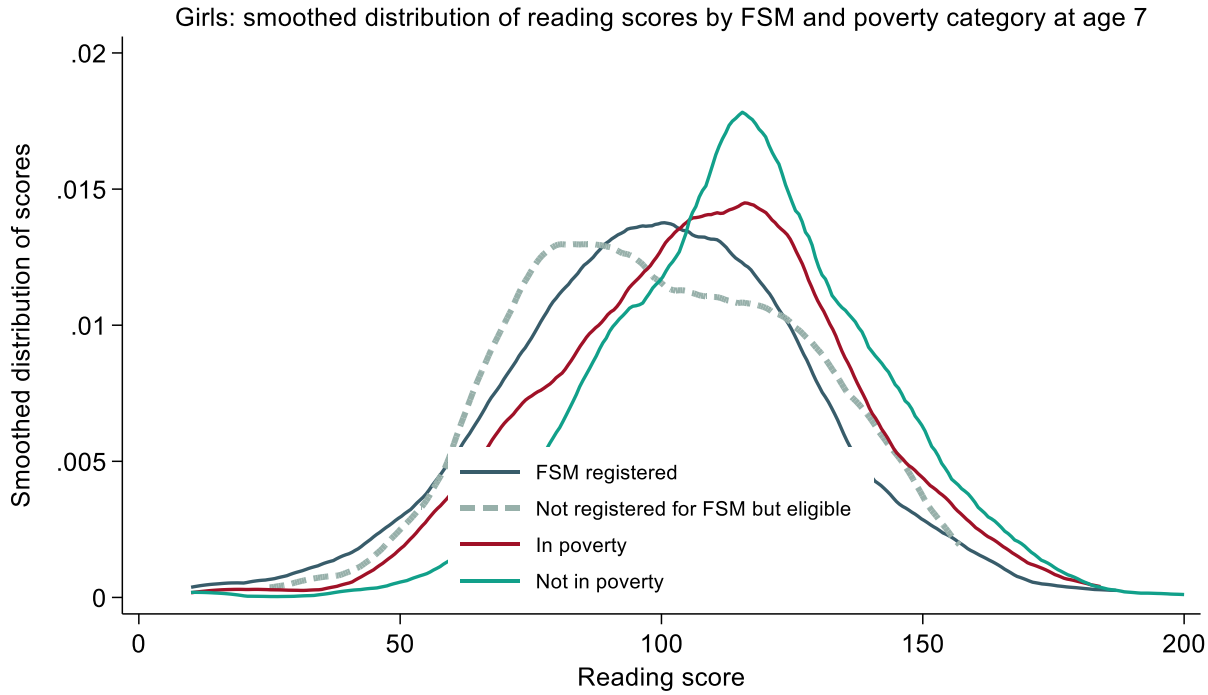
Figure A2: Percentage of children in five GCSEs outcome model who fell into each categorisation of FSM/poverty at age 14, who fell into each category at age 7[64]

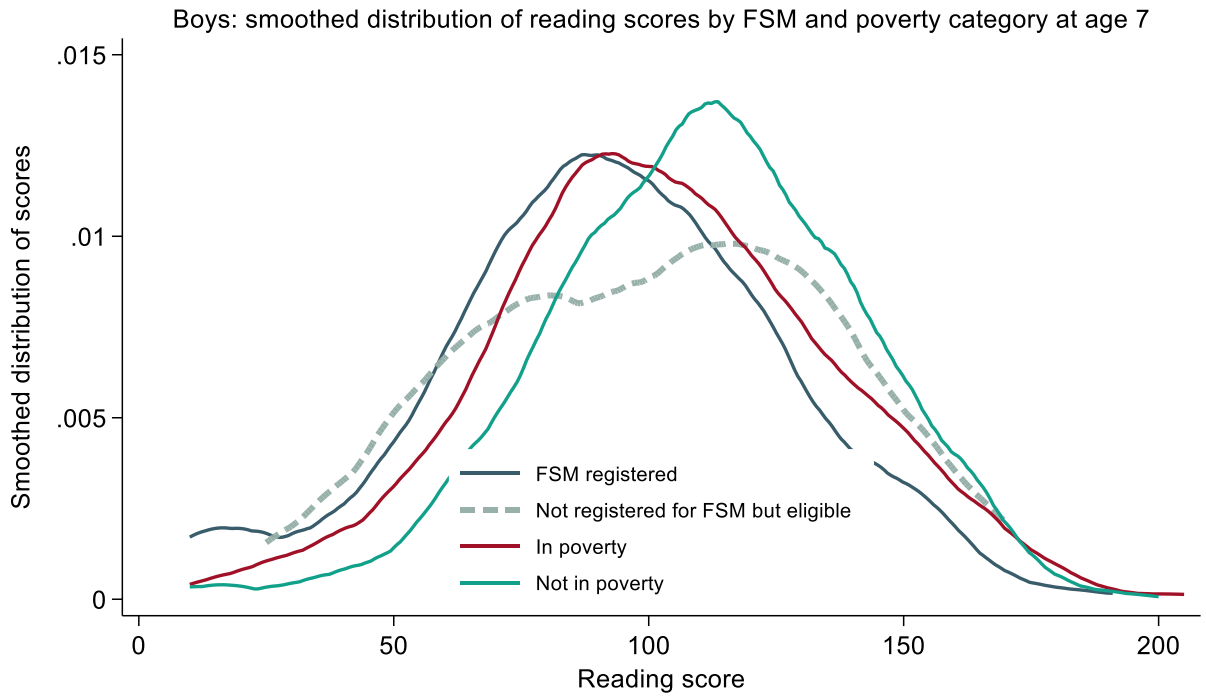


[64] N not in poverty age 14 = 3,913; In poverty age 14 = 797; Not registered but eligible age 14=125; FSM age 14=909

Figure A3: Distribution of reading cognitive test scores at age 7 for children in each categorisation of FSM/poverty at the same age



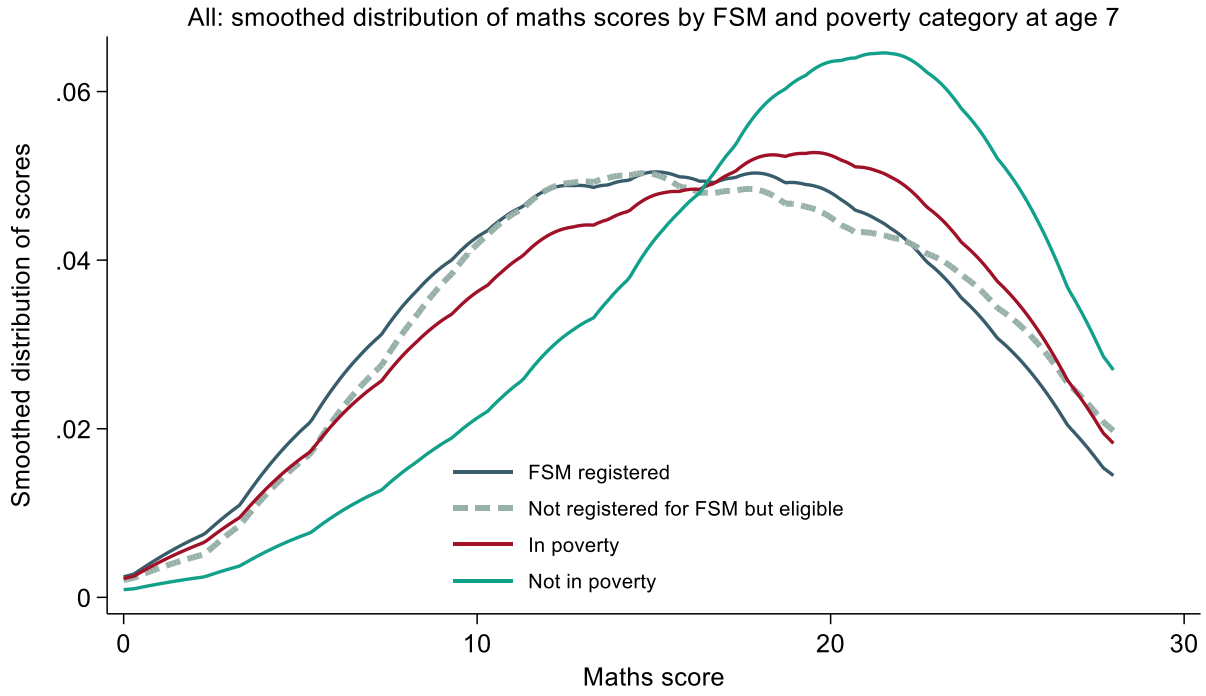


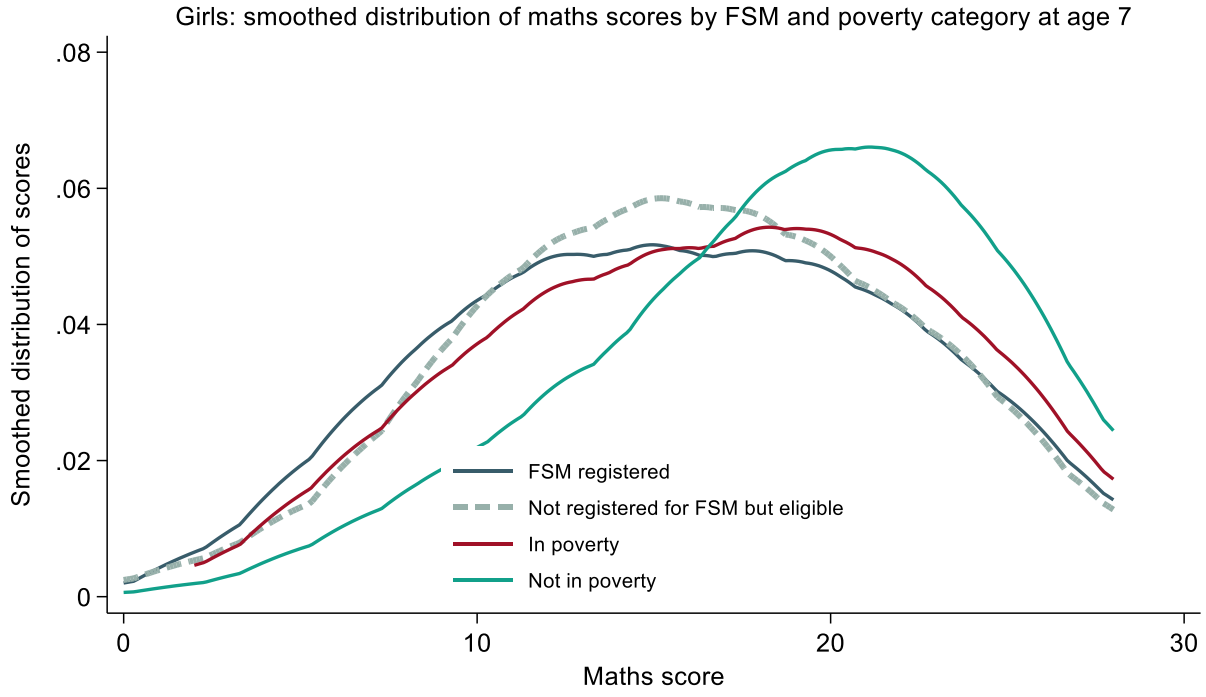


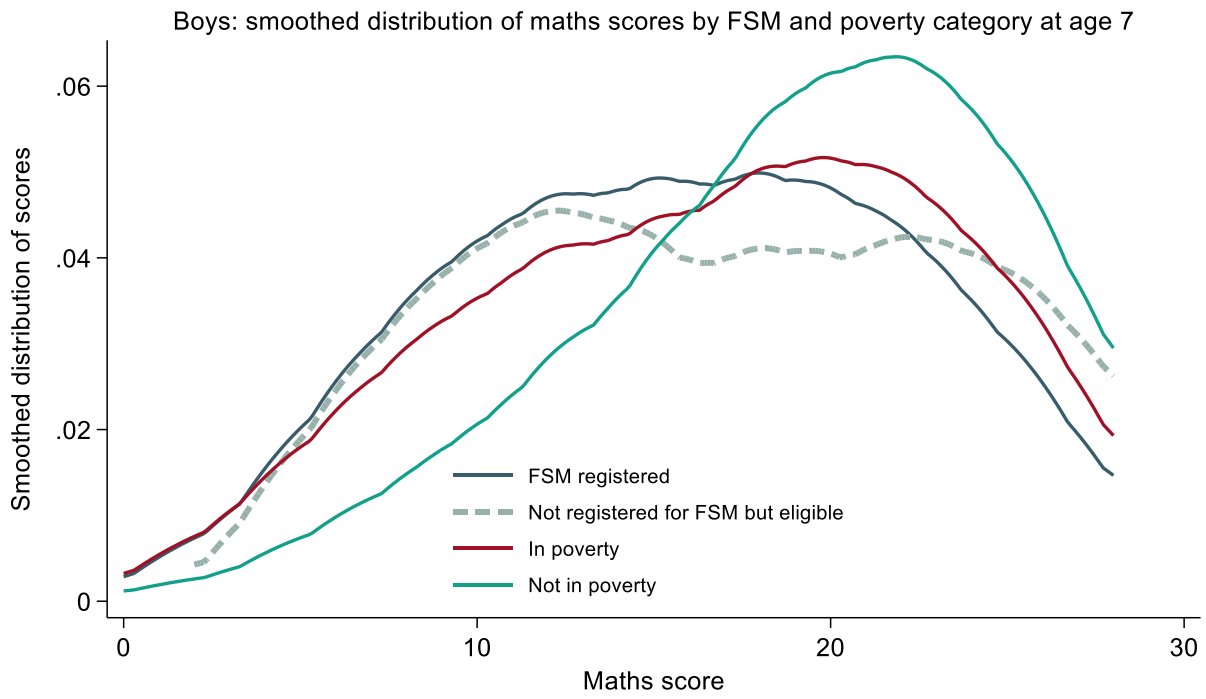
Sample sizes for reading scores at age 7 within each group:

