



Department
for Education

The Impact of the Summer Schools Programme on Pupils

Research Report

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NFER

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The project team was directed by Caroline Sharp, and the research was initially lead by Helen Poet and then by Kerry Martin.

Executive summary

Introduction

This report forms part of an independent evaluation of the first year of the Department for Education's Summer Schools programme for disadvantaged pupils. The main purpose of this initiative is to help those eligible for Free School Meals (FSM) and pupils looked after continuously for more than six months by the local authority (LAC)¹ to make a successful transition from primary to secondary school. A total of 1,776² Summer Schools were held across England between July and September 2012.

This summary sets out the key findings of a survey of 21,065 Year 7 pupils from secondary schools across England, which aimed to explore pupils' feelings towards starting secondary school and the difference made by attending a Summer School. The pupil survey sample included a group of schools that ran a Summer School for disadvantaged pupils, known as 'treatment schools' (n=347), as well as a group of schools who were not involved in the Summer Schools programme known as 'comparison schools' (n=114). This enabled the research team to consider what difference attending a Summer School made to pupils' responses. 11,383 pupils from comparison schools responded to the survey compared to 9,682 pupils from treatment schools.

Both treatment and comparison schools were asked to target the survey specifically at disadvantaged Year 7 pupils where possible, but they were permitted to include other Year 7 pupils if they wished to do so. Treatment schools were also asked, where possible, to target pupils who had attended the Summer School. Survey data gathered from pupils was matched to the National Pupil Database (NPD) in order to identify pupils as disadvantaged (i.e. eligible for FSM or LAC) for the purposes of analysis. The study also obtained information from NPD on other variables of interest, such as pupils' ethnicity, whether they had English as an Additional Language (EAL) and whether they had Special Educational Needs (SEN). For both groups of schools, a larger number of non-disadvantaged pupils responded. Of the 9,682 pupils from treatment schools, 5,881 actually attended a Summer School and of these 2,386 pupils were disadvantaged.

¹ Henceforth, these two groups are referred to as disadvantaged pupils. All other pupils are termed non-disadvantaged for the purposes of this research.

² This figure has recently been updated by the Department and therefore no longer corresponds to figures cited in cited in previous NFER reports relating to this evaluation.

Key Findings

Key findings from the survey focused on pupils' attitudes on starting secondary school and the relationship between attitude scores and attending a Summer School.

Pupils' attitudes to starting Year 7

- Most pupils (61 per cent) were worried about transferring to secondary school. However, the overwhelming majority of pupils (91 per cent) said they felt welcomed by their new school when they started Year 7. The majority of pupils made friends (89 per cent) and got to know their teachers quickly (87 per cent) when they started secondary school.
- Just over half of pupils (58 per cent) said it was hard to find their way around their new school. Disadvantaged pupils were more likely to report difficulties finding their way around than their non-disadvantaged peers. There were no other notable differences between disadvantaged and non-disadvantaged pupils' attitudes to starting Year 7.

Attending a Summer School

- 83 per cent of the responding pupils who were invited to a Summer School actually took part. 41 per cent of the responding pupils who attended a Summer School were disadvantaged. It should be noted that this is lower than the Summer School attendance rates for disadvantaged pupils based on findings from the school survey conducted as part of this evaluation (see Martin *et al.*, 2013).
- Pupils from Asian backgrounds and pupils with EAL who were invited to a Summer School were significantly less likely to attend.
- Pupils' views of Summer School were very positive: 90 per cent of pupils were pleased to be invited to a Summer School run by their secondary school. Most pupils who attended a Summer School had fun, made new friends and said they felt more confident about starting secondary school.
- A multilevel analysis revealed two statistically significant differences among the attitudes of pupils with different background characteristics who attended Summer Schools. Pupils who lived in more deprived areas (as determined by the Income Deprivation Affecting Children Index, IDACI) rated their enjoyment and satisfaction of Summer Schools more highly. Boys tended to give lower ratings of their Summer Schools than girls.

Influences on pupils' confidence, school readiness and socialisation

- Certain pupil characteristics were associated with significantly higher or lower confidence, school readiness and socialisation scores. In particular, pupils from Black ethnic backgrounds had more positive attitudes. Pupils eligible for FSM, those eligible for FSM in the years prior to Year 6³ and pupils with SEN had lower scores. Boys had higher confidence and socialisation scores but lower scores for school readiness.
- Controlling for the influence of other factors, compared to pupils with similar characteristics who did not attend a Summer School⁴, confidence scores were statistically significantly higher for pupils who attended Summer Schools and higher still for pupils with FSM who attended Summer Schools.
- Controlling for the influence of other factors, school readiness scores were significantly higher for pupils who attended Summer Schools and higher still for both pupils with FSM who attended Summer Schools and pupils who were LAC and attended Summer Schools.
- Controlling for the influence of other factors, socialisation scores were significantly higher for pupils who attended Summer Schools and higher still for pupils with FSM who attended Summer Schools.
- However, attending a Summer School explained a relatively small proportion of the variance in pupils' attitude scores.
- Pupils who said they enjoyed their Summer School had significantly higher scores for confidence, school readiness and socialisation.

Conclusions and recommendations

The pupil survey found a number of relationships between school and pupil characteristics and pupils' attitude scores. Pupils from disadvantaged backgrounds (especially those eligible for FSM) had significantly lower levels of confidence, socialisation and school readiness. Attending a Summer School was related to more positive attitudes (for confidence, socialisation and school readiness); however, these should be viewed as 'associations' rather than causal links due to the limitations of the study design.

The study findings are broadly supportive of the Summer School programme and are consistent with a small positive effect on transition to secondary school, especially for pupils from disadvantaged backgrounds.

³ Known as the 'Ever6' measure.

⁴As part of the Department's Summer Schools programme for disadvantaged pupils.

The findings of the pupil survey suggest the following points for consideration by schools and policymakers:

- The Department and schools should continue to track the outcomes of pupils attending Summer Schools in order to measure the impact of the programme on their attainment in the longer term.
- There was a lower take up of Summer School places among pupils from Asian backgrounds and those with EAL (as identified by matching survey responses to pupil characteristics identified in the NPD). This may indicate a need for schools to consider how best to encourage take up among these pupils and their families.
- Boys appear to be less positive in their enjoyment of Summer Schools. It may therefore be worthwhile for schools to consider enhancing the appeal of their Summer School to boys.
- While pupils with SEN are not specifically targeted by the Summer Schools programme, this study suggests that schools and policymakers should recognise the particular difficulties these pupils face at transition and their need for targeted support.

Background

In September 2011, the Department announced that, as part of the Pupil Premium, £50 million would be made available for a Summer Schools programme for disadvantaged pupils in 2012. Each participating secondary school in England was funded £250 per eligible child per week for programme activities (up to a maximum of two weeks). Schools were free to design their programme based on the needs of their incoming Year 7 cohort. Although there was a clear expectation that the funding should be used to provide summer activities for disadvantaged pupils, schools could offer places to other children if they did not need to spend the full amount on disadvantaged pupils, or if a disadvantaged pupil turned down a planned place. In March 2013, the Department announced the launch of the Summer Schools 2013 programme⁵ and the extension of the eligibility criteria to include pupils eligible for FSM in the past six years (Ever6), publically funded Ever6, and FSM and LAC pupils in independent special schools.

Methodology

The Department commissioned the NFER and Ecorys to undertake an independent evaluation of the first year of its Summer Schools programme in June 2012.

In order to explore the impact of Summer Schools on pupils specifically, the NFER carried out a survey of Year 7 pupils from a sample of 1,500 schools which participated in

⁵ <http://www.education.gov.uk/schools/pupilsupport/premium/summer/a00216636/summer-schools-programme>

the Summer Schools initiative (participation in the programme was voluntary). The survey was also sent to a sample of 530 non-participating schools which formed a comparison group to help assess if the programme was making a difference. A short online survey was administered to pupils from September to November 2012. Pupils were asked 18 questions on confidence and attitudes to school. Summer School attendees were asked a further eight questions about their Summer School (See Appendix 2).

Previous phases of the Summer Schools evaluation included a survey of 1,597 schools who participated programme and 10 qualitative case studies involving pupils, teachers, parents and carers. The findings have been published separately in a technical overview report⁶, a key findings summary for schools⁷, and a ‘top tips’ guide for schools focusing on effective Summer School practice⁸.

⁶ <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-RR271A>

⁷ <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-RR271B>

⁸ http://media.education.gov.uk/assets/files/pdf/e/essp%20top%20tips%20for%20summer%20schools%20v7_online.pdf

⁹ Footnote inserted in error

¹⁰ Footnote inserted in error

1. Introduction

This report presents the findings of the third phase of a research study commissioned by the Department for Education¹¹ to evaluate the implementation and early outcomes of their 2012 Summer Schools programme for disadvantaged pupils.¹²

1.1 The Summer Schools programme

In September 2011, the Deputy Prime Minister announced that £50 million would be made available Summer Schools programme as part of the Pupil Premium in England. The main purpose of this initiative was to help those eligible for Free School Meals (FSM) and those looked after continuously for more than six months by the local authority¹³, to make a successful transition from primary to secondary school.

The Department set the following specific aims for the Summer Schools programme:

- to allow pupils to see their new school environment;
- to allow schools to familiarise themselves with their new pupils, including identifying any additional needs they may have; and
- to improve the educational attainment of disadvantaged children, ensuring gains in primary school are not lost on transfer.

Participating secondary schools¹⁴ were free to design their programme based on the needs of their incoming Year 7 cohort. Schools could decide on specific aims and objectives, the activities they wished to deliver, and whether these were offered in a single block (of one or two weeks) or broken into regular sessions across a longer period over the summer holidays (from July to September 2012). The Department provided each participating secondary school with £500 per place for each disadvantaged pupil¹⁵, which it anticipated would fund two weeks' worth of activities. Schools could choose to offer a one-week Summer School, in which case they could apply for funding of £250 per disadvantaged pupil. There was a clear expectation that funding was to be used to provide a Summer School for disadvantaged pupils and where schools advised the Department they had chosen not to deliver a Summer School, the funding was recovered. It was open to schools to invite other pupils making the transition to attend the

¹¹ Henceforth referred to as the Department.

¹² Henceforth referred to as the Summer Schools programme.

¹³ Henceforth referred to as disadvantaged pupils. All other pupils are termed 'non-disadvantaged' for the purposes of this research.

¹⁴ This includes maintained schools (including special schools), Academies (including special schools), Free Schools (including special schools) and non-maintained special schools. The programme was focused on transition into Year 7 in all schools.

¹⁵ Funding was provided to schools for the lower of the two following numbers: 'disadvantaged pupils invited to attend' and 'Summer School places set up'.

Summer School if a disadvantaged pupil turned down a planned place, or if there was a surplus available from the funding for disadvantaged pupils. Schools could also use additional funding from other sources if they wished to.

A total of 1,776 Summer Schools were held across England between July and September 2012. In March 2013, the Department announced the launch of the Summer Schools 2013 programme¹⁶ and the extension of the eligibility criteria to include pupils eligible for FSM in the past six years (Ever6) and publically funded Ever6, FSM and LAC pupils in independent special schools

1.2 About the evaluation

In June 2012, the Department commissioned the NFER and Ecorys to undertake an independent evaluation of the first year of its Summer Schools programme. The evaluation aimed to establish the effectiveness of the programme in terms of its implementation and early outcomes. A mixed methods approach was employed, using a combination of survey research, programme data and qualitative fieldwork and analysis. The strands of work were:

- **Phase 1: a school survey** – completed by 877 schools¹⁷, drawn from a random sample of all schools applying to take part in the 2012 Summer Schools programme (September – October 2012)¹⁸.
- **Phase 2: case-study visits** – ten case-study schools were selected to reflect different school characteristics and types of Summer School. The case studies involved interviews with staff, partner organisations, pupils and parents/carers. Initial visits were undertaken during the delivery of the Summer School provision (July – September 2012) and follow up visits took place after transition into Year 7 (October – December 2012).
- **Phase 3: a pupil survey** – exploring pupils' feelings towards starting secondary school impact of the Summer Schools programme (September – November 2012). The findings of which are set out in this report.

This report sets out the findings from Phase 3. Findings from the school survey and case-study visits are detailed in the following publications:

- An evaluation overview report with technical appendices¹⁹
- A key findings summary report for schools²⁰

¹⁶ <http://www.education.gov.uk/schools/pupilsupport/premium/summer/a00216636/summer-schools-programme>

¹⁷ 838 of which actually ran Summer Schools. The remaining 39 schools initially signed up to run a Summer School but then withdrew.

¹⁸ Survey sample 1,597 (response rate 55 per cent).

¹⁹ <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-RR271A>

- A ‘top tips’ guide for running Summer Schools.²¹

1.2.1 Findings from Phases 1 and 2

The school survey and case-study strands of the evaluation demonstrated that the Summer Schools initiative was viewed very positively by schools: 94 per cent of schools surveyed considered their Summer School a success and 95 per cent would take part in the programme again. Getting pupils to attend Summer School was the most common challenge. Half of the disadvantaged pupils invited to a Summer School attended at least once. About three quarters (74 per cent) of schools surveyed offered places to non-disadvantaged pupils, who comprised 37 per cent of all Summer School attendees.

Most Summer Schools focussed on supporting disadvantaged pupils’ social and emotional wellbeing. The greatest impacts reported by schools were on pupils’ confidence and self esteem, as well as improved relationships among pupils and between pupils and staff. Pupils from the case-study schools felt the Summer School had helped them to develop the social confidence to mix with their peers and teachers. Some pupils welcomed the opportunity for a ‘fresh start’. However, pupils also reported a widespread fear of bullying which persisted despite taking part in a Summer School.

1.3 The aims of the pupil survey

The main purpose of this phase of the evaluation was to provide an estimate of the impact of the Summer School programme on pupils²².

The specific research questions are as follows:

- What are pupils’ feelings towards starting secondary school?
- What do pupils feel they have gained from attending Summer School? Did the summer activities help them?
- Did pupils with different experiences of Summer School have more or less positive attitudes on starting school?
- Did disadvantaged pupils have different experiences of Summer School?

1.4 About this report

This report sets out:

²⁰ <https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-RR271B>

²¹ http://media.education.gov.uk/assets/files/pdf/e/essp%20top%20tips%20for%20summer%20schools%20v7_online.pdf

²² The Department requested a survey of pupil attitudes rather than a more formal assessment of pupil attainment, because administering assessments was considered too burdensome for schools and pupils.

- details of the pupil survey, design methods and analysis (Section 2)
- pupils' attitudes to starting Year 7 (Section 3)
- pupils' attendance at, and opinions on, Summer Schools (Section 4)
- influences on pupils' confidence, school readiness and socialisation (Section 5)
- discussion, conclusions and recommendations for policy and practice (Section 6).

2. Evaluation design and methods

This section sets out the Summer Schools pupil survey methods. It provides an overview of the sampling and response rates and details of the survey design and analysis.

2.1 The pupil survey sample

The pupil survey sample included a group of schools which ran a Summer School for disadvantaged pupils, known as ‘treatment schools’, as well as a group of schools who were not involved in the Summer Schools programme known as ‘comparison schools’. Including the views of pupils from both treatment and comparison schools enabled the research team to consider what difference attending a Summer School made to pupils’ responses.