	Girls	Boys	All
FSM registered	666	685	1,351
Not registered for FSM but eligible	93	98	191
In poverty	548	528	1,076
Not in poverty	2,537	2,601	5,138

Figure A4: Distribution of maths cognitive test scores at age 7 for children in each categorisation of FSM/poverty at the same age



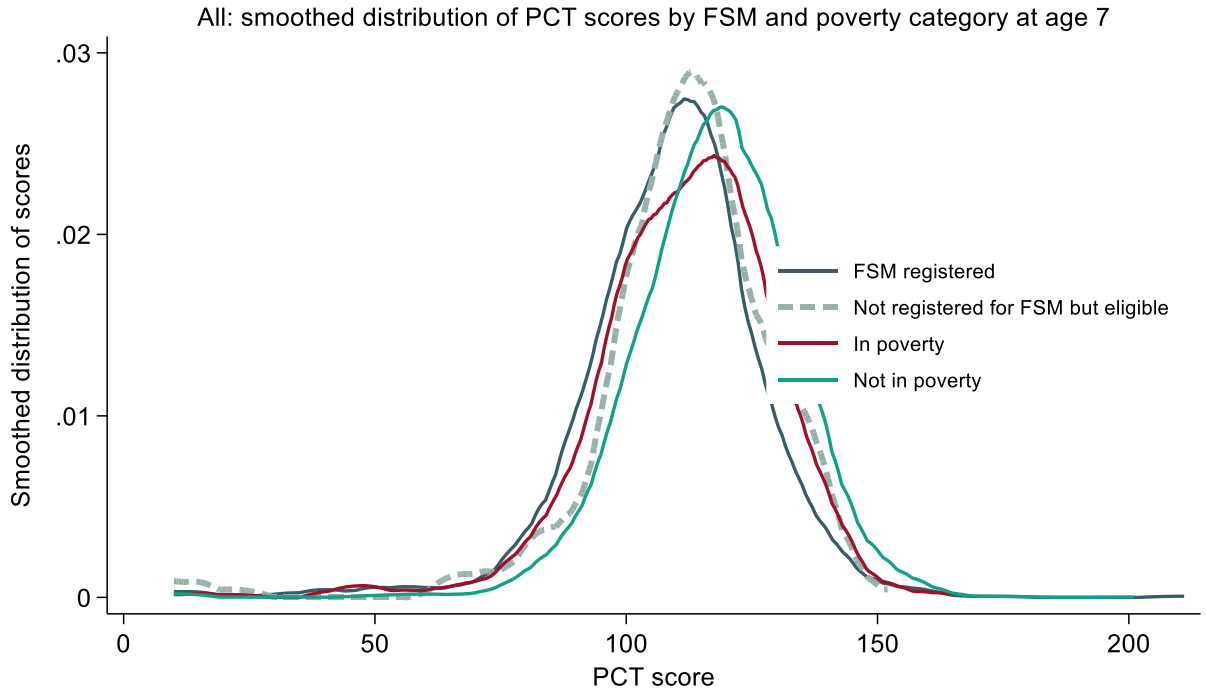


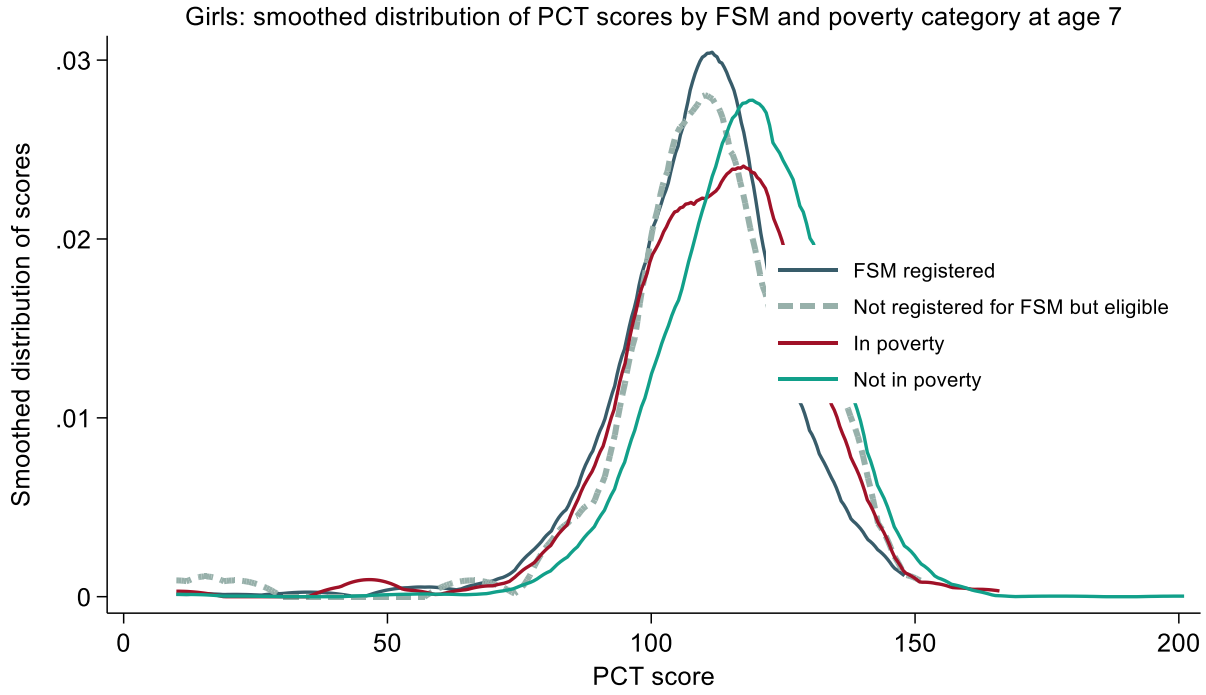


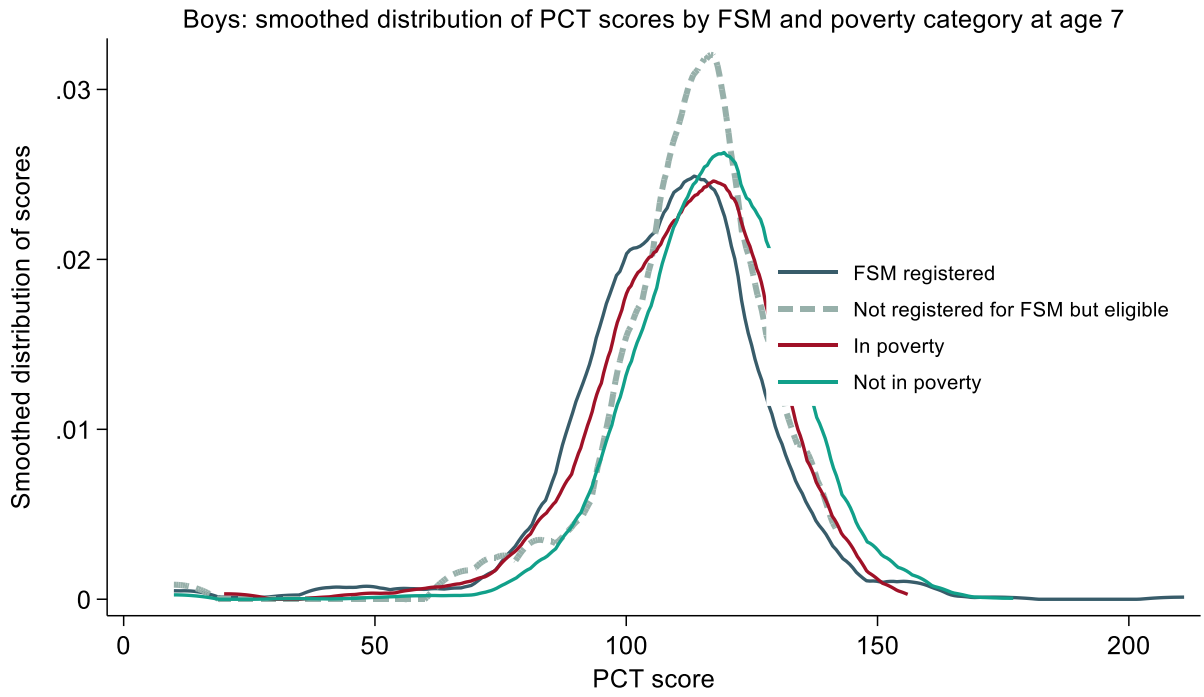
Sample sizes for maths scores at age 7 within each group:

	Girls	Boys	All
FSM registered	666	682	1,348
Not registered for FSM but eligible	93	100	193
In poverty	546	530	1,076
Not in poverty	2,540	2,602	5,142

Figure A5: Distribution of pattern construction test (PCT) cognitive test scores at age 7 for children in each categorisation of FSM/poverty at the same age