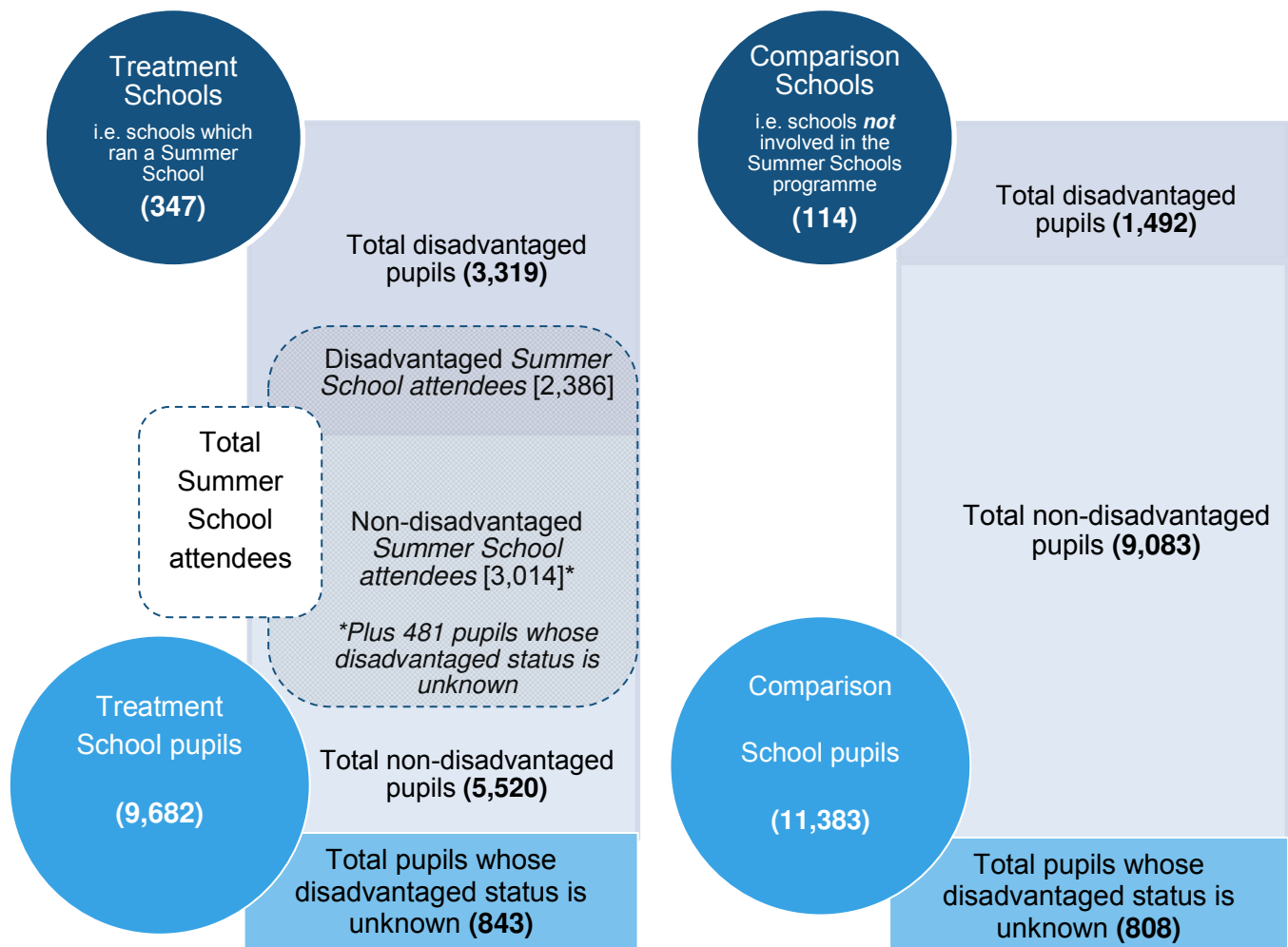
Treatment schools: A random stratified sample of 1,500 secondary schools was drawn out of 1,869 mainstream schools which had applied to the Department to participate in the 2012 Summer School programme. This sample did not include special schools or middle schools²³. Schools had the option of focusing on involving their entire Year 7 cohort or only those who had attended the Summer School. The study aimed to recruit at least 2,500 pupils from 100 treatment schools.

Comparison schools: A sample of 1,332 secondary schools was drawn which did not participate in the Summer Schools programme. The aim was to draw a sample of secondary schools with similar characteristics to the sample of treatment schools. The comparison sample comprised 530 comparison schools and the study aimed to recruit at least 2,500 pupils from 100 comparison schools.

The sample of treatment schools had similar characteristics to secondary schools who had applied to take part in the Summer Schools programme. The sample of comparison schools had broadly similar characteristics to the sample of treatment schools, apart from the fact that there were fewer schools with high proportions of pupils with FSM in the comparison sample. Figure 2.1 provides a breakdown of the achieved survey sample. For further details about the sample, please see Appendix 1.

²³ By request of the Department, because it was felt that these groups of schools would be too different to include alongside mainstream secondary schools, but too few in number to enable separate analysis.

Figure 2.1 Pupil survey sample



A total of 21,065 Year 7 pupils responded to the survey. Pupil data was matched to the NPD January 2013 release, to identify relevant pupil and school characteristics (e.g. FSM eligibility, LAC status²⁴, ethnicity, SEN and EAL status). Pupils were then identified as disadvantaged (i.e. eligible for FSM/LAC) or non-disadvantaged groups for the purposes of analysis. There was also a small group of pupils whose disadvantaged status was not known, because they could not be matched to the NPD.

As Figure 2.1 shows, there were more than three times the number of treatment schools than comparison schools in the achieved sample. However, a larger number of Year 7 pupils responded to the survey from comparison schools (11,383 pupils, compared to 9,682 pupils from treatment schools). The most likely explanation for this is that treatment schools targeted the pupil survey at Year 7 pupils who attended a Summer School,

²⁴ The NPD variable for LAC status used in the analysis defines LAC as 'looked after in the last processing year'. This is different to the Departments' Summer Schools eligibility criteria, which defines LAC as pupils looked after continuously for more than six months by the local authority.

whereas comparison schools were more likely to include whole classes or year groups in order to benefit from the survey feedback.

A total of 5,881 pupils responding to the survey attended a Summer School, and of these, 41 per cent (2,386 pupils) were disadvantaged. A higher number of non-disadvantaged Summer School attendees completed the survey (3,014 pupils). Findings from the school survey (Martin *et al.*, 2013) indicated that 37 per cent of pupils attending Summer Schools were non-disadvantaged, which suggests that the treatment schools had higher proportions of non-disadvantaged pupils attending their Summer Schools and/or that higher proportions of non-disadvantaged pupils responded to the survey.

As part of the pupil survey analysis, propensity score matching was conducted to ensure that pupils who attended a Summer School were compared only with pupils in comparison schools that were similar in background and school characteristics. As a result of removing responses from pupils who were not similar to those in the comparator group, the sample was reduced slightly to 20,912 pupils overall (9,680 from treatment schools and 11,232 from comparison schools). Similarly when pupils' responses were matched to NPD, the sample was reduced once more as 19,629 pupils were successfully matched – see Appendix 1 for further details.

2.2 Pupil survey design and methods

The pupil survey was designed to gather information on Year 7 pupils' attitudes towards transition to secondary school, their confidence and readiness for school and the difference made by attending a Summer School. A full version of the survey can be found in Appendix 2.

The research team drew on a 'bank' of reliable and valid items to devise a robust and appealing survey for pupils. The survey began with a short introduction and practice item and consisted of 18 closed items (with a further 8 questions for Summer School attendees only). The majority of the questions were in the form of rating scales (with a five-point Likert scale). The survey was piloted in July 2012 in seven schools participating in the Summer Schools initiative. Teachers were asked to arrange for a small group of Year 7 pupils to comment on the draft questionnaire and teachers were also asked for their own comments on the appropriateness of the survey. Schools could feed back their comments by the most convenient method (e.g. local visit by a member of the evaluation team, by email or telephone). Amendments were made to the survey in response to the comments received.

Details of the pupil survey were sent to teachers in treatment and comparison schools by post in September 2012. The survey was open to all Year 7 pupils; however, teachers were asked, where possible and appropriate, to include pupils who were disadvantaged, and in the case of treatment schools, pupils who had attended the Summer School. Teachers were asked to ensure that pupils had access to a computer and the internet. To

gain access to the survey, pupils were required to log on to the pupil survey website using their individual school number and password provided by the NFER. Teachers were provided with guidance on how to explain the survey to pupils, including their right to withdraw and confidentiality, which was reinforced by information contained at the beginning of the online survey itself. Schools were also provided with a parent/carer information and consent letter, which contained information about the purpose of the survey and the use of the data. The pupil survey ran from September to November 2012.

The NFER provided all schools with anonymised feedback of their pupils' responses in comparison with all participating schools in the sample.

2.3 Pupil survey data analysis

In order to explore whether responses varied systematically for pupils with different background characteristics, the research team carried out a series of analyses, starting with descriptive analysis and then using factor analysis to identify where pupils' responses to one question in the survey were related to responses to other questions, indicating that they were measuring the same underlying trait. Multilevel modelling was used to control for systematic differences between schools and pupils in order to determine the effects related to attending a Summer School. The modelling controlled for differences among schools (e.g. School type, region, percentage FSM) and differences among pupils (e.g. gender, SEN, ethnicity, EAL, FSM in Year 6, LAC in Year 6). It used a 'base case' for comparison (e.g. girl, in comparison school, not eligible for FSM in Year 6, not LAC in Year 6). In this way, it was able to identify factors that were significant overall, when all other factors were taken into account. Further information on the analysis can be found in Appendix 1.

3. Pupils' attitudes to starting Year 7

Key findings summary

- Most pupils (61 per cent) were worried about transferring to secondary school. However, the overwhelming majority of pupils (91 per cent) said they felt welcomed by their new school when they started Year 7. The majority of pupils made friends (89 per cent) and got to know their teachers quickly (87 per cent) when they started secondary school.
- Just over half of pupils (58 per cent) said it was hard to find their way around their new school. Disadvantaged pupils were more likely to report difficulties finding their way around than their non-disadvantaged peers. There were no other noticeable differences between disadvantaged and non-disadvantaged pupils' attitudes to starting Year 7.

An overarching aim of the Summer Schools evaluation was to explore pupils' feelings about transferring to secondary school. This chapter presents the responses of 21,065 pupils who responded to the survey, providing a national picture of current Year 7 pupils' attitudes. Responses to individual questions have been provided for descriptive purposes. Significance testing has not been conducted on these survey items as the factor analysis and multilevel modelling presented later in the report provide a better indication of the significant differences between pupils and schools, by identifying the influence of a range of characteristics.

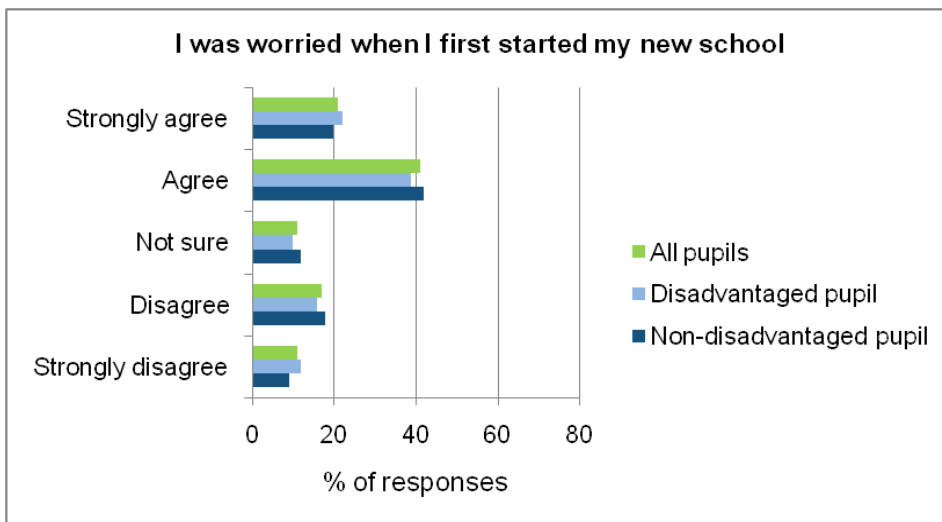
There is some evidence from previous research to suggest that pupils from disadvantaged backgrounds find it more difficult to make a good transition to secondary school. For example, Evangelou *et al.* (2008) found that students from a low socio-economic background needed greater help and support to prepare them for the organisation and expectations of secondary school. The same study found that although children with special educational needs did not necessarily experience a less successful transition to secondary school than other children, they were more likely to be bullied (which is a key inhibitor of successful transitions). It has also been suggested that pupils with poor socio-emotional skills, low self-esteem or low self-confidence may be particularly vulnerable during transition, due to a lack of emotional resilience which would help them to cope with new expectations and social relationships (Evans *et al.*, 2010).

As the Summer Schools programme and the wider Pupil Premium policy focuses specifically on improving outcomes for disadvantaged pupils, the responses of all pupils in the following sections have been split into disadvantaged and non-disadvantaged groups.

3.1 Starting secondary school

Pupils responding to the survey were asked to rate six statements about starting Year 7 on a five-point scale from strongly agree to strongly disagree. Most pupils were worried when they first started secondary school; 61 per cent of all pupils strongly agreed or agreed with this statement. There were only small differences between disadvantaged and non-disadvantaged pupils' attitudes towards starting secondary school.

Figure 3.1 Starting secondary school

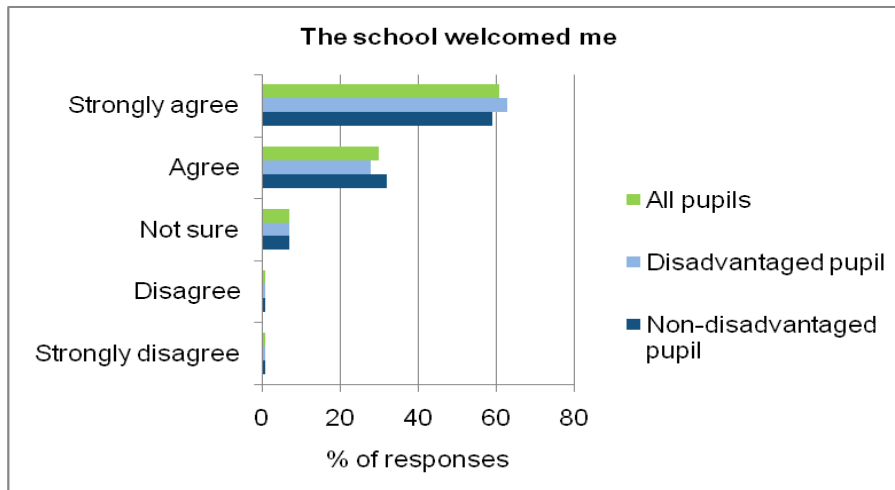


Source: Summer Schools pupil survey (n =18,915)

3.2 Feeling welcomed

Despite being worried about starting secondary school, the overwhelming majority of pupils felt welcomed by their new school when they started Year 7 (91 per cent of all pupils strongly agreed or agreed with this statement). Responses were similar for disadvantaged and non-disadvantaged pupils.

Figure 3.2 Feeling welcomed



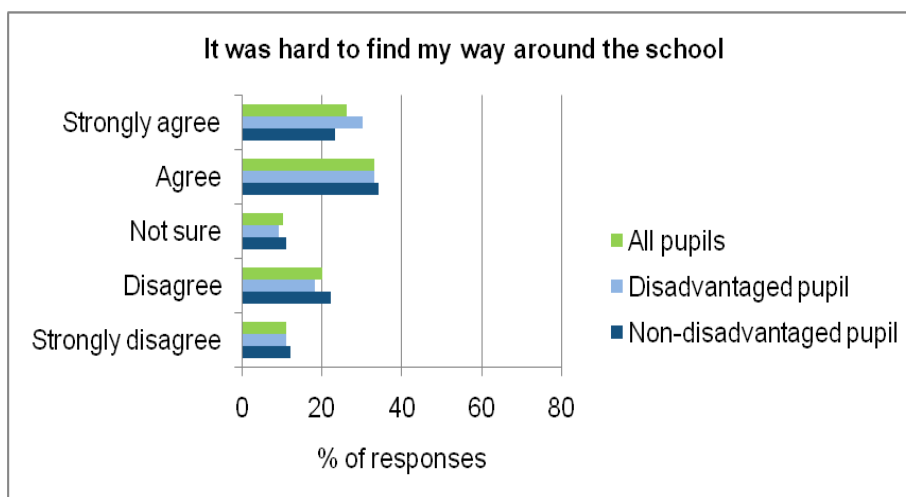
Source: Summer Schools pupil survey (n =18,804)

3.3 Getting around school

Just over half of pupils agreed it was difficult to find their way around their new secondary school when they started (58 per cent of all pupils strongly agreed or agreed).

Disadvantaged pupils were more likely to report difficulties finding their way around: 30 per cent of disadvantaged pupils strongly agreed compared to 23 per cent of their non-disadvantaged peers (further information on this is included in Chapter 5).

Figure 3.3 Getting around school

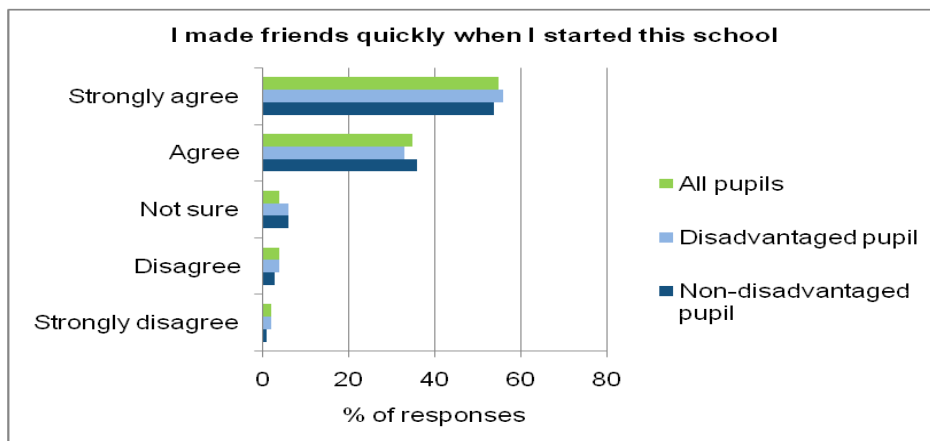


Source: Summer Schools pupil survey (n =18,820)

3.4 Making friends

The majority of pupils made friends quickly when they started their new secondary school: 89 per cent of all pupils strongly agreed or agreed with this statement. There was little difference between the responses of disadvantaged and non-disadvantaged pupils.

Figure 3.4 Making friends

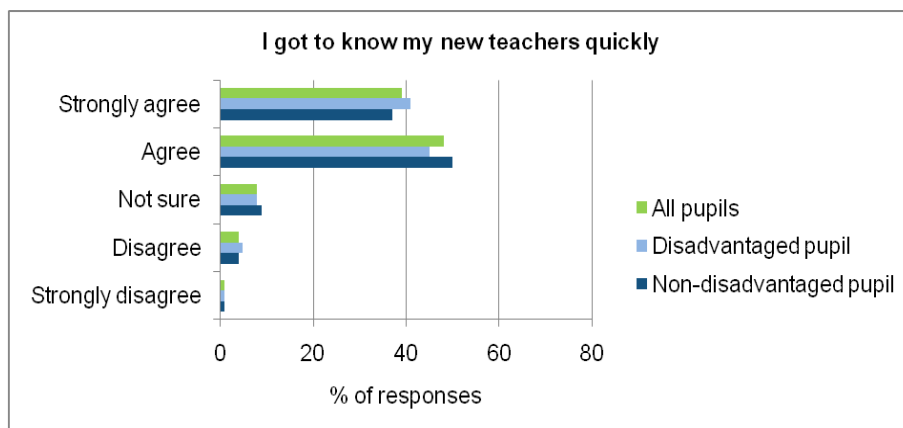


Source: Summer Schools pupil survey (n =18,951)

3.5 Getting to know teachers

Most pupils got to know their new teachers quickly when they started their new secondary school: 87 per cent per cent of all pupils strongly agreed or agreed with this statement. Differences in responses between disadvantaged and non-disadvantaged pupils were relatively small.

Figure 3.5 Getting to know teachers



Source: Summer Schools pupil survey (n =18,985)

4. Pupils' attendance at, and opinions on, Summer School

Key findings summary

- 83 per cent of the responding pupils who were invited to a Summer School actually took part. Of these, 41 per cent were disadvantaged. It should be noted that this is lower than the Summer School attendance rates for disadvantaged pupils based on findings from the school survey (see Martin *et al*, 2013).
- Asian pupils and pupils with EAL were less likely to attend a Summer School.
- Pupils' views of Summer School were very positive: 90 per cent of pupils who attended said they were pleased to be invited to a Summer School run by their secondary school.
- Most pupils who attended a Summer School had fun, made new friends and said they felt more confident about starting secondary school.
- There were statistically significant differences among the attitudes of pupils who attended Summer Schools. Pupils who live in more deprived areas rated their enjoyment and satisfaction of Summer Schools more highly. Boys tended to give lower ratings of their Summer Schools and were less likely to recommend it to pupils in Year 6.

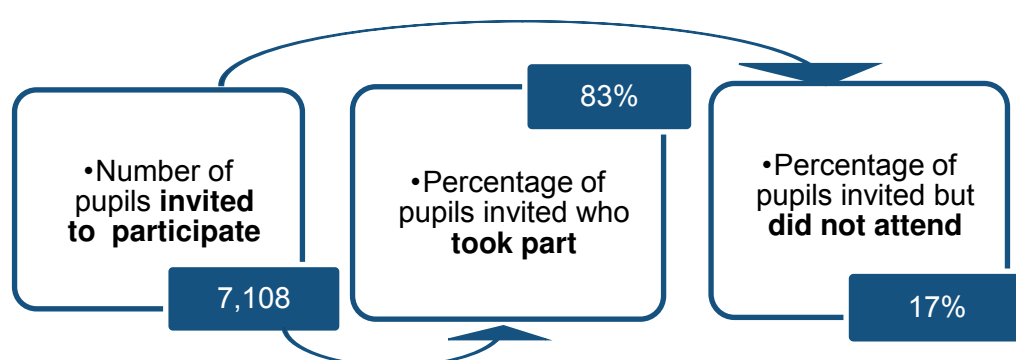
This section of the report presents the responses of pupils from schools which took part in the Summer Schools programme. It provides details of pupils who were invited and attended a Summer School, their views of Summer Schools, and any associations between pupils' enjoyment and satisfaction with their Summer School and pupil and/or school-level characteristics. Throughout this report, any reference to 'significant' differences refers to statistically significant differences at the 0.5 level.

In exploring differences in pupils' attendance and views of Summer Schools, it is worth noting that individual pupils may have a number characteristics that are being explored in the analysis. For example, pupils eligible for FSM may well have other characteristics such as SEN, which are associated with other outcome variables (see Chapter 3 for details).

4.1 Pupils who were invited and attended a Summer School

Pupils from treatment schools were asked to report if they had been invited to participate in a Summer School organised by their secondary school. Figure 4.1 shows that of the 9,682²⁵ pupils responding to the survey from treatment schools, 73 per cent (7,108 pupils) had been invited to a Summer School run by their secondary school and the majority of these pupils attended (either for the entirety, or for part of the Summer School).

Figure 4.1 Pupils invited to attend a Summer School



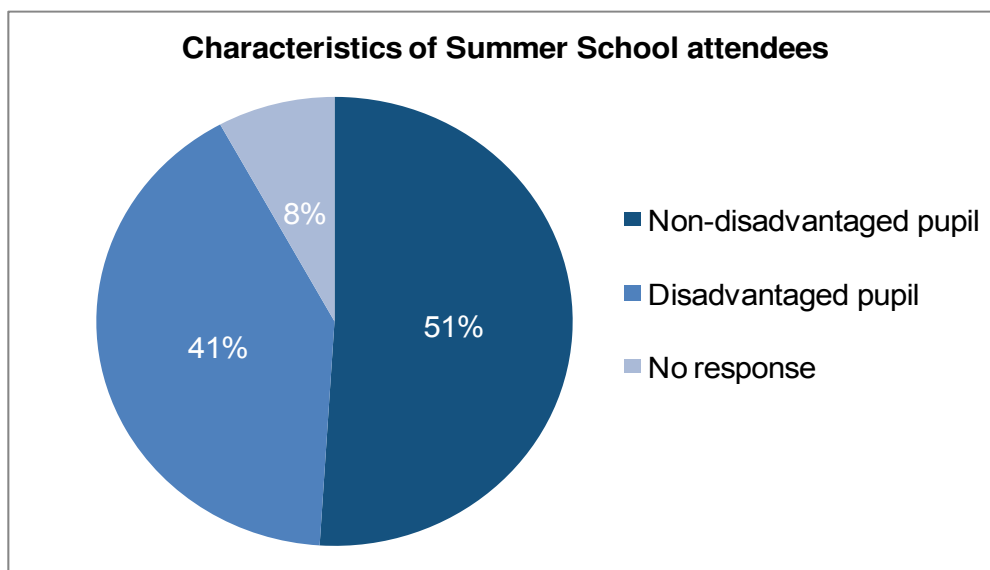
As Figure 4.1 shows, 83 per cent of responding pupils in treatment schools who were invited to a Summer School went on to attend (compared to 50 per cent reported by schools participating in the school survey, which formed part of the first phase of the Summer Schools evaluation – see Martin *et al.*, 2013). The sample is, however, inevitably skewed towards pupils who actually attended a Summer School as participating schools were asked to specifically include these pupils in the survey where possible.

Chi square tests were carried out to see if particular pupil characteristics (namely: gender, FSM eligibility, SEN, ethnic group and EAL) were associated with pupils who were invited but did not attend. There were only small, non-significant differences between most groups of pupils, but Asian pupils and pupils with EAL appeared less likely to attend a Summer School if invited. A possible explanation for this finding could be that communication issues between the school, the pupils and their families might have made it more difficult for pupils with these characteristics to take up the invitation. Findings from the case studies and school survey (see Martin *et al.*, 2013) revealed that Summer School attendance was affected by religious observance during Ramadan, which could also provide a further explanation for this finding.

²⁵ Pupil numbers prior to propensity score matching.

Just 41 per cent of pupils responding to the survey who attended a Summer School were disadvantaged (see Figure 4.2). This is lower than the average number of disadvantaged pupils who attended Summer Schools when compared to findings from the school survey (see Martin *et al.*, 2013)²⁶. We cannot be sure of the reason for the higher proportion of non-disadvantaged pupils in this study who reported attending a Summer School, although it should be noted that the treatment sample comprised schools which *applied* for participation in the programme, some of which may not have been able to recruit sufficient disadvantaged pupils and therefore offered unfilled places to non-disadvantaged pupils.

Figure 4.2 Disadvantaged and non-disadvantaged Summer School attendees



Source: Summer School pupil survey (n = 5881)

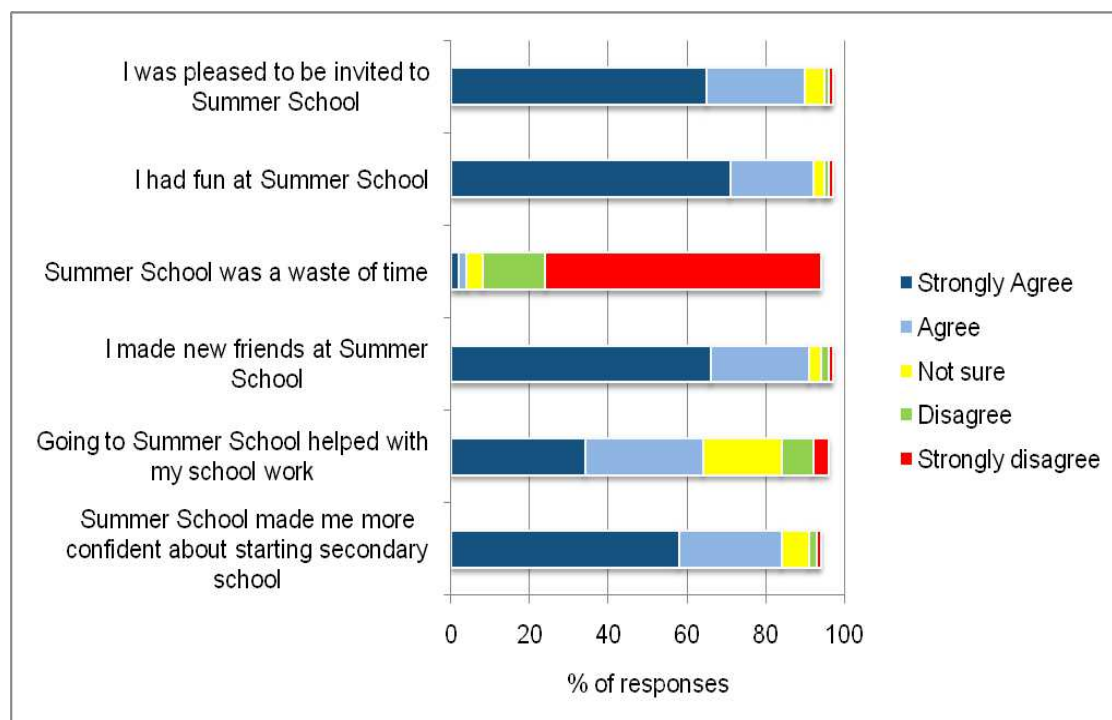
4.2 Pupils' views of Summer School

The pupil survey included eight questions specifically for pupils from treatment schools who reported that they had attended a Summer School.

Figure 4.3 sets out pupils' responses to six statements about Summer School, which they rated on a five-point scale from strongly agree to strongly disagree.

²⁶ Non-disadvantaged pupils comprised 37 per cent of all Summer School attendees.