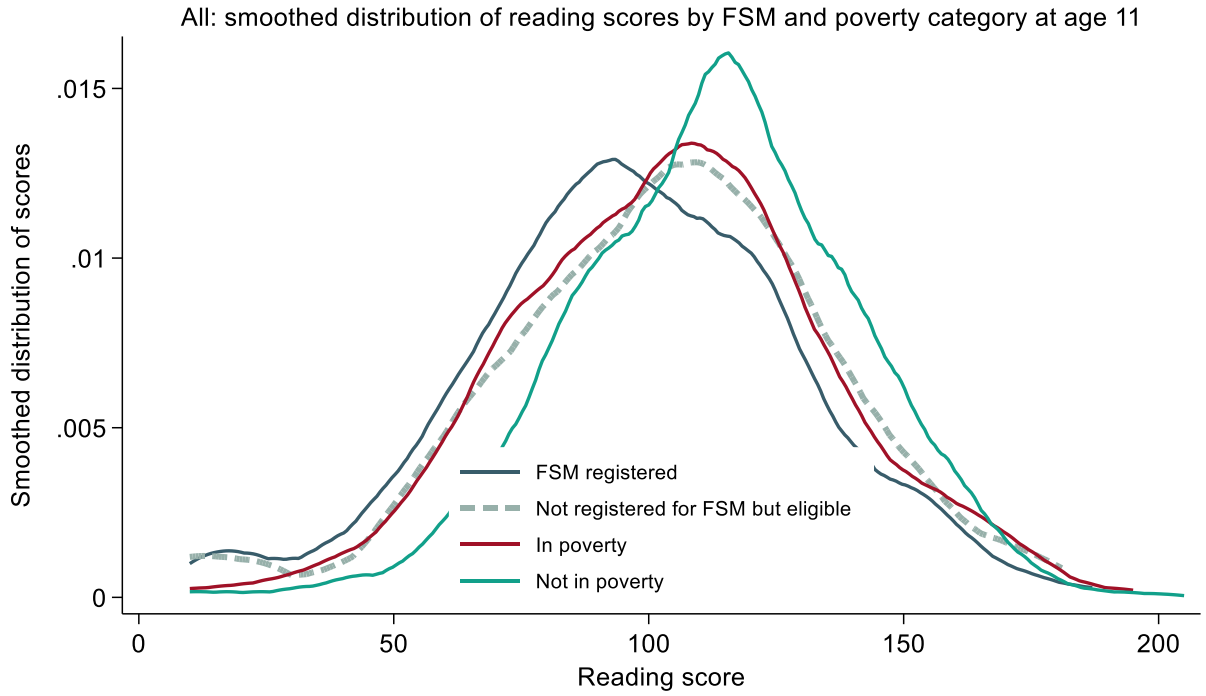


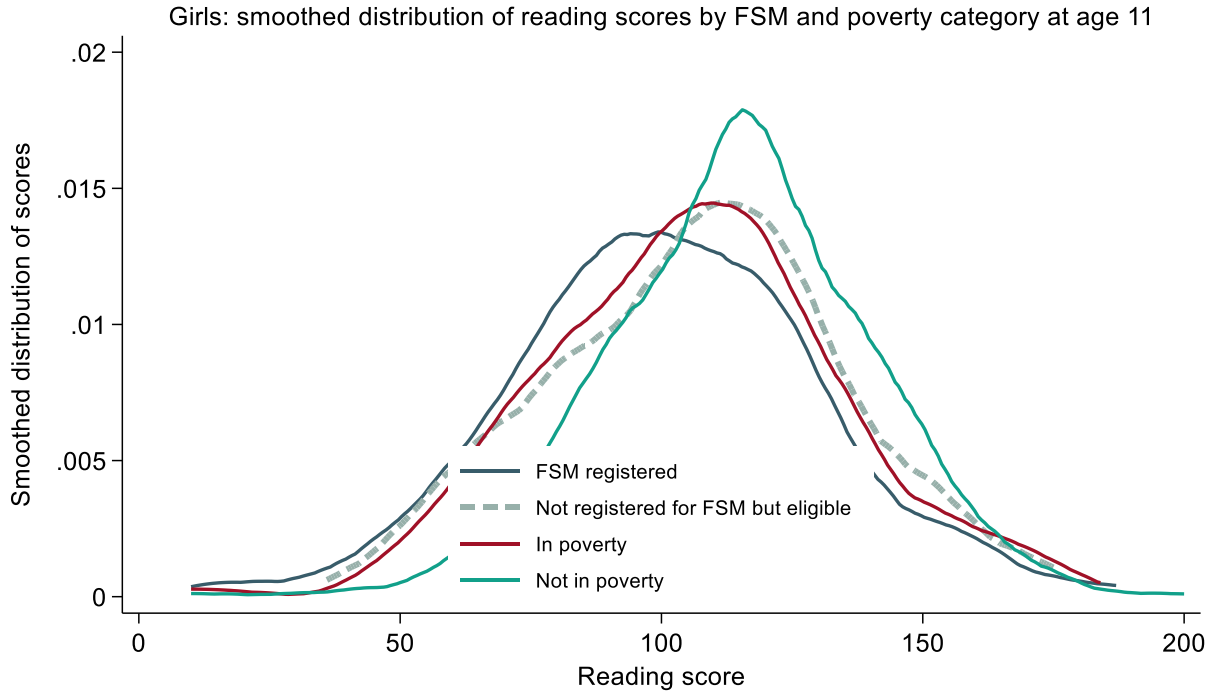


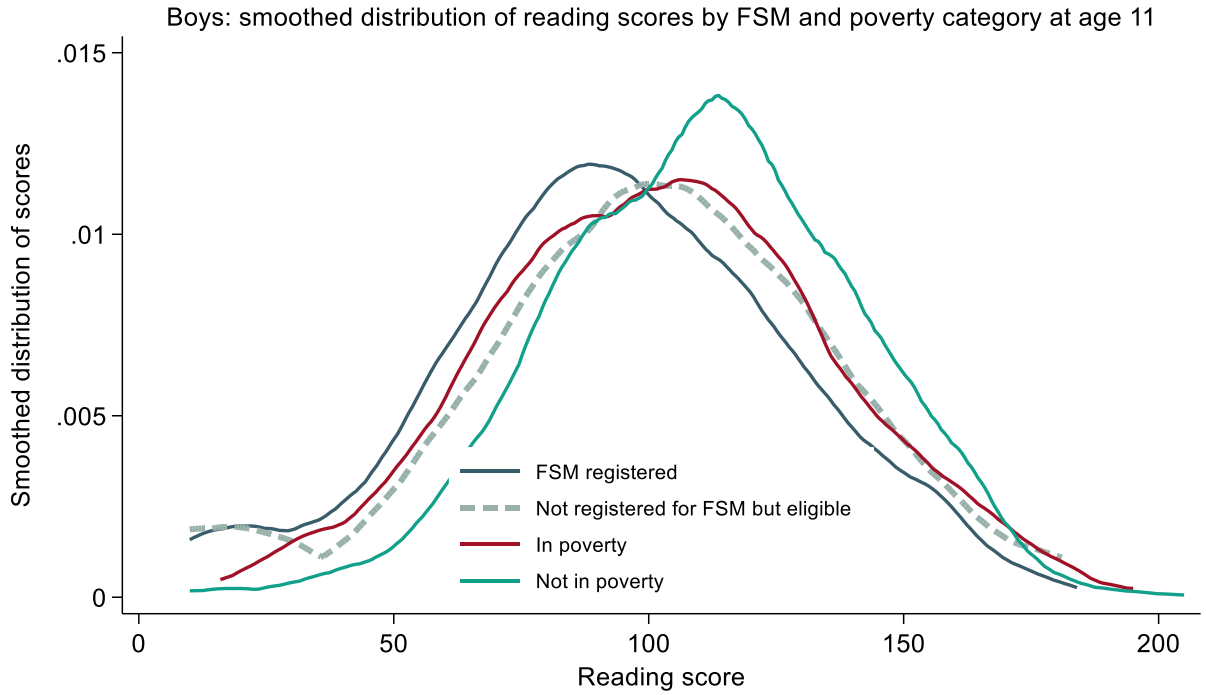
Sample sizes for PCT scores at age 7 within each group:

	Girls	Boys	All
FSM registered	657	672	1,329
Not registered for FSM but eligible	92	98	190
In poverty	546	524	1,070
Not in poverty	2,536	2,593	5,129

Figure A6: Distribution of reading cognitive test scores from assessments at age 7 for children in each categorisation of FSM/poverty at age 11