Figure 4.3 Pupils' views of Summer School



Source: Summer School pupil survey (n = 5881)

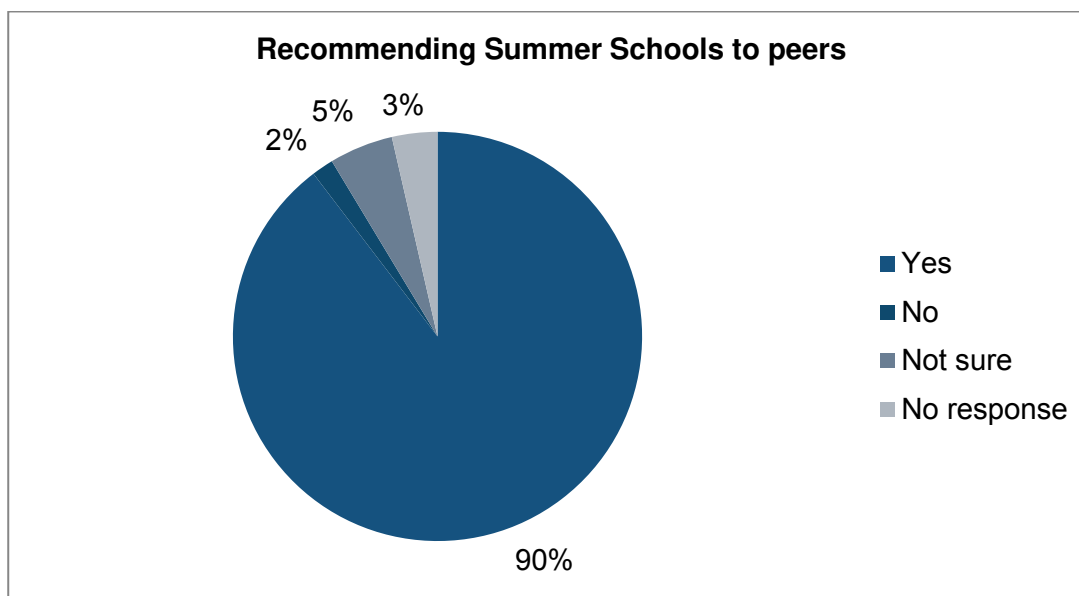
Of the 5,881 pupils responding to the survey who attended a Summer School, 90 per cent agreed (65 per cent strongly agreed and 25 per cent agreed) that they were pleased to be invited to a Summer School run by their secondary school. Just four per cent of pupils agreed (two per cent strongly agreed and two per cent agreed) that Summer school was a waste of time. On the whole, responses to these questions show that most pupils who attended a Summer School had fun (92 per cent agreed – 71 per cent strongly agreed and 21 per cent agreed), made new friends (91 per cent agreed – 66 per cent strongly agreed and 25 per cent agreed), and felt more confident about starting secondary school (84 per cent agreed – 58 per cent strongly agreed and 26 per cent agreed).

The statement 'Summer School helped with my school work' had a slightly lower level of agreement than the other items: 64 per cent of pupils agreed (34 per cent strongly agreed and 30 per cent agreed) and more pupils reported being not sure about this statement than any other. There are a number of possible explanations for this, including the timing of the survey: pupils were in the first term of Year 7 when they completed the survey and may not have had sufficient time to judge if the Summer School had helped them with their school work or not. Also, the school survey found that few Summer Schools aimed specifically to improve pupils' attainment and therefore pupils' responses may reflect the fact that Summer Schools were not necessarily designed to help with pupils' schoolwork.

As a further measure of the pupils' views of Summer School, Summer School attendees were asked if they would recommend Summer School to pupils in Year 6. As Figure 4.4.

shows, the majority of Summer School attendees would advocate participating in a Summer School to their peers: just two per cent of pupils would not recommend it.

Figure 4.4 Pupils who would recommend as Summer school to their peers in Year 6



Source: Summer School pupil survey (n = 5881)

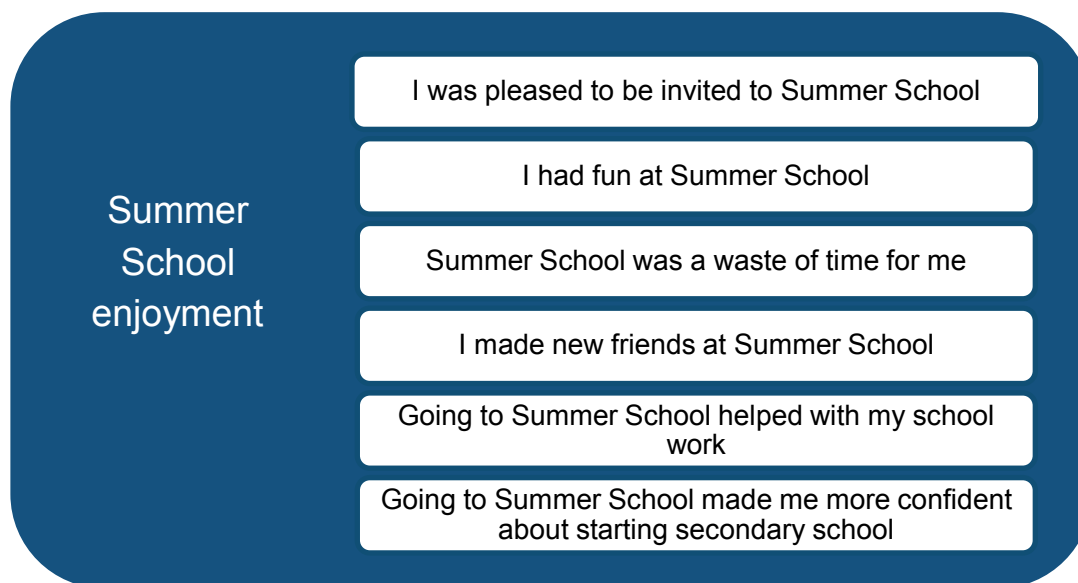
Further analysis (Chi square test) was conducted to explore differences for this variable among pupils with different characteristics (FSM, LAC and gender). This revealed that boys were significantly less likely to recommend Summer School to Year 6 pupils.

4.3 Associations between pupil satisfaction with their Summer School and pupil background characteristics

In order to provide further insights into pupils' enjoyment of their Summer School, the evaluation team carried out multilevel modelling. This statistical analysis controls for differences between schools (e.g. school type, region, percentage FSM) and pupils (e.g. gender, special educational needs (SEN), ethnicity, EAL, FSM in Year 6, LAC in Year 6) to determine any differences between the attitudes of those who attended a Summer School and other pupils.

The following statements, which pupils who had attended a Summer School rated on a scale from strongly agree to strongly disagree, were used to form a Summer School enjoyment outcome measure. Where a statement in the survey was negatively worded (e.g. 'Summer School was a waste of time for me'), the scale was reversed, so that for all statements a higher score meant a more positive attitude.

Figure 4.4 Summer School enjoyment outcome measure



After taking account of the influence of school and pupil variables, the analysis showed that there were two statistically significant differences²⁷ in pupils' scores for Summer School enjoyment.

Boys gave lower ratings of Summer School enjoyment

Pupils who live in more deprived areas (determined by the IDACI) rated their enjoyment of Summer Schools more highly.

Pupils who attended a Summer School were also asked to rate their Summer School on a scale of 0 (terrible) to 10 (fantastic). The average rating was 8.8, indicating that overall, pupils were very positive about their Summer School experience.

The findings of multilevel modelling were very similar to the findings for the Summer School enjoyment measure. There was one significant difference related to school characteristics:

- Pupils from schools with higher proportions of pupils with English as an additional language (EAL) gave lower ratings of their Summer School.
- When the ratings given by pupils with different characteristics were compared there were two statistically significant differences:
- Pupils living in more deprived areas gave higher ratings of their Summer School
- Boys gave lower ratings of their Summer School.

²⁷ All differences described as 'statistically significant' are significant at the level $p. < 0.05$.

5. Influences on pupils' confidence, school readiness and socialisation

Key findings summary

- Certain pupil characteristics were associated with higher or lower confidence, school readiness and socialisation scores. In particular, pupils from Black ethnic backgrounds had more positive attitudes. Disadvantaged pupils (those eligible for FSM and eligible for FSM in the previous 5 years) and pupils with SEN had lower scores for all three measures.
- Boys had higher confidence and socialisation scores but lower scores for school readiness.
- Summer School participation was associated with higher scores for pupil confidence, school readiness and socialisation.
- Controlling for the influence of other factors, confidence scores were higher for pupils who attended Summer Schools and higher still for pupils with FSM who attended Summer Schools.
- Controlling for the influence of other factors, school readiness scores were higher for pupils who attended Summer Schools, and higher still for both pupils with FSM who attended Summer Schools and pupils who were LAC and attended Summer Schools.
- Controlling for the influence of other factors, socialisation scores were higher for pupils who attended Summer Schools and higher still for pupils with FSM who attended Summer Schools.
- However, attending a Summer School explained a relatively small proportion of the variance in pupils' attitude scores.
- Summer school enjoyment scores were correlated with scores for confidence, school readiness and socialisation.

This chapter presents the findings of three outcome measures of pupil attitudes:

- Confidence
- Readiness for school
- Socialisation.

The analysis aimed to control for any systematic differences in characteristics between schools and pupils that applied to take part in the Summer School programme and comparison schools in order to identify any differences in responses from those who

attended Summer Schools which may be related to their Summer School attendance. Four variables of particular interest to the study were included in the analysis:

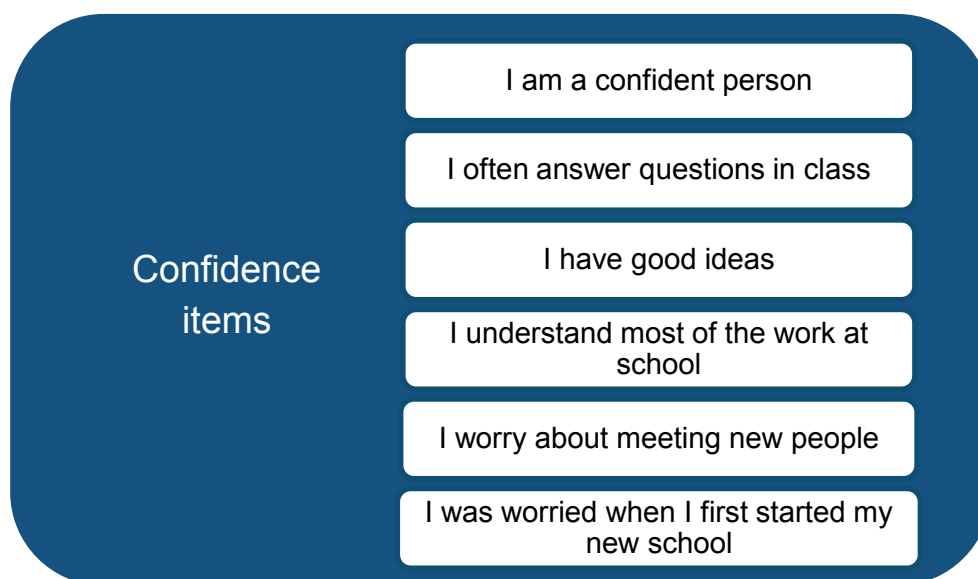
- Summer School attendance²⁸
- FSM eligibility (in Year 6) and Summer School attendance
- LAC status in Year 6 and Summer School attendance
- Eligibility for FSM in past five years but not in Year 6 ('Ever6') and Summer School attendance.

Further details of the analysis can be found in the Appendix 1.

5.1 Relationship between attending Summer School and pupil confidence

The pupil confidence outcome measure comprised six statements which the factor analysis identified as belonging together. These represent pupils' feelings of personal confidence, social confidence and perceptions of themselves as learners - see Figure 5.1.

Figure 5.1 Pupil confidence outcome measure



Two school-level variables were statistically significantly related to pupils' confidence. Confidence scores were higher among pupils in schools with better Key Stage 4 results

²⁸ Pupil attendance at Summer School was defined as pupils who were in treatment schools and who indicated they attended a Summer School QE – 'Yes I went to the whole Summer School' or 'Yes I went to some of the Summer School'.

and lower among pupils in schools with a higher percentage of pupils who are White British.

A number of pupil-level variables were also significantly related to pupils' confidence. Confidence levels were higher among boys and those from Black and Asian ethnic backgrounds. Confidence levels were lower for younger pupils and pupils with SEN. Confidence scores were also lower among disadvantaged pupils: those eligible for FSM in Year 6; those eligible for FSM in the past 6 years (Ever6); and for pupils living in deprived areas.

Attending a Summer School was related to higher levels of pupil confidence. After taking account the influence of school and pupil variables, pupils' confidence scores were statistically significantly:

- higher for pupils who attended Summer Schools
- higher still for pupils with FSM who attended Summer Schools.

Although Summer School participation is positively associated with positive pupil confidence, it explained only a small amount of the variance in pupils' scores. Figure 5.2 shows the differences in levels of confidence between different pupil groups comparing average scores for this outcome measure against a 'base case' providing a comparison for each variable included in the analysis (e.g. a girl, in a comparison school, not eligible for FSM in Year 6, not LAC in Year 6). Full details of all the characteristics making up the 'base case' are provided in the Appendix.

Figure 5.2 Effects for pupil confidence and Summer School attendance

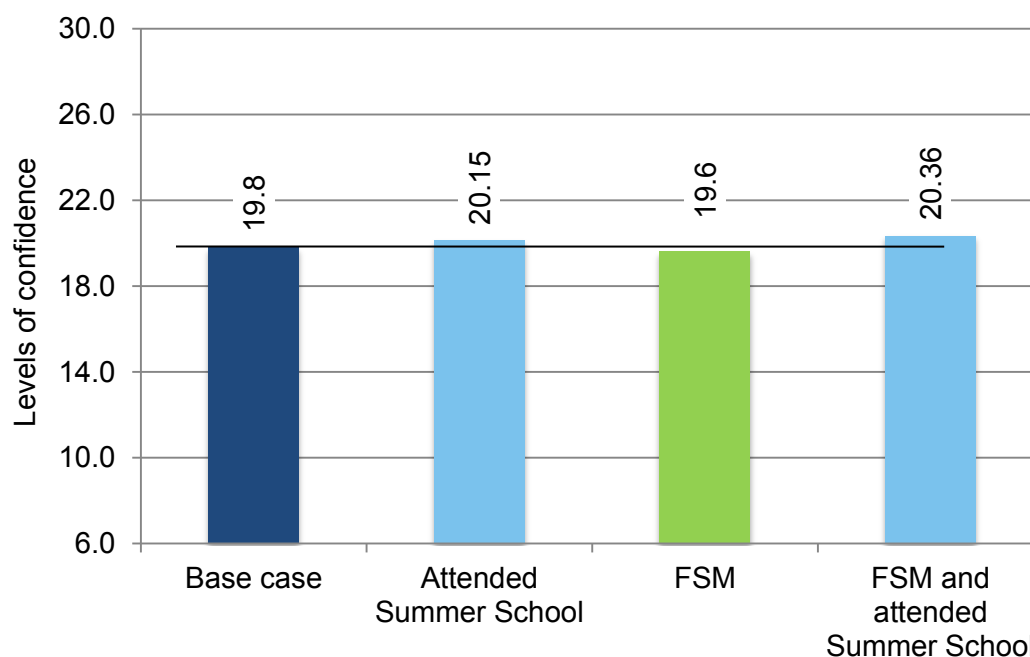
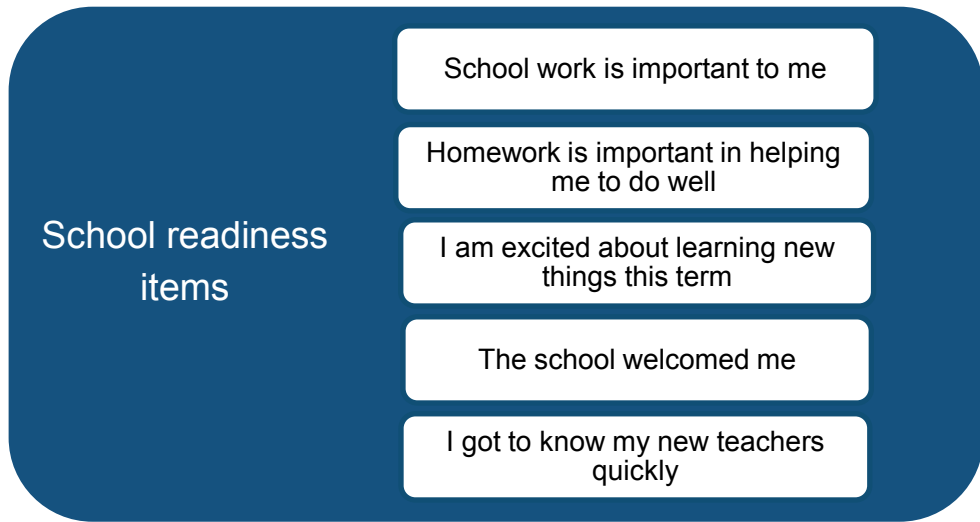


Figure 5.2 shows the relatively small (though statistically significant) differences between pupils' confidence scores according to whether they attended a Summer School and whether they were eligible for FSM and attended a Summer School. Although differences are small, it is interesting to note that scores for pupils with FSM tend to be lower than the comparison (base case) but scores for pupils with FSM who attended a Summer School were slightly higher than the average for all pupils who attended a Summer School.