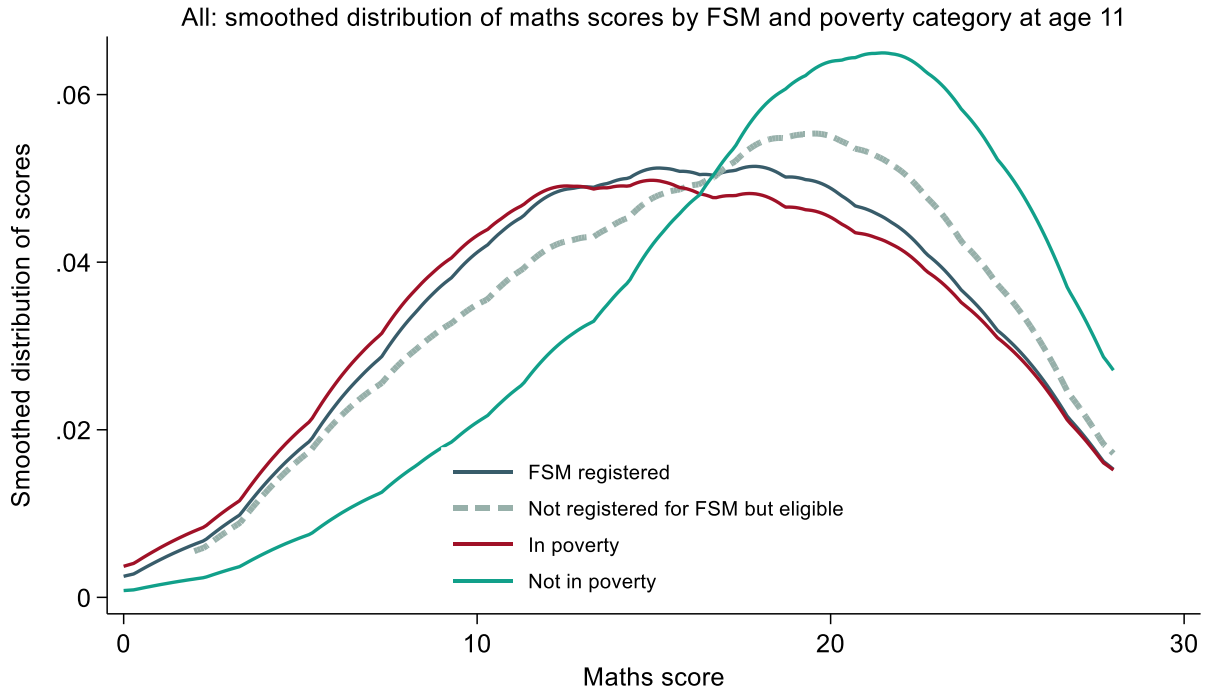


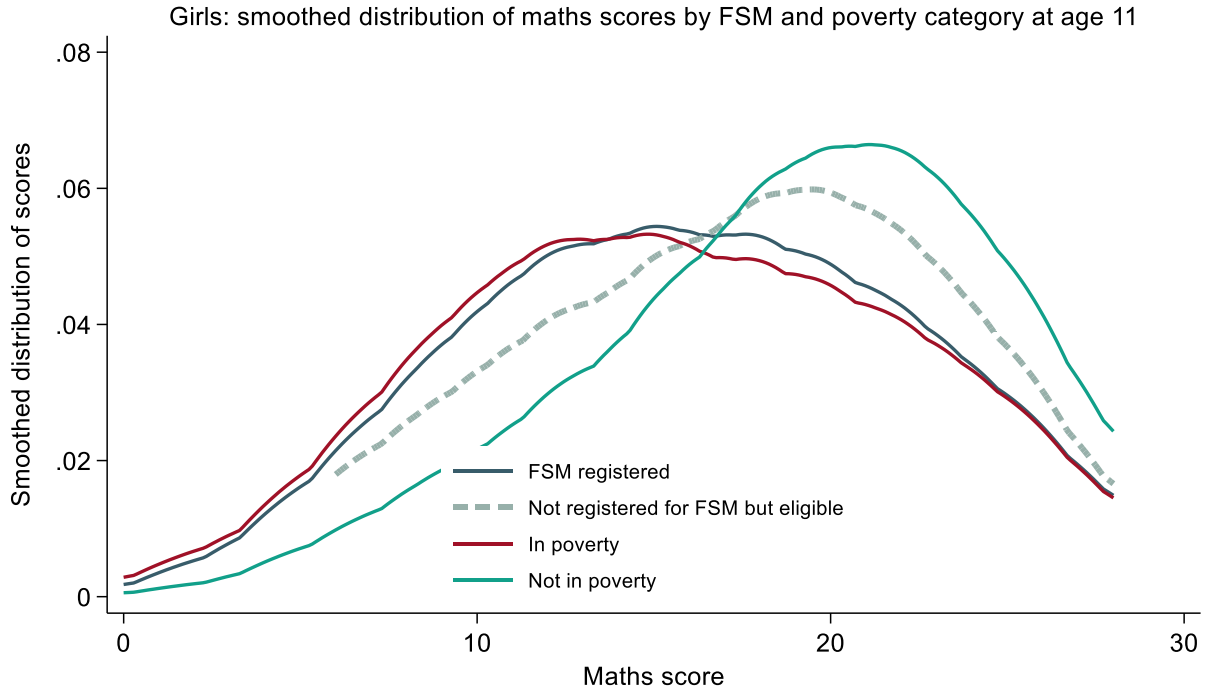


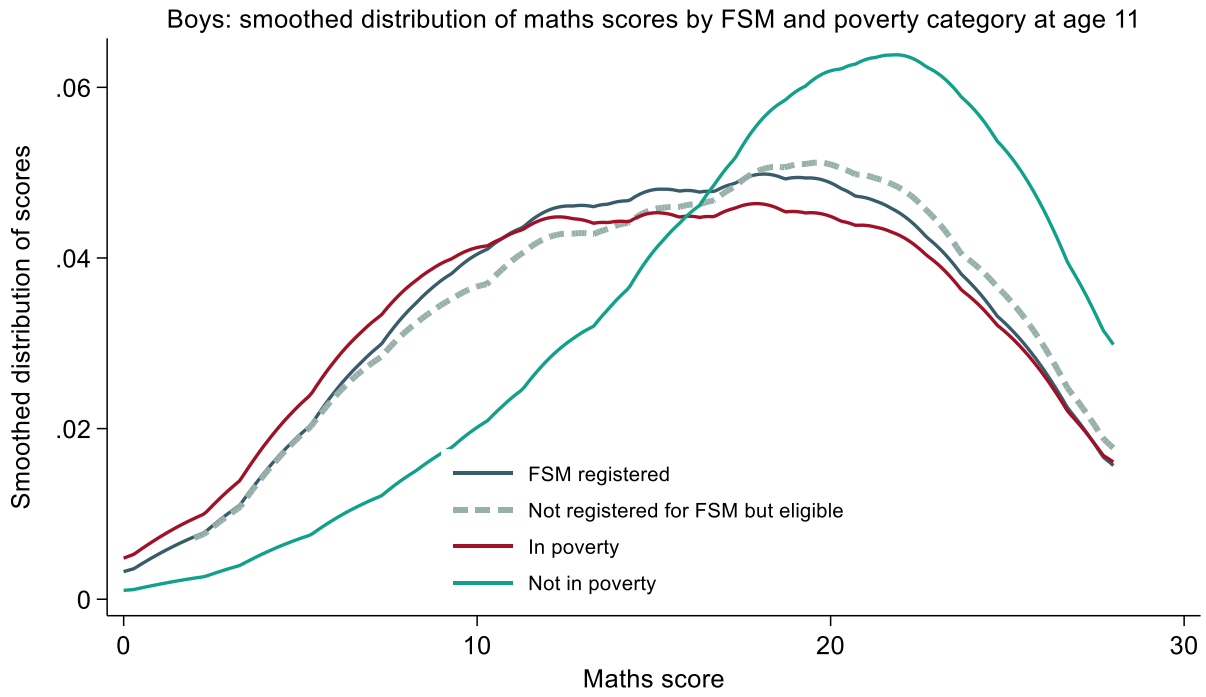
Sample sizes for reading scores at age 7 within each group:

	Girls	Boys	All
FSM registered	564	563	1,127
Not registered for FSM but eligible	125	133	258
In poverty	294	226	520
Not in poverty	2,423	2,481	4,904

Figure A7: Distribution of maths cognitive test scores from assessments at age 7 for children in each categorisation of FSM/poverty at age 11



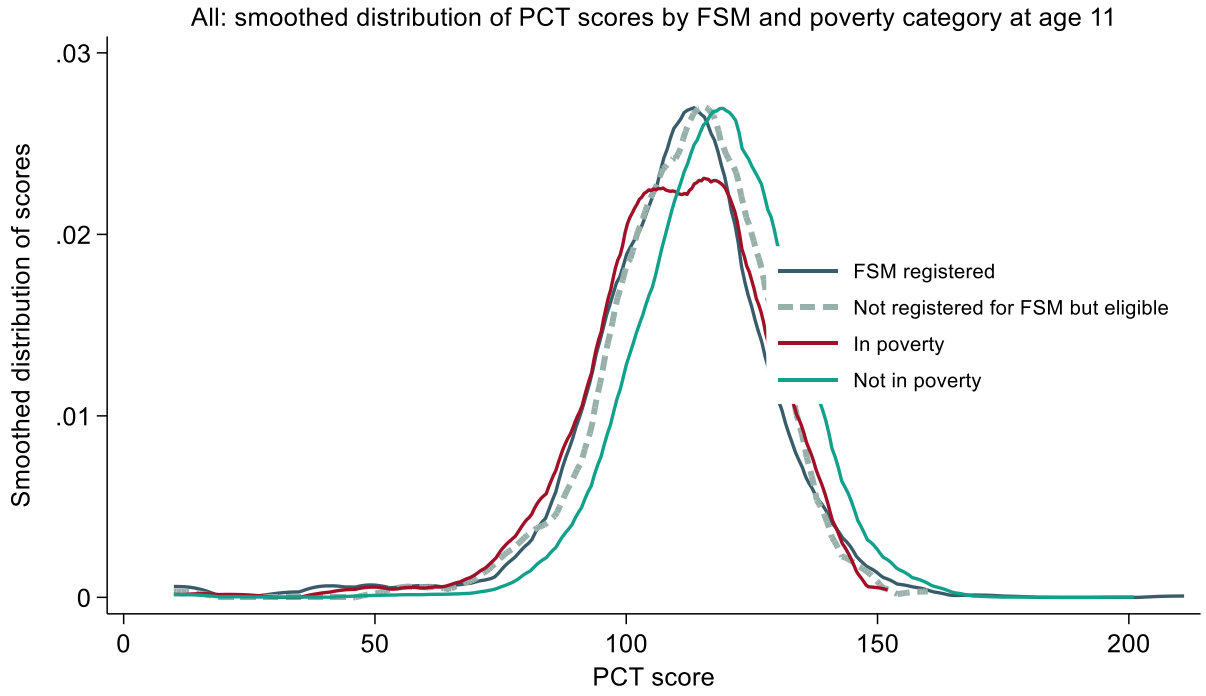


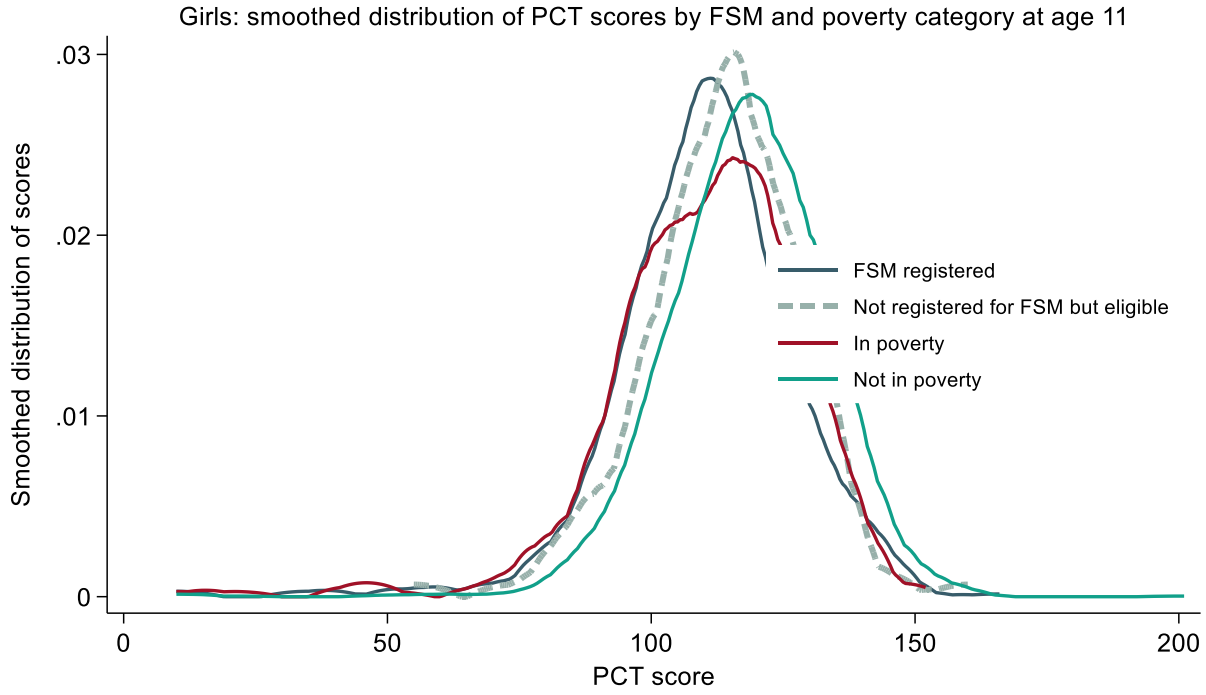


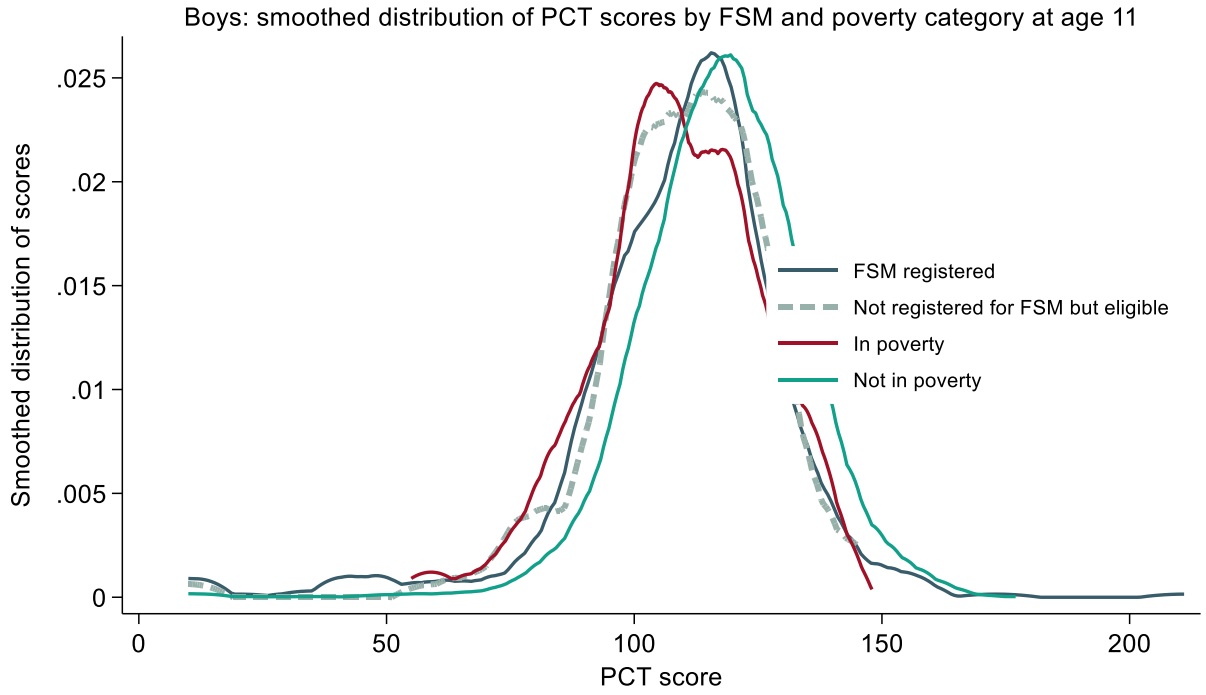
Sample sizes for maths scores at age 7 within each group:

	Girls	Boys	All
FSM registered	564	563	1,127
Not registered for FSM but eligible	125	134	259
In poverty	294	226	520
Not in poverty	2,425	2,485	4,910

Figure A8: Distribution of pattern construction test (PCT) cognitive test scores from assessments at age 7 for children in each categorisation of FSM/poverty at age 11



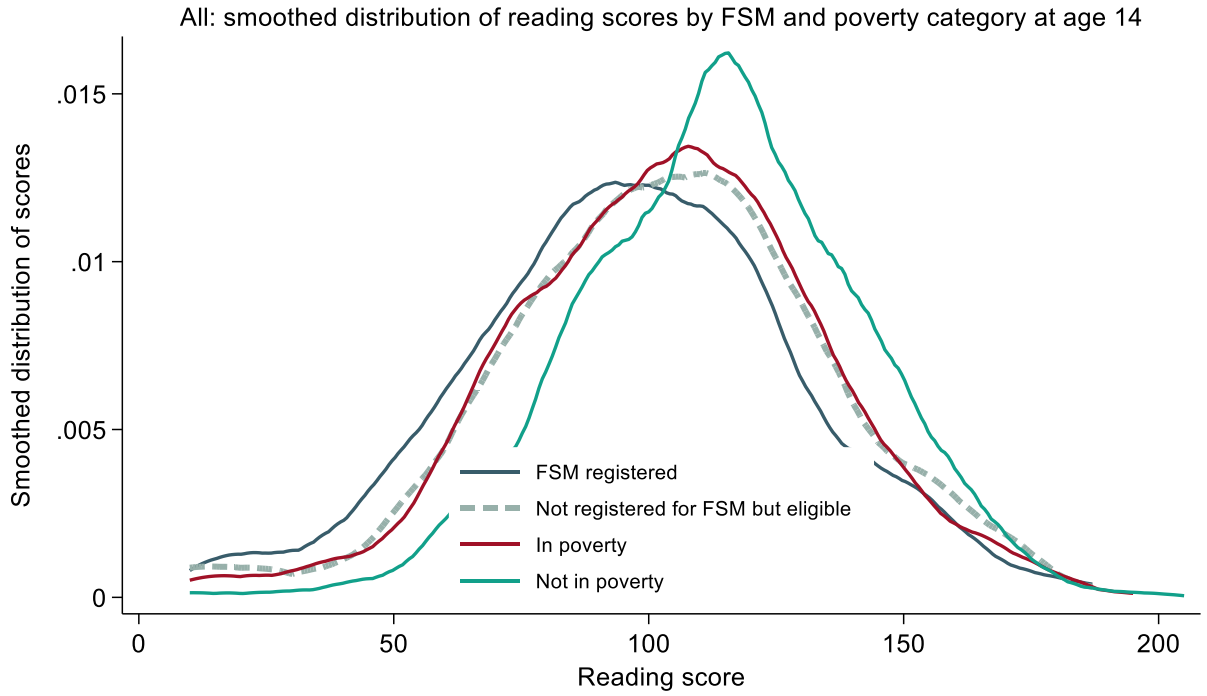


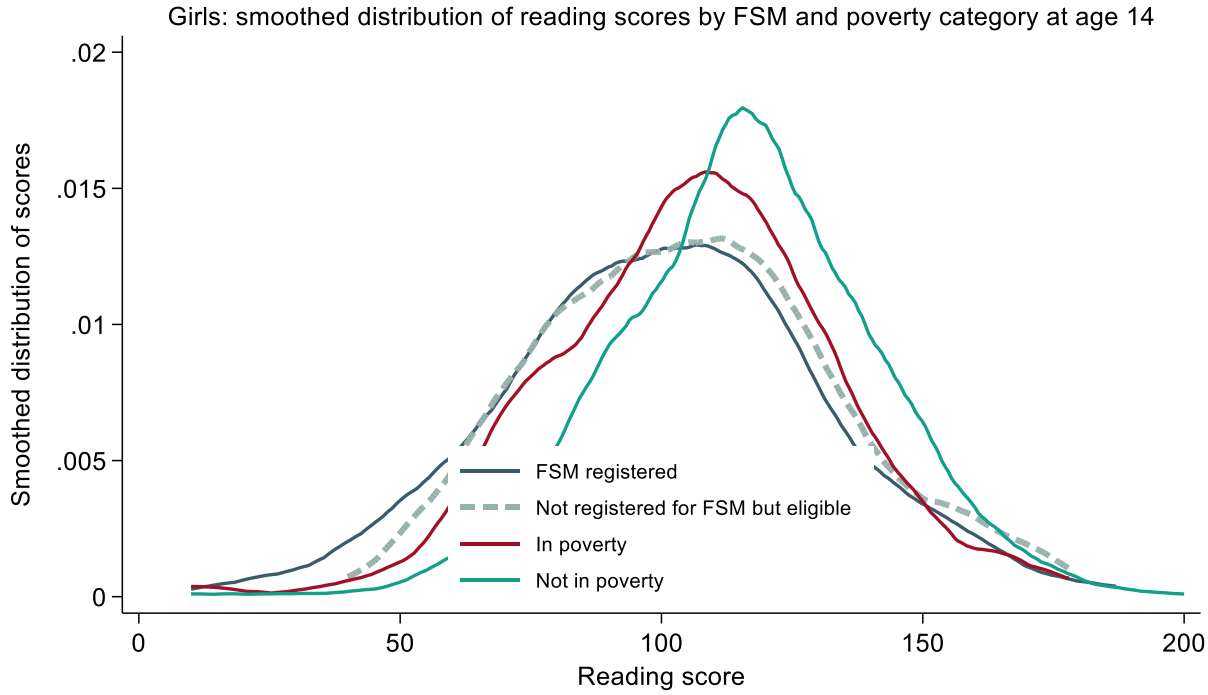


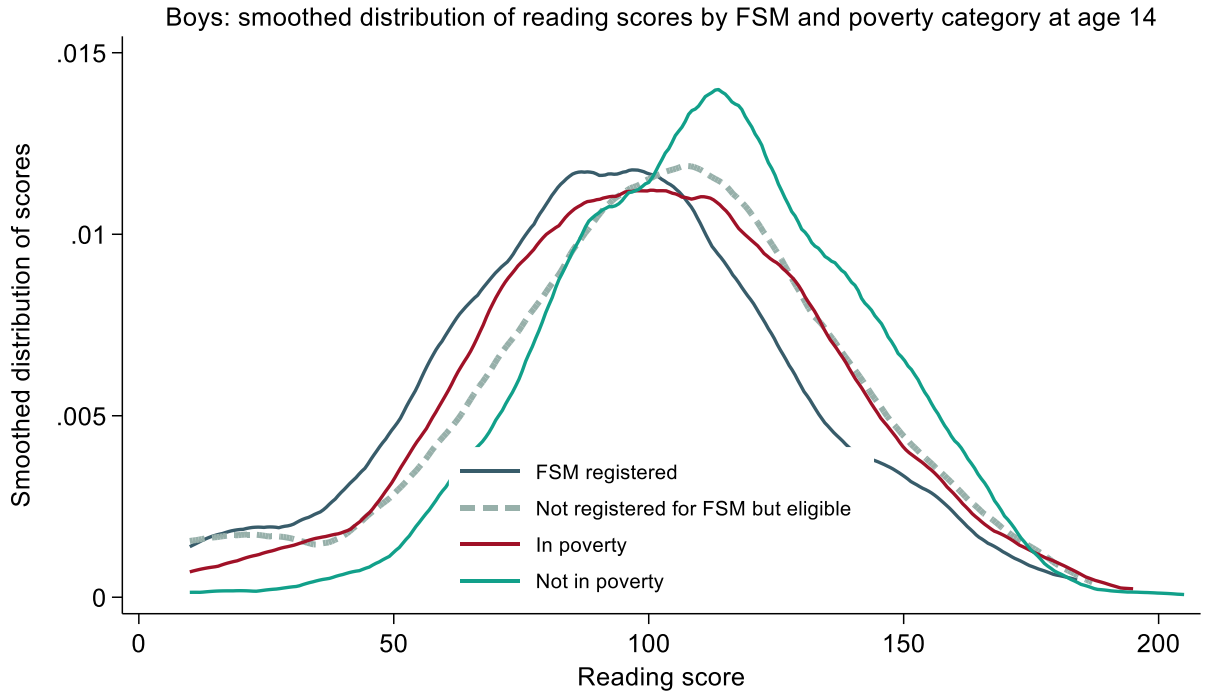
Sample sizes for PCT scores at age 7 within each group:

	Girls	Boys	All
FSM registered	557	557	1,114
Not registered for FSM but eligible	125	133	258
In poverty	293	222	515
Not in poverty	2,421	2,472	4,893

Figure A9: Distribution of reading cognitive test scores from assessments at age 7 for children in each categorisation of FSM/poverty at age 14