5.2 Relationship between attending Summer School and school readiness

The school readiness outcome measure comprised five statements which the factor analysis identified as belonging together. These represent pupils' preparedness for school, motivation to learn, and the extent to which they felt supported when they moved schools – see Figure 5.3.

Figure 5.3 School readiness outcome measure



A number of school-level characteristics were statistically significantly associated with pupils' school readiness. Pupils in treatment schools, regardless of whether they attended the Summer School or not, gave higher ratings of their school readiness. There were also regional differences, school readiness scores were higher among pupils from schools located in the north of England and the midlands compared to schools in the south.

A number of pupil-level variables were significantly related to pupils' school readiness. Disadvantaged pupils had lower school readiness scores: those with FSM in Year 6; those eligible for FSM in the past 6 years (Ever6) and pupils with LAC status. School readiness scores were also lower for boys and pupils with SEN. In contrast, school

readiness scores were higher for pupils from Black or Asian backgrounds; pupils with EAL; and younger pupils. The finding that younger pupils had higher school readiness scores is surprising, as it might be expected that older pupils would feel more prepared for secondary school. However, the significance level of this analysis is only just over the five per cent threshold and the size of this effect is very small (see Appendix for further details).

Attending a Summer School was significantly related to higher levels of school readiness. After taking account of the influence of school and pupil variables, pupils' readiness for school scores were:

- higher for pupils who attended a Summer School
- higher still for pupils who were LAC²⁹ who attended Summer Schools
- higher still for pupils with FSM who attended Summer Schools.

Although Summer School participation was positively associated with higher levels of school readiness, this explains only a small amount of the variance in pupils' scores. Figure 5.4 shows the differences in levels of school readiness between different pupil groups comparing average scores for this outcome measure against a 'base case' for all variables in the analysis (including: a girl, in a comparison school, not eligible for FSM in Year 6, not LAC in Year 6).

²⁹ Please note that the sample included only 68 pupils with looked after status who attended a Summer School.

Figure 5.4 Effects for school readiness and Summer School attendance

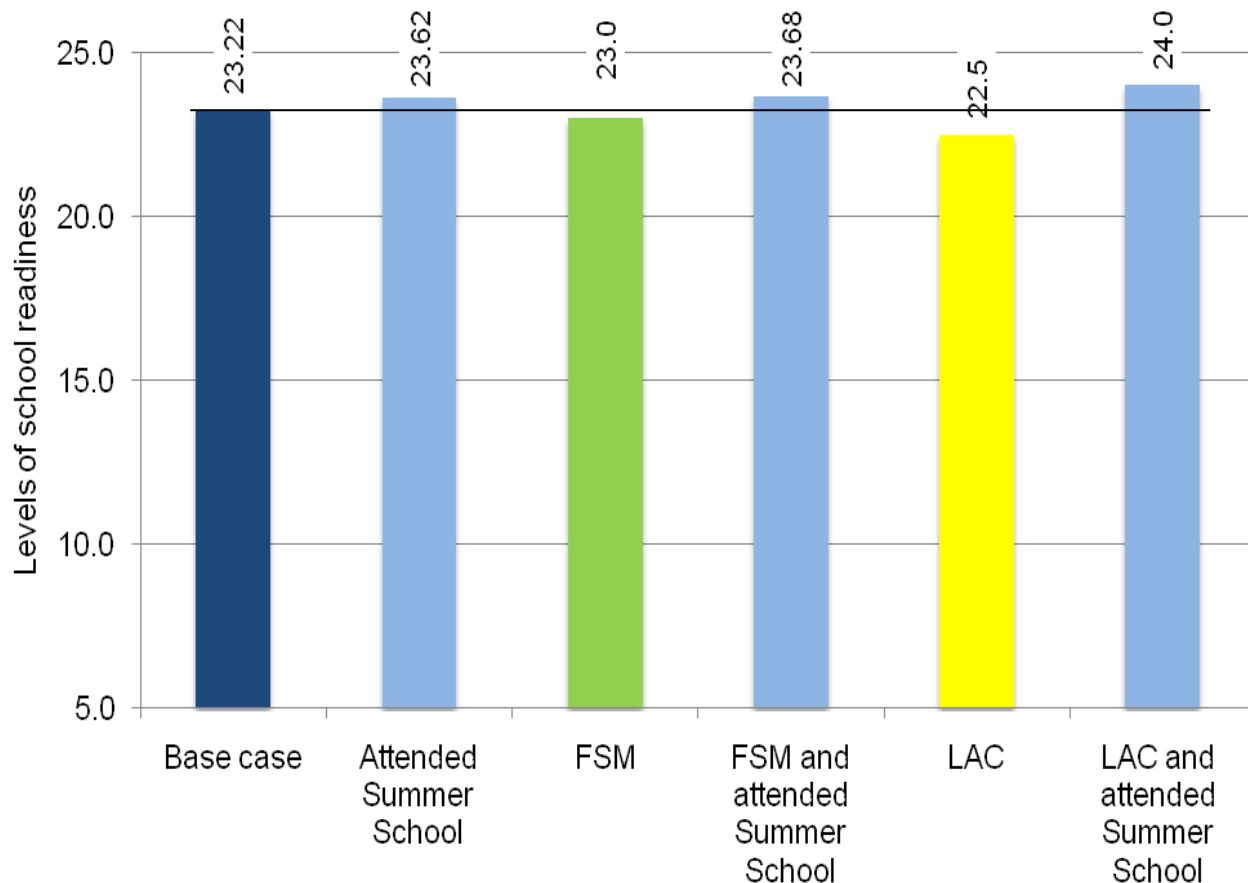
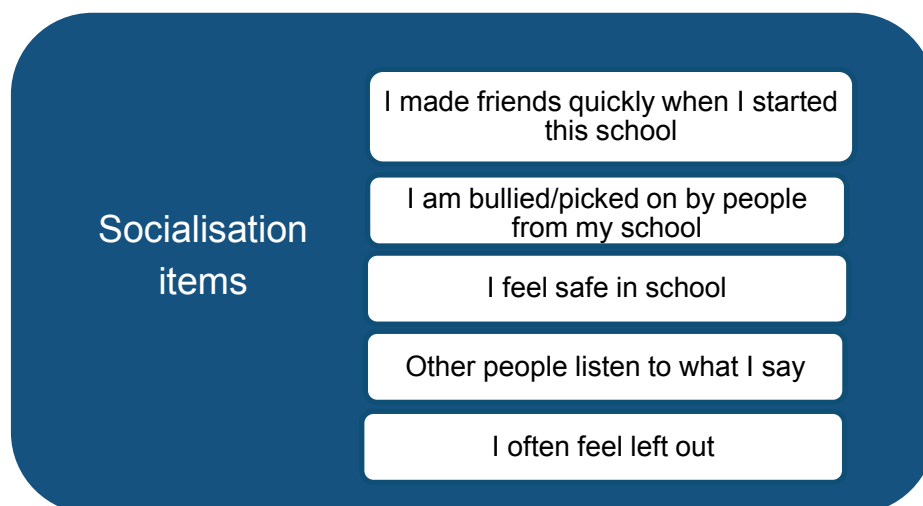


Figure 5.4 shows that most pupils gave high ratings to the school readiness items in the survey. There were relatively small differences between pupils' school readiness scores according to whether they attended a Summer School, whether they were eligible for FSM and attended a Summer School and whether they were LAC and attended a summer School. Although differences are small, it is interesting to note that scores for LAC pupils were lower than the comparison (base case) but scores for LAC pupils who attended a Summer School are slightly higher than the average for all pupils who attended a Summer School. It should be noted however, the number of LAC in the sample who attended a Summer School is small and therefore these differences should be interpreted with caution.

5.3 Relationship between attending Summer School and socialisation

The socialisation outcome measure comprised five statements which the factor analysis identified as belonging together. These represent how well pupils had settled into their peer group, made friends and integrated with other pupils – see Figure 5.5.

Figure 5.5 Socialisation outcome measure



A number of school-level variables were statistically significantly related to pupils' socialisation scores. Scores were higher among pupils in schools with better Key Stage 4 results; comprehensive schools for pupils up to age 18; schools with higher percentages of pupils eligible for free school meals; and schools in the north of England. Socialisation scores were lower for pupils from boys only schools.

A number of pupil-level variables were significantly related to pupils' levels of socialisation.

Socialisation scores were lower among disadvantaged pupils: those with FSM in Year 6; those eligible for FSM in the past 6 years (Ever6) and pupils living in deprived areas. Socialisation scores were lower for pupils with SEN. In contrast, socialisation scores were higher for boys and pupils from Black backgrounds.

Attending a Summer School was significantly associated with higher levels of socialisation. After taking account of the influence of school and pupil variables, pupils' socialisation scores were statistically significantly:

- higher for pupils who attended Summer Schools
- higher still for pupils with FSM who attended Summer Schools.

Again, although Summer School participation is positively associated with higher levels of socialisation, this explains only a small amount of the variance in pupils' scores. Figure 5.6 shows the differences in levels of socialisation between different pupil groups comparing average scores for this outcome measure against a 'base case' comprising a comparator for all variables in the analysis (including: a girl, in a comparison school, not eligible for FSM in Year 6, not LAC in Year 6).

Figure 5.6 Effects for socialisation and Summer School attendance

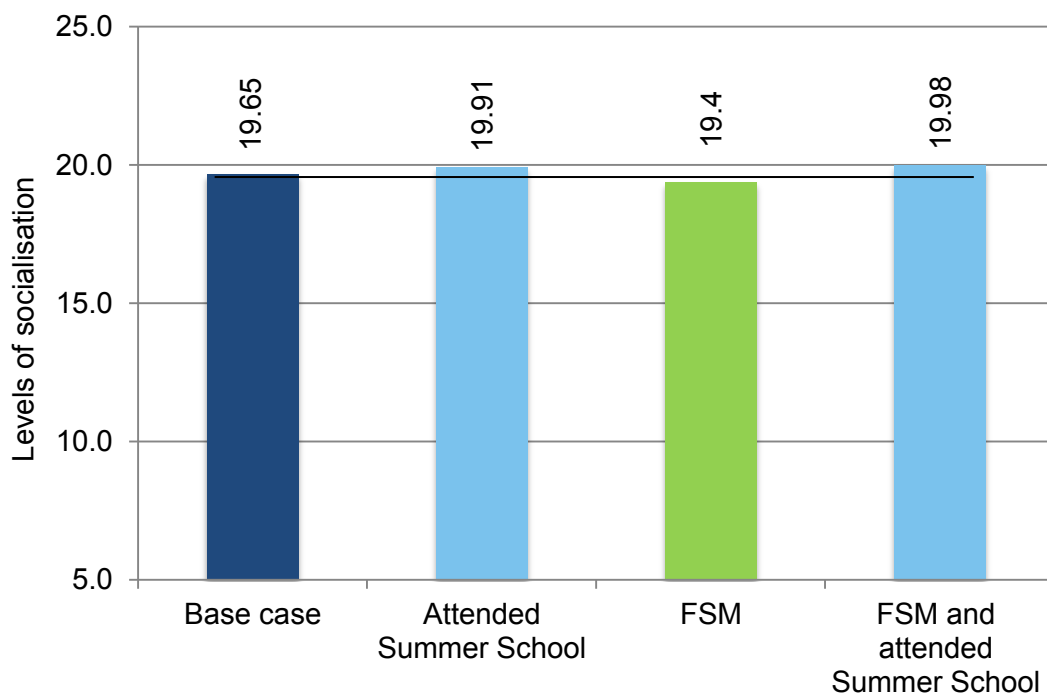


Figure 5.6 shows there were relatively small differences between pupils' school readiness scores according to whether they attended a Summer School and whether they were eligible for FSM and attended a Summer School. Although differences are small compared to the base case, the Figure shows that pupils who attended a Summer School gave higher scores for socialisation.

5.4 The relationship between Summer School attendance and other outcome variables

There were two survey questions that were not included in the factor analysis because the analysis indicated that they were not measuring the same construct as other items (see Appendix 1 for further details). These were subject to further analysis (chi square test) for FSM eligibility and Summer School Attendance.

The first of these other outcome variables asked pupils about their attendance at school: 'I sometimes skip lessons, bunk off or skive from school'. Additional analysis found a statistically significant relationship between pupils (self-reported) school attendance and their Summer School attendance. There was also a significant relationship between self-reported school attendance and children eligible for FSM who attended a Summer School. However, it is possible that this finding could result from a selection effect: it could be that children who were less likely to attend school were also less likely to attend a Summer School.

The second variable asked pupils to indicate their agreement that on starting in Year 7 'It was hard to find my way around the school'. Statistical analysis (chi square test) showed that pupils who were eligible for FSM and did not attend a Summer School were most likely to report difficulties in finding their way around their new school. Fewer pupils eligible for FSM who attended Summer School strongly agreed with this statement and pupils not eligible for FSM were the least likely to say 'strongly agree (irrespective of their Summer School attendance).

5.5 Relationships between Summer School enjoyment and other outcome variables

Further analysis was conducted to explore the relationships between Summer School enjoyment and the three outcome measures: confidence; school readiness and socialisation.

The analysis showed statistically significant relationships between pupils' enjoyment of their Summer School and their confidence, school readiness and socialisation scores. Pupils with higher Summer School enjoyment levels gave higher ratings for all three outcome measures. The strongest relationship was between levels of Summer School enjoyment and school readiness (see the Section A.1.7 in Appendix 1 for further details of this analysis). However, the interpretation of these relationships is not straightforward, since it is not possible to identify, for example, whether pupils who gave a higher rating to their Summer School enjoyment were more confident or whether pupils with higher confidence were more likely to rate their Summer School experience as highly enjoyable.

6. Discussion, conclusions and recommendations

This study aimed to identify pupils' feelings towards starting secondary school and the difference made by attending a Summer School.

In relation to pupils' feelings on starting secondary school, the study found that most pupils said they were worried on starting secondary school and had difficulty finding their way around their new school at first. However, most pupils said they felt welcomed, made friends and got to know their teachers quickly when they started secondary school.