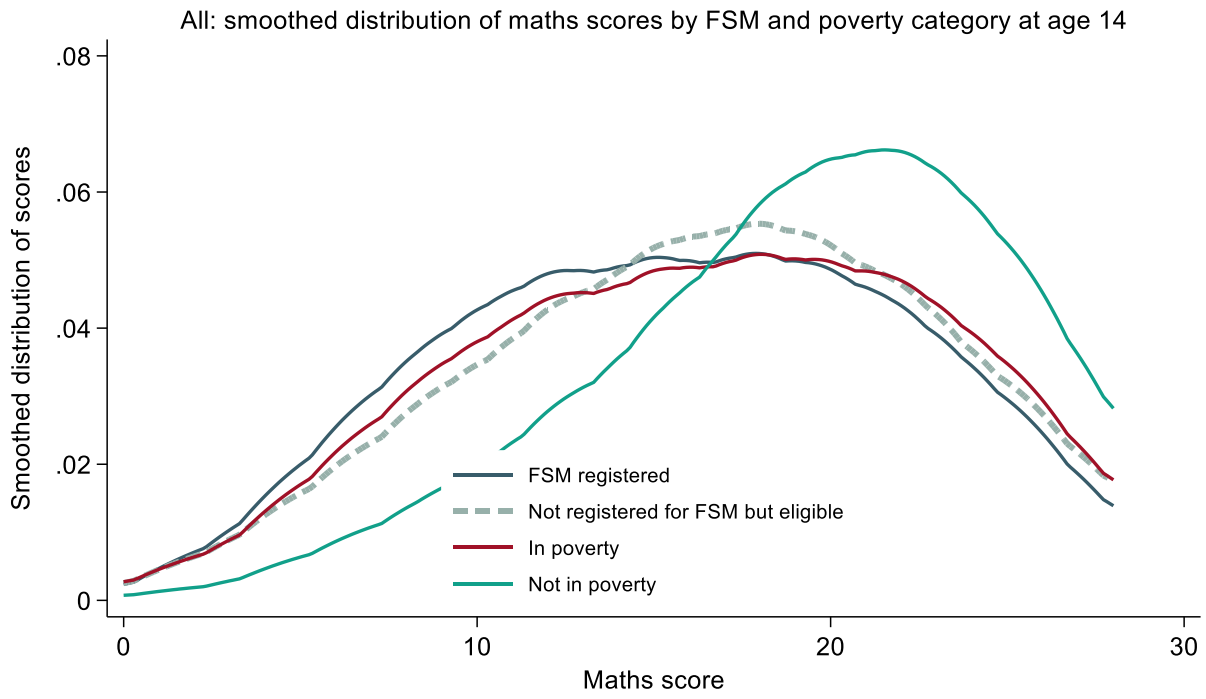


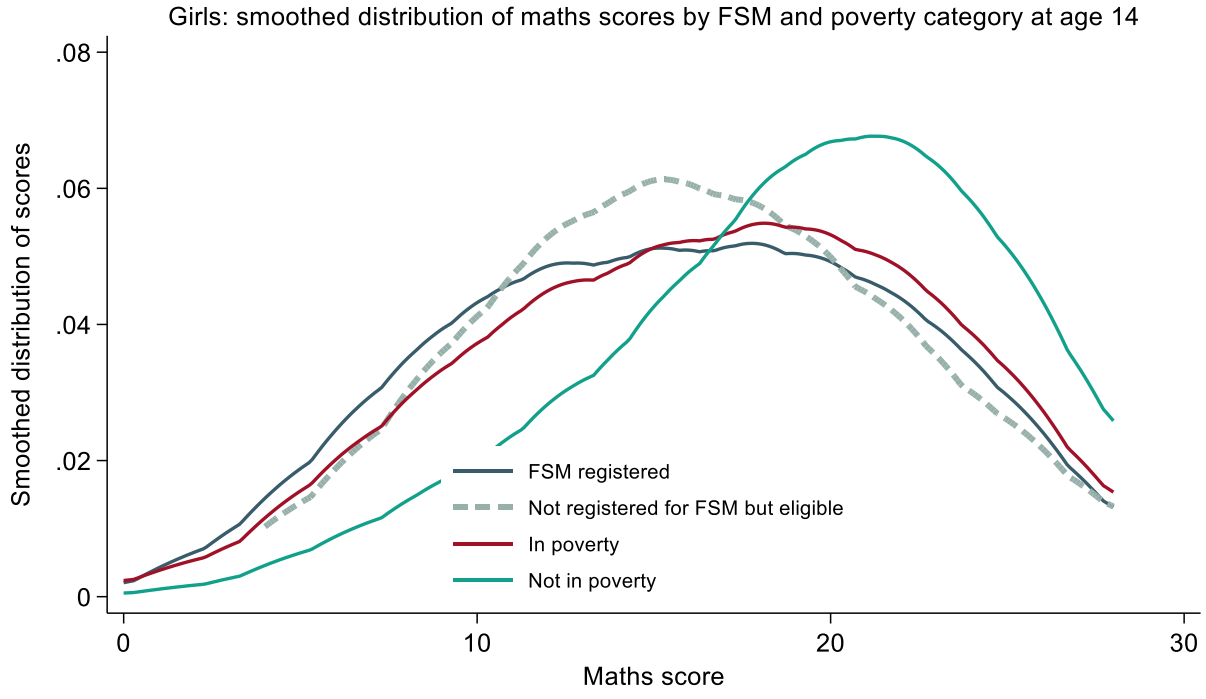


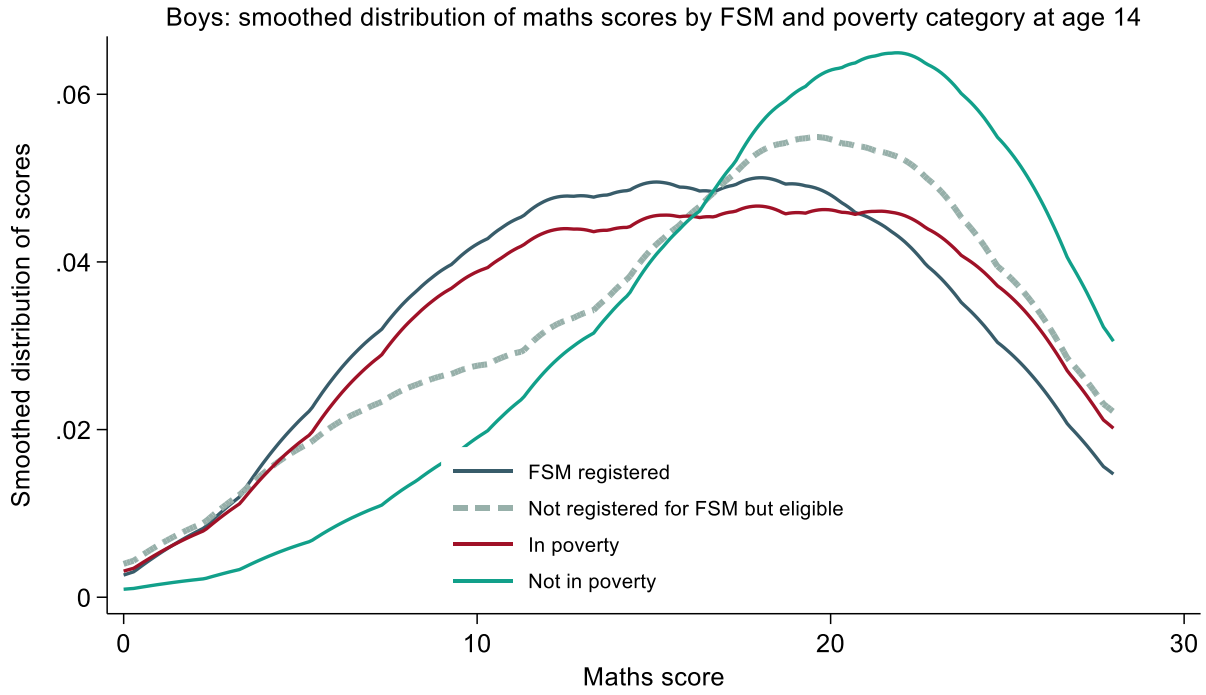
Sample sizes for reading scores at age 7 within each group:

	Girls	Boys	All
FSM registered	458	431	889
Not registered for FSM but eligible	137	128	265
In poverty	390	374	764
Not in poverty	2,017	2,066	4,083

Figure A10: Distribution of maths cognitive test scores from assessments at age 7 for children in each categorisation of FSM/poverty at age 14



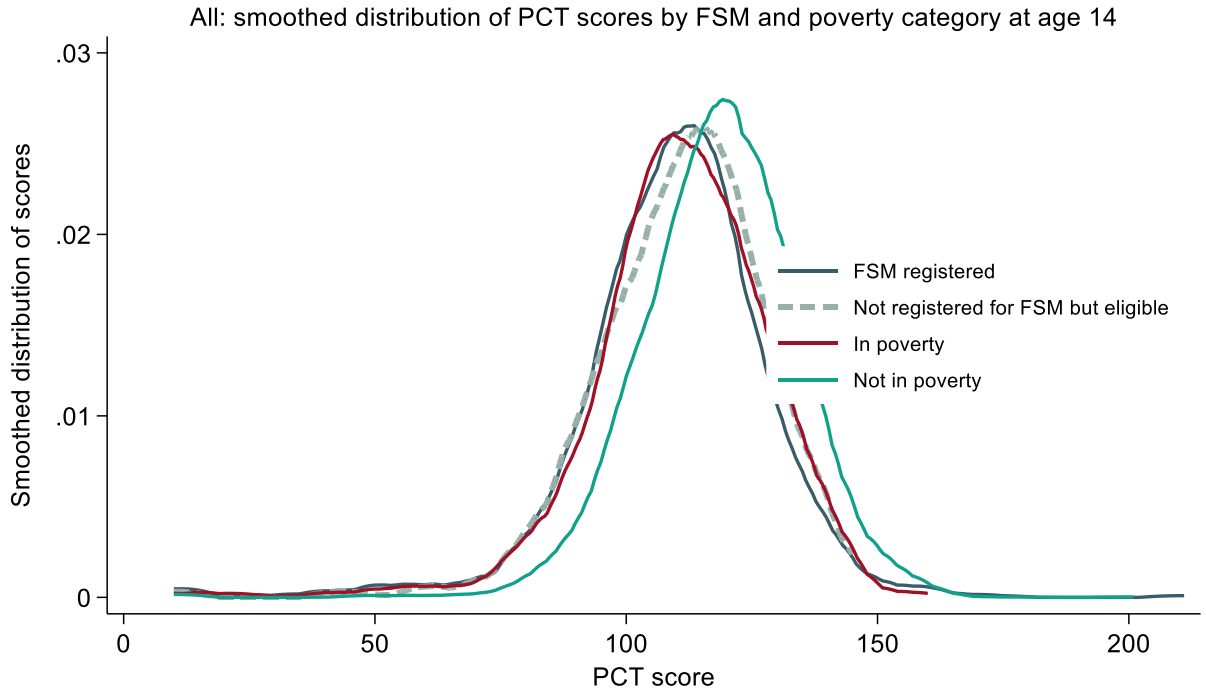


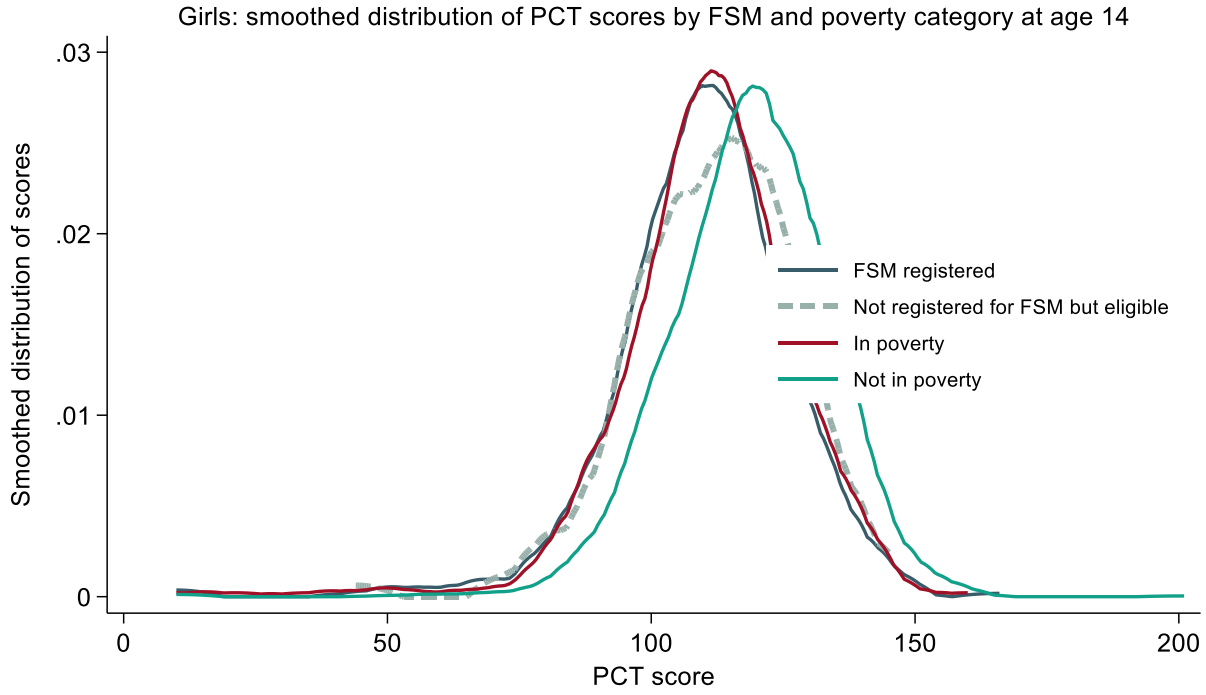


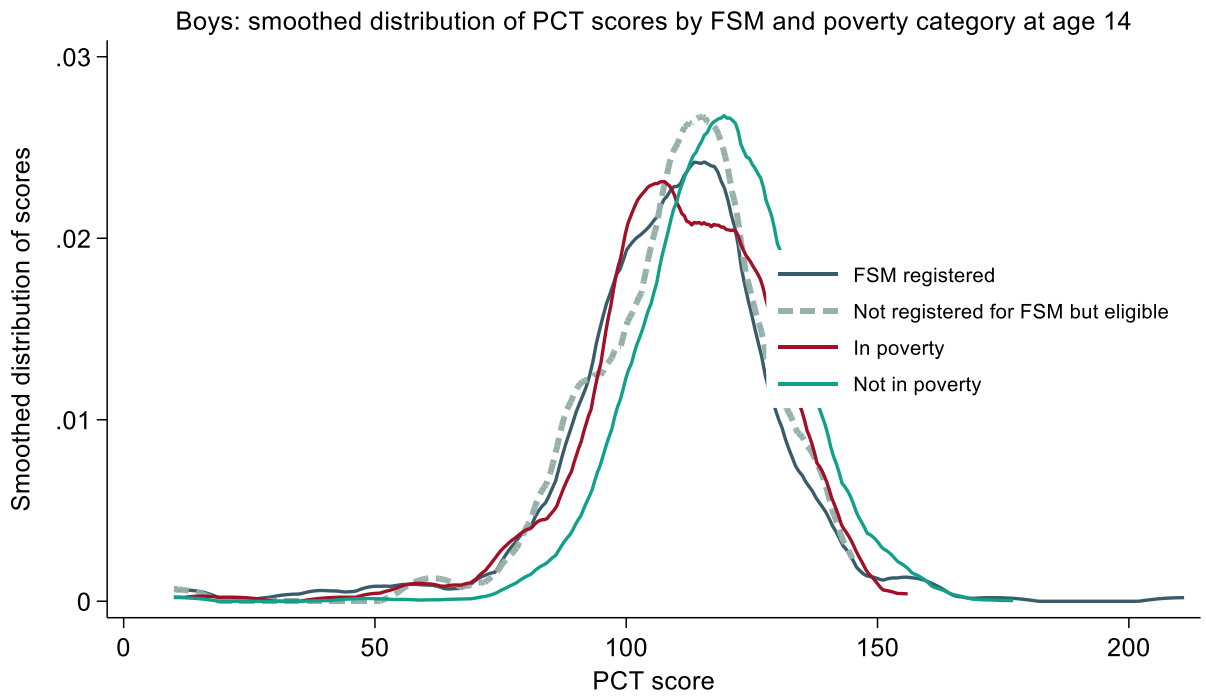
Sample sizes for maths scores at age 7 within each group:

	Girls	Boys	All
FSM registered	458	429	887
Not registered for FSM but eligible	137	128	265
In poverty	390	374	764
Not in poverty	2,016	2,069	4,085

Figure A11: Distribution of pattern construction test (PCT) cognitive test scores from assessments at age 7 for children in each categorisation of FSM/poverty at age 14