Most pupils had positive experiences of their Summer School and felt attending had helped them. They were pleased to be invited, made friends and enjoyed the experience. Pupils felt attending Summer School had helped them feel more confident about starting secondary school and a majority thought that it had helped them with their school work.

There were few statistically significant differences in pupils' enjoyment of Summer School related to their background characteristics. However, pupils who lived in more deprived areas had higher enjoyment scores and rated their Summer Schools more highly. On the other hand, boys had lower enjoyment scores, they gave lower ratings of their Summer School and were less likely than girls to recommend Summer School to other pupils.

By matching pupils' survey responses to NPD variables, the analysis was able to identify a number of relationships between pupils' attitude scores and their school and individual characteristics. For example, pupils' confidence scores were higher among pupils attending higher achieving secondary schools; pupils eligible for FSM, had significantly lower scores for all three outcome measures: confidence, socialisation and school readiness; and pupils with SEN also had statistically significantly lower scores for all three measures.

Summer School participation is positively associated with positive pupil attitudes (confidence, school readiness, and socialisation) but it explains only a small percentage of the variance in pupils' scores. Findings should be viewed as 'associations' rather than causal links due to the study design. Although there was a comparison group, this was not a randomised control trial and there were no measures taken before the Summer School; therefore it is difficult to know whether the observed differences are caused by attending Summer School or are due to differences between the treatment and comparison groups that were not identified or controlled for in the analysis. Nevertheless, the pattern of results shows a consistent association which is consistent with the hypothesis that attending a Summer School is associated with more positive attitudes.

In 2013, funding for the Summer Schools initiative was extended to pupils with previous eligibility for FSM (Ever6). There were some pupils who were Ever6 but not eligible for FSM in the current year in the survey sample who had attended Summer Schools. These pupils were not eligible for funding in the 2012 programme, but would be eligible in 2013

as a result of the policy change. The analysis did not indicate any positive significant differences related to attending a Summer School specifically for pupils in this group. This does not necessarily imply that Summer School is ineffective for these pupils, just that the analysis did not find any difference between the strength of association for this group and that of non-disadvantaged pupils. Since the 2012 programme was not focussed on recruiting pupils with Ever6, it is not possible to estimate with any confidence what would have happened had these pupils been among the eligible disadvantaged groups included in the study.

Conclusion and recommendations

This study has identified a number of positive results in support of the Summer Schools initiative. Summer Schools are popular among pupils who attend. There is a statistically significant association between Summer School attendance and positive attitudes (confidence, school readiness and socialisation), especially among disadvantaged pupils. However, the evaluation also suggests that the sizes of the observed effects are relatively small and the study design limits the extent to which differences can be attributed to the programme.

- In conclusion, this part of the evaluation is supportive of continued funding for the initiative. The findings relating to pupil characteristics suggest the following points for consideration by policymakers and schools:
- The Department may wish to conduct further analysis of pupils' responses to explore the relationship between Key Stage 2 attainment levels and the variation in pupil outcomes identified in this study.
- To achieve a better estimate of the programme's effects and cost-effectiveness, the Department may wish to continue evaluating the size of effects, preferably using a randomised control trial to evaluate alternative initiatives designed to address the difficulties experienced by disadvantaged pupils on transfer to secondary school.
- Both the Department and schools should continue to track the outcomes of pupils attending Summer Schools in order to measure the impact of the programme on pupil attainment in the longer term.
- There was a lower take up of Summer School places by pupils from Asian backgrounds and those with EAL. This may indicate a need for schools to consider how best to encourage take up among these pupils and their families.
- Boys appear to be less positive in their enjoyment of Summer Schools. It may therefore be worthwhile for schools to consider enhancing the appeal of their Summer School to boys.
- While pupils with SEN are not specifically targeted by the pupil premium, this study found their attitude scores were among the least positive. This suggests that

schools and policymakers should recognise the particular difficulties these pupils face at transition and their need for targeted support.

7. References

Evangelou, M., Taggart, B., Sylva, K., Melhuish, E., Sammons, P., and Siraj-Blatchford, I. (2008). *What Makes a Successful Transition from Primary to Secondary School?* Department for Children, Schools and Families Research Report RR019. London: DCSF.

Evans, K., George, N., White, K., Sharp, C., Morris, M. and Marshall, H. (2010). *Ensuring that All Children and Young People Make Sustained Progress and Remain Fully Engaged Through All Transitions Between Key Stages (C4EO Schools and Communities Research Review 2)*. London: Centre for Excellence and Outcomes in Children and Young People's Services [online]. Available: http://www.c4eo.org.uk/themes/schools/sustainedprogress/files/kr_full_sustained_progress.pdf [22 March 2013].

Day, L., Martin, K., Sharp, C., Gardner, R. and Barham, J. (2013). *Summer Schools programme for disadvantaged pupils: key findings for schools*. Slough: NFER. [online]. Available: <http://www.nfer.ac.uk/publications/ESSP03> [22 March 2013].

Day, L., Martin, K., Sharp, C., Gardner, R. and Barham, J. (2013). *Top tips for running a successful summer school*. Slough: NFER. [online]. Available: <http://www.nfer.ac.uk/publications/ESSP02> [22 March 2013].

Martin, K., Sharp, C., Day, L., Gardner, R., Mehta, P. and Cook, R. (2013). *Summer Schools Programme for Disadvantaged Pupils: Overview Report*. London: Department for Education. [online]. Available: <http://www.nfer.ac.uk/publications/ESSP01> [22 March 2013].

Appendix

A1 Technical description of analysis methods

A1.1 Sampling strategy

A random stratified sample of 1,500 schools was drawn out of 1,836 mainstream schools which applied to participate in the Department's Summer School programme (referred to in this report as 'treatment schools'). This sample did not include special schools or middle schools. Treatment schools were invited to take part in the online pupil survey and had the option of involving their entire Year 7 or only those who had participated in the Summer School programme. The aim was to recruit at least 2,500 pupils from 100 treatment schools.

Once the sample of treatment schools was drawn, the team drew a sample of comparison schools. These were secondary schools which *did not* apply to the Summer Schools programme (n=1,332). The aim was to draw a sample of secondary schools with similar characteristics to the sample of treatment schools. However, the programme take-up was high, especially among schools with higher proportions of pupils eligible for FSM. This meant that few schools with high proportions of pupils eligible for FSM were left in this sample pool. Therefore, the team invited all schools from the highest three FSM quintiles which did not apply to participate in the Summer Schools programme to participate in the comparison group. A matched proportion of schools was drawn from the two lowest FSM quintiles in order to obtain equal proportions of low FSM schools as represented in the treatment group sample. The comparison sample comprised 530 comparison schools and the study aimed to recruit at least 2,500 pupils from 100 comparison schools.

A1.2 Response rate and sample representation

Overall, pupil survey responses were high across both the groups and exceeded originally intended numbers. These numbers perhaps reflect the relevance of the issue of transition for secondary schools and schools' interest in receiving individual school-level feedback from the NFER. In this feedback, pupil responses were presented separately for those who were considered disadvantaged³⁰ and those who were not disadvantaged. These responses were further compared against responses from all schools. Table A1 summarises population numbers and response rates.

³⁰ i.e. eligible for FSM and those with LAC status.

Table A1 School response rates

	Treatment schools	Comparison schools
Number of schools in the population	1,836	1,332
Number of schools in the sample	1,500	530
Number of schools responding to the pupil survey	347 (23%)	114 (22%)
Number of pupil survey responses	9,682	11,383

Table A2 shows the characteristics of the responding schools from the treatment sample. On average, responding treatment schools are representative of the broader population of schools participating in the Summer School programme. Person's chi-squared tests were run for each variable, which suggests no difference between the responding sample and the population at the p-value of 0.05.

Table A2 Treatment schools – representation of the sample

		Responding treatment schools		Population schools	
		Count	Column N %	Count	Column N %
School type	Secondary Modern	10	2.9%	46	2.5%
	Comprehensive to 16	106	31.1%	522	28.4%
	Comprehensive to 18	95	27.9%	539	29.4%
	Grammar	3	.9%	17	.9%
	Academy	127	37.2%	706	38.5%
	Not Known	0	.0%	6	.3%
	Total	341	100.0%	1836	100.0%
% pupils eligible for FSM 2010/11 (5 pt scale)	Lowest 20%	23	6.7%	161	8.8%
	2nd lowest 20%	63	18.5%	367	20.0%
	Middle 20%	91	26.7%	476	25.9%
	2nd highest 20%	97	28.4%	470	25.6%
	Highest 20%	67	19.6%	362	19.7%
	Total	341	100.0%	1836	100.0%
School size	Smallest	66	19.4%	415	22.6%
	Medium	106	31.1%	606	33.0%
	Largest	169	49.6%	815	44.4%
	Unknown	0	.0%	0	.0%
	Total	341	100.0%	1836	100.0%

Note: Six schools were excluded from above table due to academy conversion

Table A3 shows the characteristics of the responding schools from the comparison sample. Due to the issue highlighted above for this sample pool (i.e. few schools available with high

proportions of pupils eligible for FSM), responding schools from the comparison sample do not match with the population of schools participating in the Summer School programme with regards to the number of pupils eligible for FSM. In order to ensure comparability across treatment and comparison schools, propensity score matching was run. Adopting this technique meant that pupils from treatment schools were compared only with pupils in comparison schools that are, overall, very similar in all characteristics. Please refer to 'Propensity score matching' section for further details.

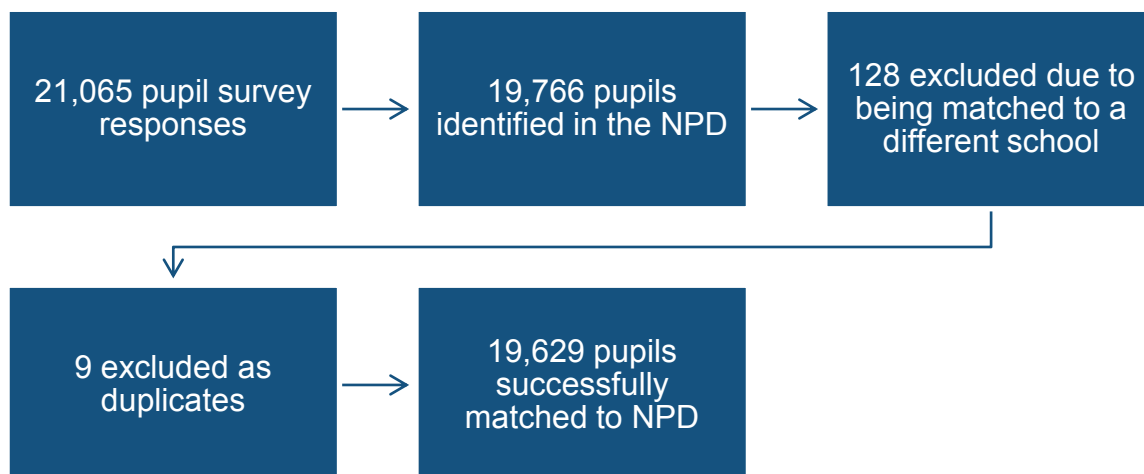
Table A3 Comparison Schools: Representation of the Sample

		Responding comparison schools		Population schools	
		Count	Column N %	Count	Column N %
School type	Secondary Modern	6	5.3%	37	2.8%
	Comprehensive to 16	39	34.5%	253	19.0%
	Comprehensive to 18	25	22.1%	366	27.5%
	Grammar	8	7.1%	147	11.0%
	Academy	35	31.0%	446	33.5%
	Not Known	0	.0%	83	6.2%
	Total	113	100.0%	1332	100.0%
% pupils eligible for FSM 2010/11 (5 pt scale)	Lowest 20%	25	22.1%	546	41.0%
	2nd lowest 20%	24	21.2%	356	26.7%
	Middle 20%	35	31.0%	229	17.2%
	2nd highest 20%	24	21.2%	139	10.4%
	Highest 20%	5	4.4%	62	4.7%
	Total	113	100.0%	1332	100.0%
School size	Smallest	36	31.9%	538	40.4%
	Medium	39	34.5%	387	29.1%
	Largest	38	33.6%	407	30.6%
	Unknown	0	.0%	0	.0%
	Total	113	100.0%	1332	100.0%

Note: One school was excluded from above table due to academy conversion

Once the schools had been sampled and the pupils had responded, the evaluation team sent details of the pupils' name, gender, date of birth and school attended to the National Pupil Database (NPD) team at the Department. The NPD holds a wide range of information about pupils who attend schools and colleges in England. Figure A4 shows the number of pupils responding to the survey whose data was successfully matched to NPD.

Figure A4 Number of pupils matched to NPD



A.1.3 Factor analysis and reliability

Factor analysis is a statistical technique which combines variables that are correlated. Using factor analysis to create composite measures not only results in measures that are more robust than the individual items, it also reduces the problems that arise from colinearity (the inter-connectedness of correlated variables). The reliability of each measure was explored using Cronbach's Alpha (where a number nearer to 1 suggests higher reliability of the measure). This indicates the extent to which the variables are measuring the same underlying construct. Items whose removal resulted in an increase in reliability for the scale in question were excluded from the final calculation of composite measures.

Table A5 lists the variables that comprised the composites, along with their reliability scores.

Table A5 Factor composition and reliability

Composite	Component question	Cronbach's Alpha
Confidence	Q1 - I was worried when I first started my new school*	0.62
	Q9 - I often answer questions in class	
	Q10 - I understand most of the work at school	
	Q16 - I have good ideas	
	Q17 - I worry about meeting new people*	
	Q18 - I am a confident person	
School readiness	Q3 - The school welcomed me	0.70
	Q4 - I got to know my new teachers quickly	
	Q6 - School work is important to me	
	Q8 - Homework is important in helping me to do well	
	Q11 - I am excited about learning new things this term	
Socialisation	Q2 - I made friends quickly when I started this school	0.66
	Q12 - I am bullied/picked on by people from my school*	
	Q13 - I feel safe in school	
	Q14 - Other people listen to what I say	
	Q15 - I often feel left out*	
Summer School enjoyment	Q19- I was pleased to be invited to Summer School	0.78
	Q20- I had fun at Summer School	
	Q21- Summer School was a waste of time for me*	
	Q22- I made new friends at Summer School	
	Q23- Going to Summer School helped with my school work	
	Q24- Going to Summer School made me confident about starting secondary school	
Summer School rating	Q26-On a scale of 0-10 (where 0 is terrible and 10 is fantastic), how would you rate your Summer School?	

* Response scales for these items were reversed so that higher scores would indicate a more positive attitude.

Three survey items did not fit with any other items to create a reliable measure. These items were Q5 'It was hard to find my way around the school' and Q7 'I sometimes play truant from school (skip lessons, bunk off or skive)' and Q 25 'I would recommend people in Year 6 go to summer school'. A test of significance was carried out to explore association of these items with FSM eligibility, looked after status and Summer School attendance. As Q25 was only completed by those who attended a Summer School, the team explored the association of this item with gender, FSM eligibility and LAC status. A p-value of 0.05 was considered a statistically significant relationship: results are reported in Chapters 4 and 5.

A.1.4 Propensity score matching

Since this was not a randomised controlled trial, comparing outcomes between treatment and comparison groups yields differences that cannot necessarily be attributed to the programme itself. Rather they could be due to systematic differences between the two groups. In order to reduce such differences, the team employed a technique called *propensity score matching*. This technique fits a logistic model to predict the probability of being in the treatment or comparison group given a set of pupil characteristics. In practice, this means that pupils from treatment schools are compared only with pupils in comparison schools that are, overall, very similar in school and pupil-level characteristics. School characteristics included in this model were: school size, single/mixed sex school, school governance, region, school's KS4 attainment, and school composition – the proportion of pupils eligible for FSM, SEN, EAL and White British. Pupil background characteristics were: gender, ethnicity, FSM eligibility, looked after status, FSM eligibility for previous six years, SEN status, age in months and Income Deprivation Affecting Children Index (IDACI).

Table A6 shows number of pupils removed from the dataset due to this exercise.

Table A6 Number of pupils removed as a result of propensity score matching

Number of pupils before propensity score matching	
Original comparison group	11,383
Original treatment group	9,682
Total	21,065
Number of pupils after propensity score matching	
New comparison group	11,232
New treatment group	9,680
Total	20,912

In total, 153 pupils were removed because their school and individual characteristics indicated that they were unlikely to have a match in the other group (i.e. treatment or comparison group).

A.1.5 Multilevel modelling

Multilevel modelling is a development of a common statistical technique known as regression analysis. This is a technique for finding relationships between variables given the values of one or more related measures. Multi-level modelling takes account of data which is grouped into similar clusters at different levels. For example, in the present study, individual pupils are grouped into schools. Pupils within a school will be more alike, on average, than pupils from different schools. Multilevel modelling allows the analysis to take account of this hierarchical structure of the data and produce more reliable results.

Multilevel modelling has been used for the present study as it was necessary to control for systematic differences between treatment schools (that ran a Summer School) and comparison schools when trying to identify the any differences in responses from those who attended a Summer School and those who did not. The model included three interaction terms, designed to identify the outcomes associated with pupil characteristics of particular interest to the study:

- FSM eligibility interacted with Summer School attendance^[1] (n=2,337)
- Looked after status interacted with Summer School attendance (n=68)
- Eligible for FSM in past five years but not in year 6 interacted with Summer School attendance (n=599).

The initial dataset was prepared in SPSS and multilevel modelling was run in MlwiN. In constructing the models, a backward selection procedure was followed, adding all of the variables into the models to begin with and then successively removing those which were not significant at the five per cent level. However, variables related to Summer School, FSM eligibility and looked after status were kept in the final model irrespective of the level of significance. Findings are reported based on the final set of models where variables were significant at the five per cent level.

Table A7 shows the variables included in the modelling.

^[1] Pupil attendance at Summer School was defined as pupils who were in treatment schools and who indicated they attended a Summer School QE – ‘Yes I went to the whole Summer School’ or ‘Yes I went to some of the Summer School’.

Table A7 List of variables included in the modelling

Variable names	School-level background variables	Base case comparator
Intervent	Treatment school	Comparison school
size_small	Year 7 cohort size smallest-2 thru 133 pupils	Year 7 cohort size largest- more than 186 pupils
size_med	Year 7 cohort size medium-134 thru 185 pupils	
Smodern	Secondary modern school	Academy
comp16	Comprehensive to 16 school	
comp18	Comprehensive to 18 school	
Grammar	Grammar school	
Boysch_dummy	Boys only	Mixed school
Girlsch_dummy	Girls only	
North	Region-North	South
Midlands	Region-Midlands	
pcFSM11	Percentage pupils eligible for free school meals (2010/11)	Lower compared with higher
pcSEN11	Percentage pupils with Statement of SEN (2010/11)	Lower compared with higher
pcEAL11	Percentage pupils with English as an additional language (2010/11)	Lower compared with higher
pc5GCSEem	Percentage pupils achieving 5+ A*-C or equivalents, including A*-C in both English and mathematics GCSEs (2010/11)	Lower compared with higher
pcWBR11	Percentage pupils who are White British (2010/11)	Lower compared with higher
Variable names	Pupil-level background variables	Base case comparator
Attended_dummy	Attended Summer School	Did not attend the Summer School/ not sure
Male	Male	Female
gendermiss	Gender unknown	
Etravel	Ethnic group- White Irish traveller/Gypsy/Roma	Ethnic group-White British, White Irish and White other
Easian	Ethnic group-Asian	
Eblack	Ethnic group-Black	
emixed	Ethnic group-mixed	
eother	Ethnic group- other	
emissing	Ethnic group- unknown/missing	
prevfsm6	Eligible for FSM in past five years but not in year 6	Not eligible for FSM in past six years
fsm	Eligible for FSM in year 6	Not eligible for FSM in year 6
fsmmiss	Unknown FSM eligibility status in year 6	
lac	Looked after in the processing year	Not looked after
lacmiss	Looked after child status unknown	
SEN_A_dummy	SEN - school action	Not SEN
SEN_P_dummy	SEN - action plus	

SEN_S_dummy	SEN- Statemented	
SEN_missing_dummy	Missing SEN	
eal	English as an additional language (EAL)	Not EAL
age	Age	Younger compared with older
idaci	Income Deprivation Affecting Children Index (IDACI)	Lower compared with higher
Variable names	Pupil level interaction terms	Base case comparator
fsmattend	FSM eligibility interacted with Summer School attendance	Not eligible for FSM or did not attend Summer School
prevfsm6attend	Eligible for FSM in past five years but not in year 6 interacted with Summer School attendance	Not eligible for FSM in past five years or did not attend Summer School
lacattend	looked after status interacted with Summer School attendance	Not looked after or did not attend Summer School

A.1.6 Findings of the multilevel modelling

In this section, we present the overall results of the multilevel modelling, in terms of the variables which are significantly related to the outcome measure at the five per cent level.

The tables include an estimated 'coefficient' for each background variable. This represents the change in the outcome measure for one unit change in the background factor. Since the units in which the background factors are expressed can be quite different, these coefficients are not directly comparable to each other. To enable this comparison, coefficients have been converted into 'pseudo effect sizes'. These represent the expected change in outcome measure expressed as a percentage of the standard deviation. This measure is designed to enable comparisons across all variables.

Confidence

The *Confidence* outcome measure score has a range of 6-30, where a score of 30 is the highest levels of confidence. The model included all pupils for whom a matched comparison was found (20,912). It contained two levels: school and pupil. In addition to the variables related to attending a Summer School, Table A8 shows the variables that were significantly related to pupils' confidence scores at the five per cent level.

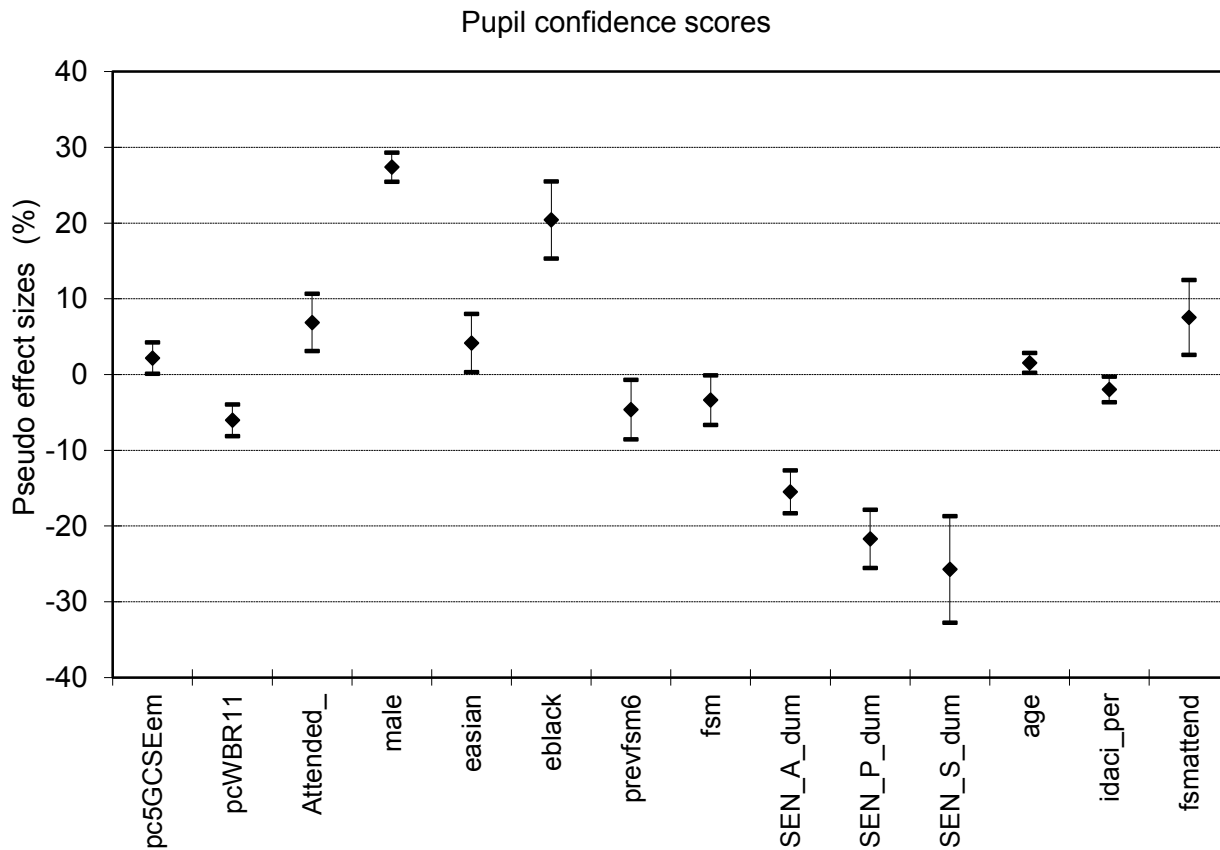
Table A8 Results of multilevel modelling for pupil confidence

Variable	Coefficient	Standard error	Significant at 5% level
Constant	19.800	0.949	*
Percentage pupils achieving 5+ A*-C or equivalents, including A*-C in both English and mathematics GCSEs (2010/11)	0.005	0.002	*
Percentage pupils who are White British (2010/11)	-0.008	0.001	*
Attended Summer School	0.347	0.097	*
Male pupil	1.380	0.049	*
Ethnic group-Asian	0.210	0.099	*
Ethnic group-Black	1.029	0.131	*
Eligible for FSM in past five years but not in year 6	-0.234	0.101	*
Eligible for FSM in year 6	-0.170	0.084	*
SEN - school action	-0.781	0.073	*
SEN - action plus	-1.094	0.099	*
SEN- Statemented	-1.296	0.181	*
Age	0.174	0.077	*
Income Deprivation Affecting Children Index (IDACI)	-0.004	0.002	*
FSM eligibility interacted with Summer School attendance	0.379	0.127	*
Treatment school	0.027	0.093	ns
Looked after in the processing year	0.135	0.397	ns
looked after status interacted with Summer School attendance	0.130	0.580	ns
Eligible for FSM in past five years but not in year 6 interacted with Summer School attendance	0.191	0.185	ns

Results from this model suggests that there is a positive association between pupils' confidence scores and attending a Summer School. There is also a positive association between pupils' confidence scores and being eligible for FSM in Year 6 and attending a Summer School (interaction term). These pupils had higher confidence scores compared to pupils who were otherwise similar.

Figure A2 presents pseudo effect sizes for pupil confidence. It includes all school and pupil level background variables where the relationship with the outcome measure was significant at the five per cent level. The estimated effect size is plotted as a diamond, with a vertical line indicating the 95 per cent confidence interval for the estimate. Positive values imply a positive relationship with the outcome measure and negative values imply a negative relationship (i.e. that scores on the outcome measure tend to decrease with higher values of the given background variable).

Figure A2 Relationship between confidence scores and pupil characteristics



Pupils who were eligible for FSM in Year 6 and those who were eligible for FSM in previous five years but not in Year 6 (Ever6) had lower levels of confidence compared to their peers. Pupils in the former group (those eligible for FSM in Year 6) who attended Summer Schools had higher levels of confidence. However, this was not the case for pupils in the latter group (Ever6) who attended Summer Schools.

School readiness

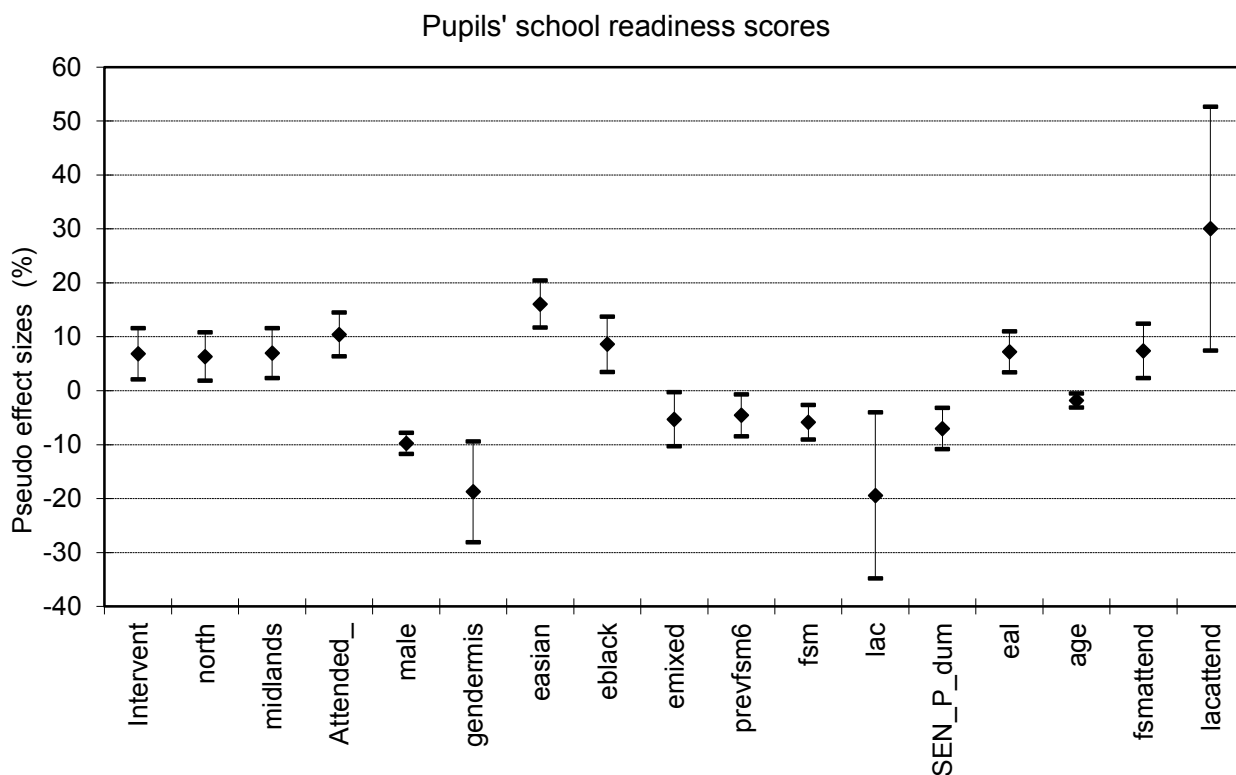
The *school readiness* outcome measure has a range of 5-25, where a score of 25 is the highest possible school readiness. This model included all pupils for whom a matched comparison was found (n=20,912). It contained two levels: school and pupil. Table A9 shows the variables, in addition to the variables related to attending a Summer School, which had a significant relationship with school readiness scores at the five per cent level.