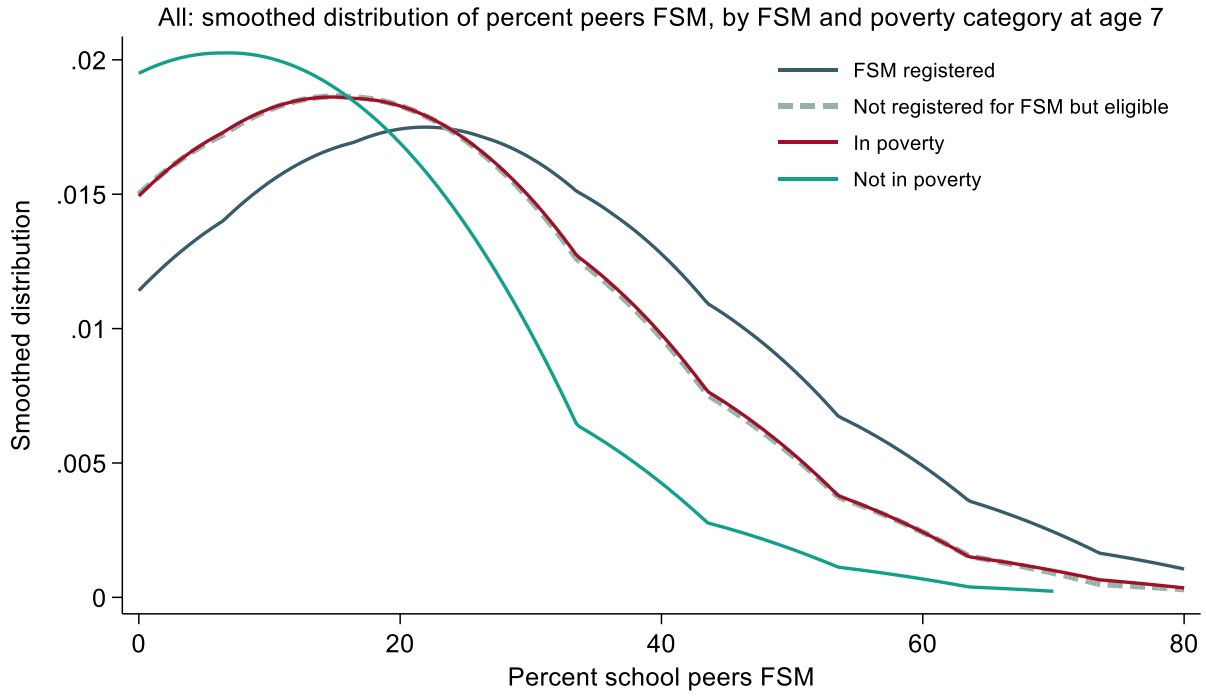


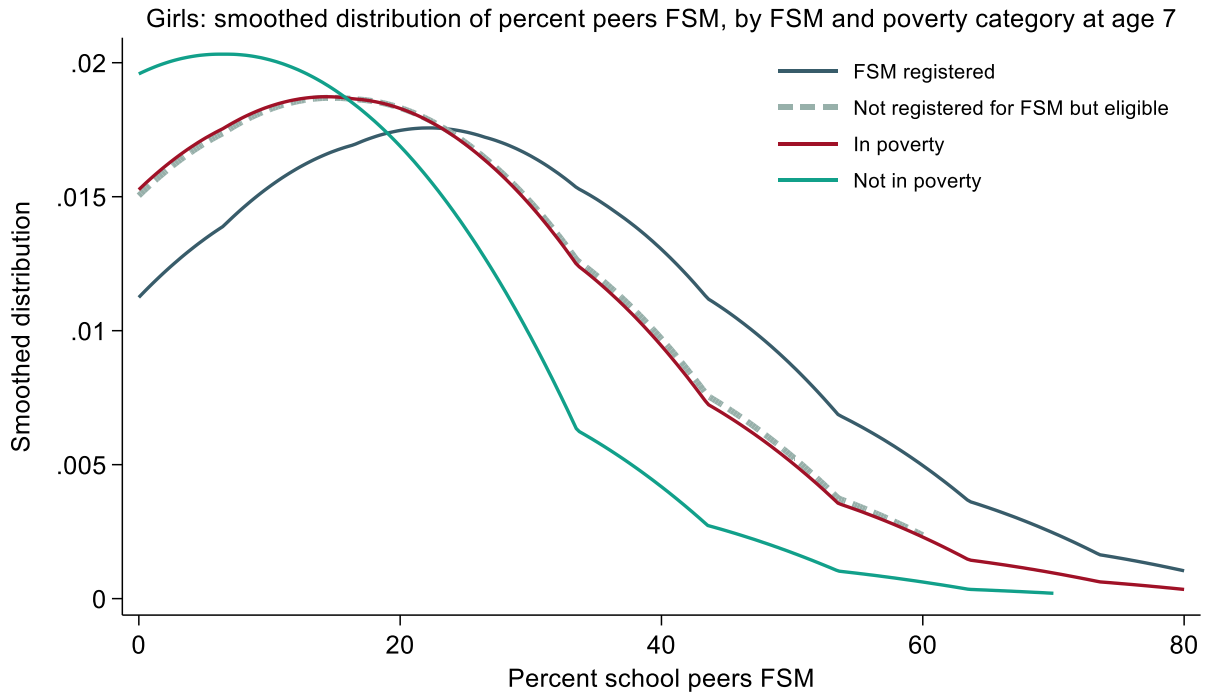


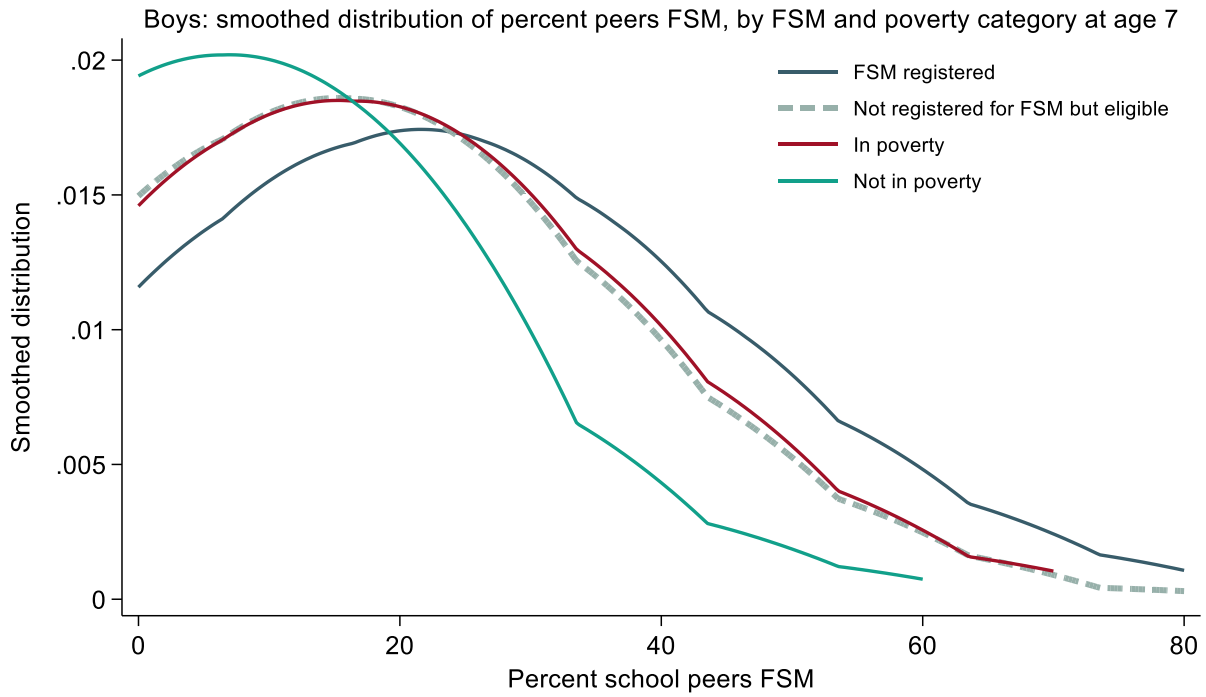
Sample sizes for PCT scores at age 7 within each group:

	Girls	Boys	All
FSM registered	456	423	879
Not registered for FSM but eligible	136	128	264
In poverty	388	372	760
Not in poverty	2,014	2,060	4,074

Figure A12: Distribution of percentage school peers FSM for children in each categorisation of FSM/poverty at age 7



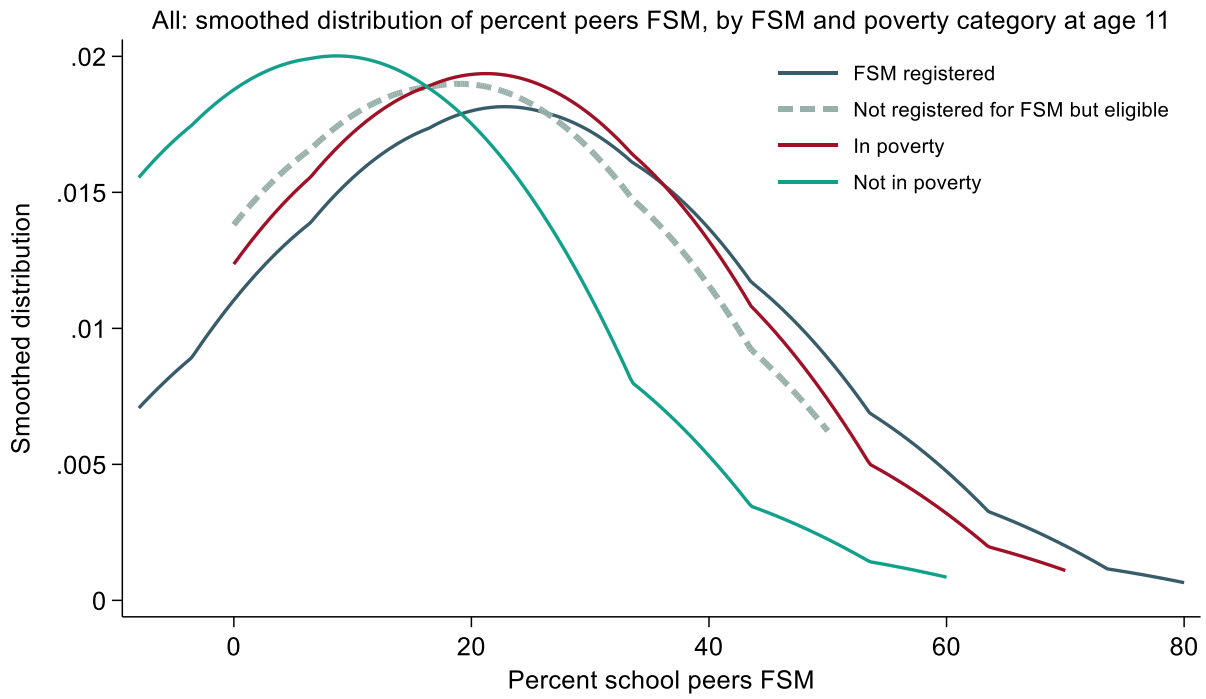


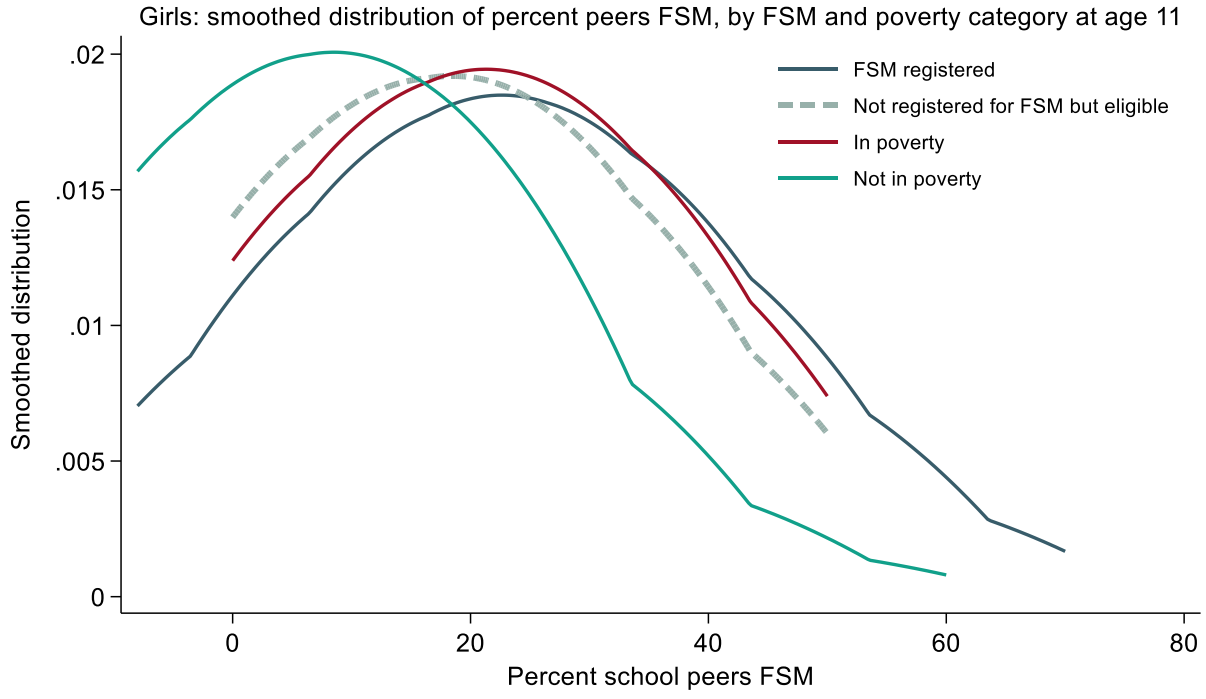


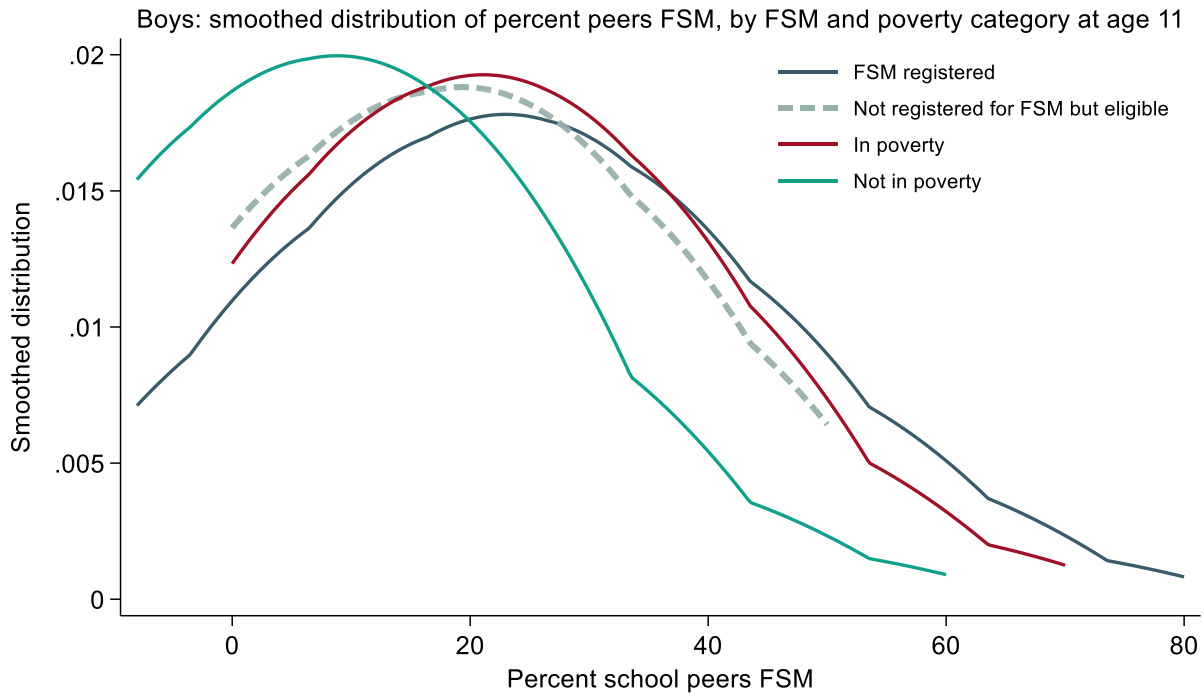
Sample sizes for percent school peers FSM at age 7 within each group:

	Girls	Boys	All
FSM registered	683	706	1,389
Not registered for FSM but eligible	94	104	198
In poverty	552	536	1,088
Not in poverty	2,556	2,629	5,185

Figure A13: Distribution of percentage school peers FSM for children in each categorisation of FSM/poverty at age 11



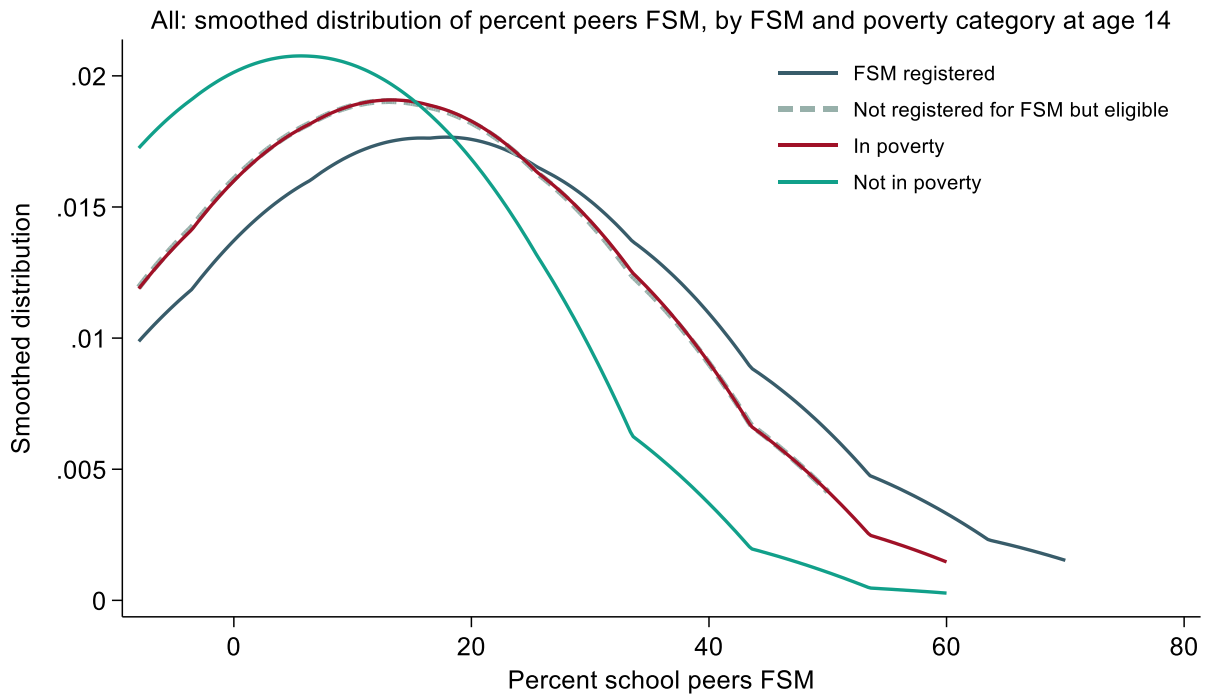


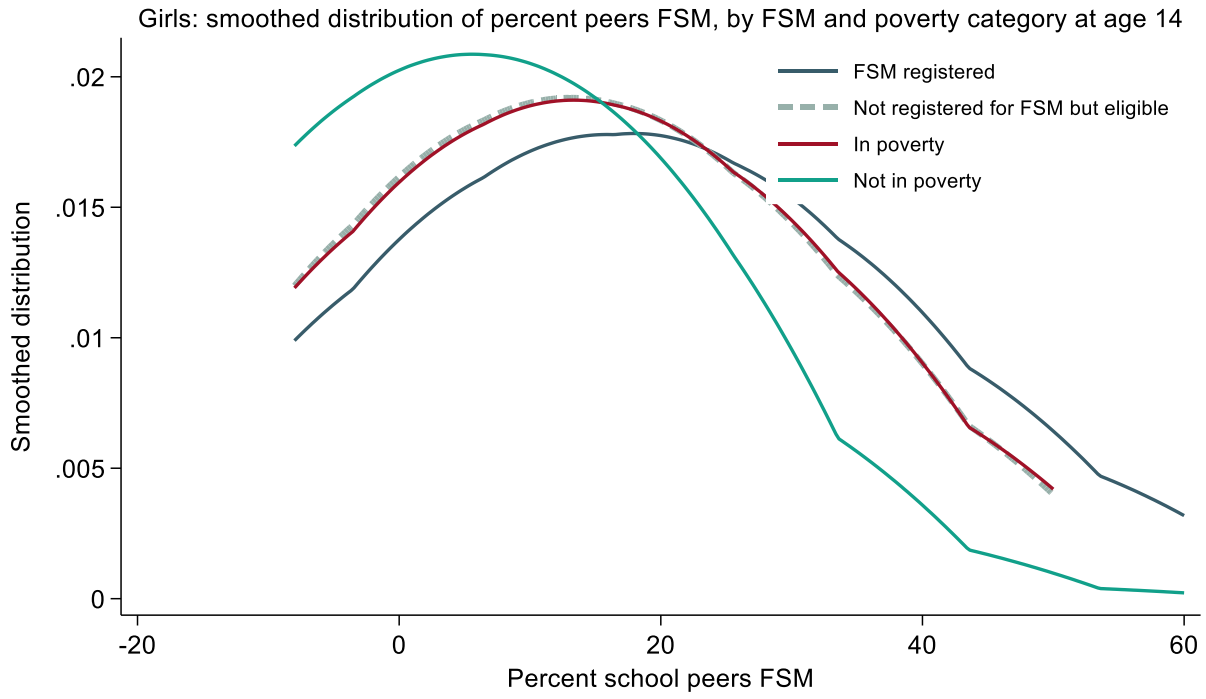


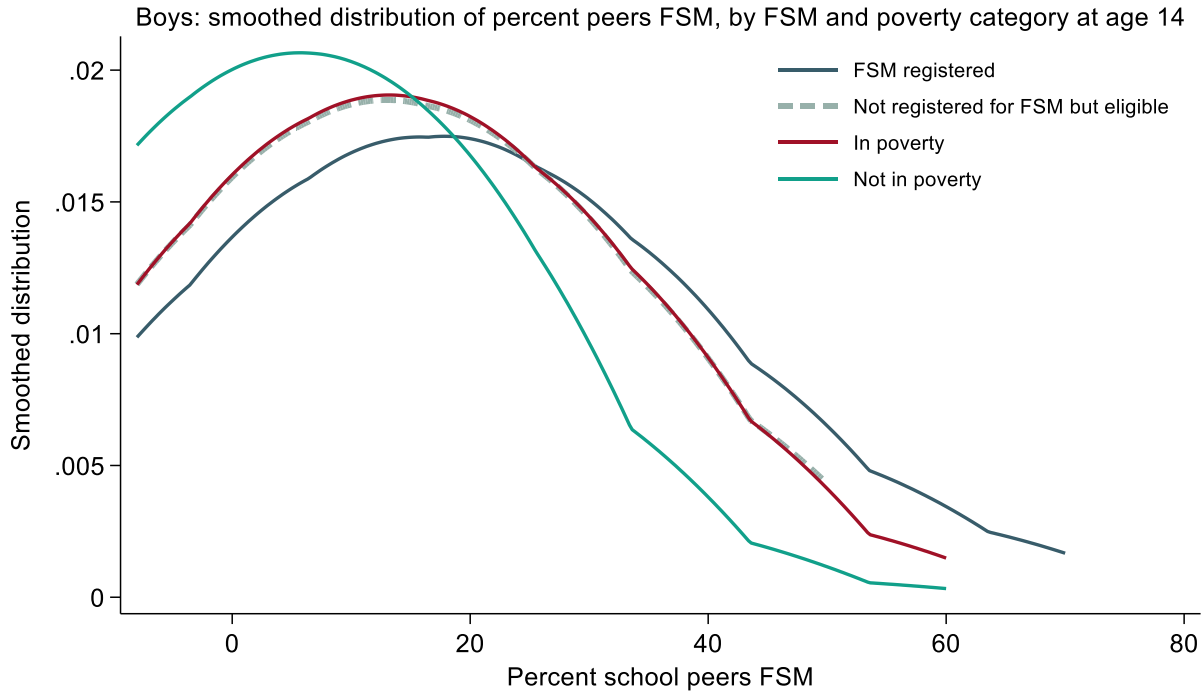
Sample sizes for percent school peers FSM at age 11 within each group:

	Girls	Boys	All
FSM registered	579	577	1,156
Not registered for FSM but eligible	127	138	265
In poverty	297	232	529
Not in poverty	2,437	2,505	4,942

Figure A14: Distribution of percentage school peers FSM for children in each categorisation of FSM/poverty at age 14







Sample sizes for percent school peers FSM at age 14 within each group:

	Girls	Boys	All
FSM registered	467	448	915
Not registered for FSM but eligible	139	129	268
In poverty	394	379	773
Not in poverty	2,025	2,088	4,113