Table A9 Results of multilevel modelling for school readiness

Variable	Coefficient	Standard error	Significant at 5% level
Constant	23.220	0.703	*
Treatment school	0.263	0.093	*
Region-North	0.243	0.087	*
Region-Midlands	0.268	0.090	*
Attended Summer School	0.399	0.079	*
Male pupil	-0.374	0.038	*
Gender unknown	-0.717	0.182	*
Ethnic group-Asian	0.615	0.085	*
Ethnic group-Black	0.330	0.101	*
Ethnic group-mixed	-0.202	0.098	*
Eligible for FSM in past five years but not in year 6	-0.175	0.076	*
Eligible for FSM in year 6	-0.223	0.063	*
Looked after in the processing year	-0.743	0.301	*
SEN - action plus	-0.269	0.075	*
English as an additional language (EAL)	0.276	0.074	*
Age	-0.158	0.058	*
FSM eligibility interacted with Summer School attendance	0.282	0.099	*
looked after status interacted with Summer School attendance	1.150	0.442	*
Eligible for FSM in past five years but not in year 6 interacted with Summer School attendance	0.221	0.142	ns

Results from this model suggests that there is a positive association between pupils' school readiness scores and the following variables: attending a Summer School, eligibility for FSM in Year 6 and attending a Summer School (interaction term), being looked after and attending a Summer School (interaction term). These pupils reported having higher levels of school readiness compared to otherwise similar pupils. Figure A3 illustrates the pseudo effect sizes of these relationships.

Figure A3 Relationship between school readiness scores and pupil characteristics



As seen in Figure A3, pupils who were looked after, those who were eligible for FSM in year 6 and those who were eligible for FSM in the previous five years but not in year 6 had lower levels of school readiness compared to otherwise similar pupils. Pupils in the first two groups who attended a Summer School had higher levels of school readiness. Pupils who attended a Summer School and were on FSM in previous five years but not in year 6 did not have higher school readiness scores.

Socialisation

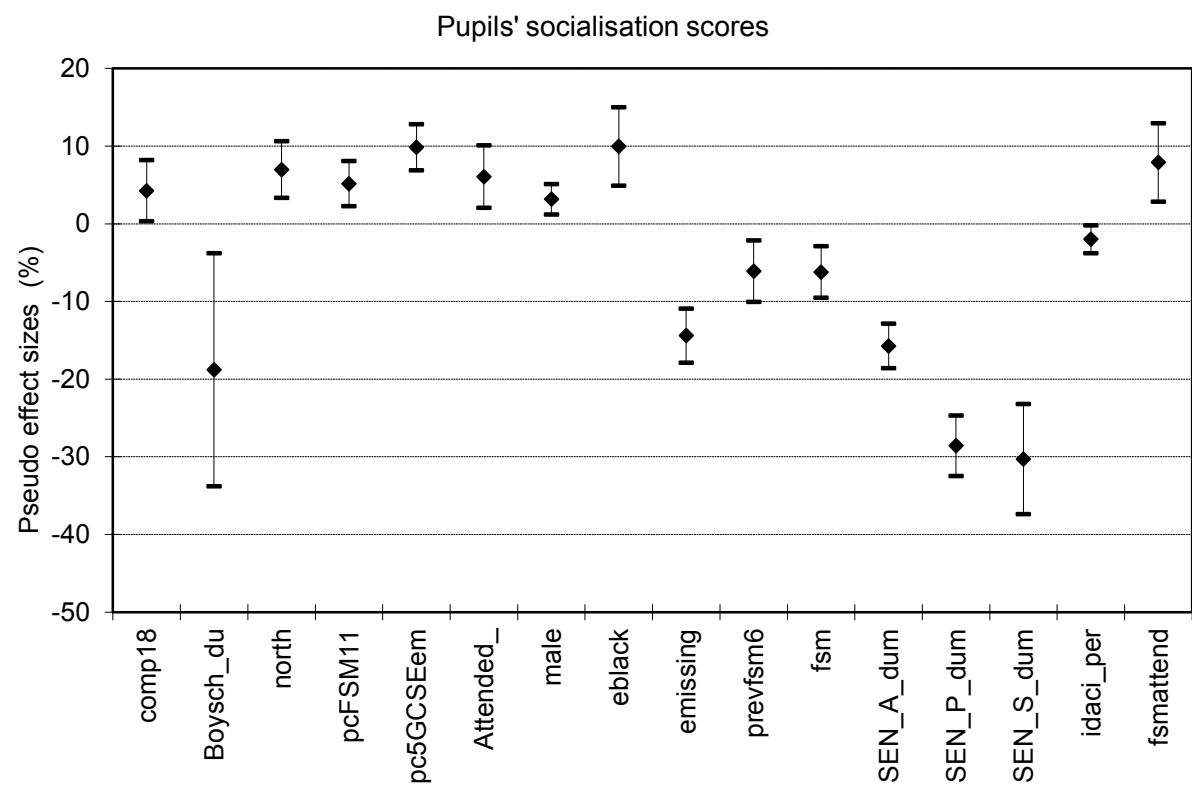
The *Socialisation* outcome measure has a range of 5-25, where a score of 25 is the highest possible score on this measure. This model included all pupils for whom a matched comparison was found (n=20,912). It contained two levels: school and pupil. Table A10 includes the variables with a significant relationship to pupils' socialization scores at the five per cent level, in addition to the variables related to attending a Summer School.

Table A10 Results of multilevel modelling for socialisation

Variable	Coefficient	Standard error	Significant at 5% level
Constant	19.650	0.218	*
Comprehensive to 18 school	0.182	0.086	*
Boys only	-0.801	0.327	*
Region-North	0.298	0.079	*
Percentage pupils eligible for free school meals (2010/11)	0.014	0.004	*
Percentage pupils achieving 5+ A*-C or equivalents, including A*-C in both English and mathematics GCSEs (2010/11)	0.019	0.003	*
Attended Summer School	0.259	0.087	*
Male pupil	0.135	0.042	*
Ethnic group-Black	0.425	0.110	*
Ethnic group- unknown/missing	-0.614	0.076	*
Eligible for FSM in past five years but not in year 6	-0.260	0.086	*
Eligible for FSM in year 6	-0.265	0.072	*
SEN - school action	-0.670	0.063	*
SEN - action plus	-1.218	0.085	*
SEN- Statemented	-1.292	0.154	*
Income Deprivation Affecting Children Index (IDACI)	-0.004	0.002	*
FSM eligibility interacted with Summer School attendance	0.337	0.110	*
Looked after in the processing year	0.268	0.337	ns
looked after status interacted with Summer School attendance	0.138	0.494	ns
Eligible for FSM in past five years but not in year 6 interacted with Summer School attendance	0.125	0.158	ns
Treatment school	0.095	0.098	ns

Results from this model indicate a positive association between socialisation and attending a Summer School, and eligibility for FSM in year 6 and attending a Summer School (interaction term). These pupils reported higher levels of socialisation compared to otherwise similar pupils. Figure A4 illustrates the pseudo effect sizes for these relationships.

Figure A4 Relationship between socialisation scores and pupil characteristics



Similar to the findings for confidence, socialisation scores were lower for pupils eligible for FSM in Year 6 but higher for pupils who were on FSM in year 6 and attended a Summer School. Pupils who attended a Summer School and were looked after and those eligible for FSM in previous five years but not in year 6 did not have higher socialisation scores.

Summer School enjoyment

As explained above, pupils who attended a Summer School were asked a series of questions about their enjoyment of the experience. This created one reliable composite: ‘Summer School enjoyment’ and a single rating scale (‘Summer School rating’).

The *Summer School enjoyment* outcome measure has a range of 6-30, where a score of 30 is the highest possible score on this measure. This model included all pupils who attended a Summer School (n=5,881). It contained two levels: school and pupil. All the school and pupil background characteristics were included in the model. Table A11 shows the variables that were statistically significant at the five per cent level.

Table A11 Results of multilevel modelling for Summer School enjoyment

Variable	Coefficient	Standard error	Significant at 5% level
Constant	26.650	0.118	*
Male pupil	-0.308	0.089	*
Income Deprivation Affecting Children Index (IDACI)	0.008	0.003	*

Table A11 shows a positive association between pupils who live in more deprived areas and Summer School enjoyment. Male pupils tended to have lower scores for Summer School enjoyment.

Summer School rating

The *Summer School rating* was a single item (Q26). This scale had a range of 0-10 where a rating of 10 is the highest rating. This model included all pupils who attended a Summer School (n=5,881). It had two levels: school and pupil. All the school and pupil background characteristics were included in the model and Table A12 shows those found to be statistically significant at the five per cent level.

Table A12 Results of multilevel modelling for Summer School rating

Variable	Coefficient	Standard error	Significant at 5% level
Constant	9.910	0.057	*
Percentage pupils with English as an additional language (2010/11)	-0.005	0.002	*
Male pupil	-0.163	0.042	*
Income Deprivation Affecting Children Index (IDACI)	0.004	0.001	*

This model suggests that there is a negative association between pupils' rating of their Summer School and being a male pupil, and attending a school with a higher proportion of pupils speaking English as an additional language. However, ratings were higher amongst pupils living in more deprived areas.

A.1.7 Relationships between Summer School enjoyment and other outcome variables

As well as providing a useful indication of pupils' experiences of a Summer School, it might be expected that attending an enjoyable Summer School would result in more positive scores for confidence, school readiness and socialisation when pupils started their secondary schools. However, any such association between these scores could be open to other interpretations. For example, pupils could have higher levels of enjoyment at Summer School due to being more confident or enjoying their time at Summer School could have made them more confident upon starting secondary school.

If the evaluation had started before the Summer Schools had taken place, it would have been possible to collect two sets of data for each pupil: one before the Summer School and one after. In such circumstances, it would have been possible to establish the relationship between Summer School enjoyment and consecutive changes in outcome measures (confidence, school readiness and socialisation) via multilevel modelling. In the absence of such pre-intervention measures, it was not possible to establish the direction of relationship between enjoyment of Summer School and outcome measures.

It was therefore decided to use correlation analysis to indicate the relationships between Summer School enjoyment and the three outcome measures. Correlation measures the statistical relationship (or association) between the two comparable variables. Correlation coefficient can take any value between -1 and 1. A positive correlation suggests a positive relationship between the two variables, such that an increase in one variable corresponds with increase in another variable. Similarly, a negative correlation suggests an inverse relationship between the two variables. Numbers nearer to zero (negative or positive) suggests no consistent relationship. The further away the number is from zero, the stronger the relationship. Table A13 presents correlation coefficients for Summer School enjoyment and the three outcome variables.

Table A13 Correlations between Summer School enjoyment, pupils' ratings of their Summer School and three outcome measures

	Confidence	School readiness	Socialisation
Summer School enjoyment	0.2	0.5	0.3
Summer School rating	0.1	0.3	0.2

This analysis shows that pupils' enjoyment of their Summer Schools and their Summer School ratings are positively correlated with their scores for confidence, school readiness and socialisation. The correlations are highest between Summer School enjoyment and school readiness (all the relationships are significant at five percent level).

A2 Pupil Survey



Starting Year 7

Introduction

We would like you to answer some questions so we can find out what would help young people in Year 7.

We will use the information from everyone who replies. We will tell your school and the Government the results, but **we won't use your name**. They will use the results to improve their support for young people in Year 7.

It may take about 15 minutes, but please take your time and think about the questions. Please give your own answers without talking to other people.

Please make sure you enter your correct name and date of birth. Read each question carefully, and pick the answer you think is best. Please give us your honest answers.

This is not a test. There are no right or wrong answers.

All of your responses will be confidential, which means that no one who knows you will find out your answers. But if someone has helped you to answer any questions, they may know what you said.

If you don't get the chance to finish the survey, we may still use the answers that you have given before you exit.

About you

A. Please type in your name

First name _____ Last name _____

B. Are you: (please tick one box)

☐ A boy ☐ A girl?

C. When (on what date) were you born?

Day ____ [1-31] (please type in the number)

[MM/YY using drop-down menu]

[Questions D & E. Only shown to schools known to who ran a Summer School]

- D. Were you **invited** to a Summer School organised by your secondary school? (please tick one box)
- ☐ Yes ☐ No ☐ Not sure

[If tick no, the pupil is routed to the practice question and not be shown Question E or Q19-26 at the end of the survey. If they ticked yes or not sure they were shown question E]

- E. Did you **actually go** to a Summer School organised by your secondary school? (please tick one box)
- ☐ Yes I went to the whole Summer School
- ☐ Yes I went to some of the Summer School
- ☐ No
- ☐ Not sure

[If ticked no or not sure, or missed out the question, the pupil was not shown Q19-26 at the end of the survey.]

Practice question

Please look at each question and click on the answer that is closest to what you think. Here is a practice question.

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Skip
I like using computers at school						

If you like using computers at school a lot, you should click the box that says 'Strongly Agree'

If you like using computers at school a bit, you should click the box that says 'Agree'

If you are not sure whether you like using computers at school, you should click the box that says 'Not sure'

If you do not like using computers at school, you should click the box that says 'Disagree'

If you hate using computers at school, you should click the box that says 'Strongly Disagree'

If you are finding it difficult to answer this question, you should click the box that says 'skip'.

If you change your mind, just go back to an answer and change it to the answer you would like.

If you do not understand what to do, please ask your teacher.

Starting secondary school

The next questions are about when you started your new school in Year 7.

(Please click on one box per row. Please click the answer closest to what you think)

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Skip
1. I was worried when I first started my new school						
2. I made friends quickly when I started this school						
3. The school welcomed me						
4. I got to know my new teachers quickly						
5. It was hard to find my way around the school						

School life

These questions are about how you feel about school.

(Please click on one box per row. Please click the answer closest to what you think)

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Skip
6. School work is important to me						
7. I sometimes play truant from school (skip lessons, bunk off or skive)						
8. Homework is important in helping me to do well						
9. I often answer questions in class						
10. I understand most of the work at school						
11. I am excited about learning new things this term						
12. I am bullied/picked on by people from my school						
13. I feel safe in school						

Feeling confident

These questions are about how you feel about yourself.

(Please click on one box per row. Please click the answer closest to what you think)

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Skip
14. Other people listen to what I say						
15. I often feel left out						
16. I have good ideas						
17. I worry about meeting new people						
18. I am a confident person						

[If the pupil was from a school in the comparison group sample they were routed to the end of the survey. If they were from a school that ran a Summer School and they answered yes to question E, they were shown the Summer School section (Q19-26).]

If they were from a school that ran a Summer School and they answered:

- *no to question D or*
- *no or not sure to question E route to the end of the survey]*

Summer School

These questions are for young people who went to a Summer School organised by their secondary school.

Please tell us what you thought of the Summer School

(Please click on one box per row. Please click the answer closest to what you think)

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Skip
19. I was pleased to be invited to Summer School						
20. I had fun at Summer School						
21. Summer School was a waste of time for me						
22. I made new friends at Summer School						
23. Going to Summer School helped with my school work						
24. Going to Summer School made me confident about starting secondary school						

25. I would recommend people in year 6 go to Summer School (please tick one)

☐ Yes ☐ No ☐ Not sure

26. On a scale of 0-10 (where 0 is terrible and 10 is fantastic), how would you rate your Summer School? (please click on the answer closest to what you think)

0	1	2	3	4	5	6	7	8	9	10	Skip
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Thank you very much for telling us what you think.

We will collect the answers from all young people before telling your school and the Government the results. We won't use your name.



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The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

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