

# Characteristics of bullying victims in schools

Rosie Green, Aleks Collingwood  
and Andy Ross  
National Centre for Social Research

This research report was written before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DFE).

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

# Contents

<b>Acknowledgements .....</b>	<b>5</b>
<b>Executive summary .....</b>	<b>6</b>
Introduction.....	6
Aims of the Study.....	6
Dataset and Methods.....	7
Key Findings.....	8
Prevalence of bullying.....	8
Characteristics of bullying victims .....	8
Gender .....	8
Ethnicity and Importance of Religion .....	9
Special Educational Needs .....	9
Disabilities .....	9
Being in Care.....	9
Social Position .....	9
Family Structure.....	10
Parental Reports of Bullying.....	10
Changing School .....	10
School Characteristics .....	10
Educational attainment at Key Stage 4 .....	11
Main activity at age 16 .....	11
Conclusions.....	11
<b>How to Use the Report .....</b>	<b>13</b>
<b>Glossary of Terms .....</b>	<b>15</b>
<b>1 Introduction .....</b>	<b>16</b>
1.1 Background.....	16
1.2 Aims of the Project .....	17
1.3 Structure of the Report .....	17
<b>2 What we already know about bullying victims .....</b>	<b>19</b>
2.1 Definition of Bullying.....	19
2.2 Potential characteristics leading to being bullied.....	20
2.3 Gaps in the existing literature .....	22
<b>3 The LSYPE Data .....</b>	<b>23</b>
3.1 Background of the dataset.....	23
3.2 Purpose of the LSYPE.....	24
3.3 Information Available.....	24
3.4 Data Linkage.....	25
3.5 Sampling / Response Rates / Missing Data .....	25
3.6 Relevance of LSYPE to the Present Study .....	26
3.7 Bullying information available in LSYPE .....	27
3.8 Variables included in the analyses.....	28
<b>4 Bullying: An Overview.....</b>	<b>31</b>
4.1 How many young people are bullied at school? .....	31
4.2 What are the risk factors for being bullied? .....	33
4.3 Being bullied over time .....	35
<b>5 Bullying and Gender.....</b>	<b>37</b>
<b>6 Bullying, Ethnicity and Importance of Religion .....</b>	<b>39</b>
<b>7 Bullying and Special Educational Needs .....</b>	<b>44</b>
<b>8 Bullying and Disabilities .....</b>	<b>47</b>
<b>9 Bullying and Being in Care .....</b>	<b>50</b>
<b>10 Bullying and Social Position .....</b>	<b>52</b>

<b>11 Bullying and Family Structure</b> .....	<b>57</b>
<b>12 Parental Reports of Bullying</b> .....	<b>62</b>
<b>13 Bullying and Changing School</b> .....	<b>65</b>
<b>14 Bullying and School Characteristics</b> .....	<b>69</b>
<b>15 Young People’s Outcomes at age 16</b> .....	<b>76</b>
15.1 Key Stage 4 scores .....	76
15.2 Main activity at age 16.....	78
<b>16 Conclusions</b> .....	<b>81</b>
16.1 The prevalence of bullying.....	81
16.2 Characteristics of bullying victims .....	81
16.3 How does bullying relate to attainment? .....	86
16.4 How does bullying affect main activity at age 16? .....	87
16.5 Limitations to the study.....	87
16.6 Recommendations .....	89
<b>References</b> .....	<b>91</b>
<b>Appendix A Tables of results</b> .....	<b>93</b>
<b>Appendix B Derived variables</b> .....	<b>107</b>
<b>Appendix C Technical Methods</b> .....	<b>108</b>
<b>Appendix D Sample Design and Weighting</b> .....	<b>110</b>
<b>Appendix E Analysis Strategy</b> .....	<b>114</b>

# Tables

Table 3.1	Individual pupil characteristics from LSYPE data/NPD data	29
Table 3.2	School-level characteristics from LSYPE/NPD data	30
Table 4.1	Overview of factors found to be associated with bullying	34
Table 4.2	Continuing, new, escaped and sporadic victims of bullying	36
Table 12.1	Congruence between young people's and parental reports of bullying	62
Table 14.1	Cut off points for new variables for interaction analysis	69
Table 15.1	Relationship between different types of bullying and Key Stage 4 attainment in points	77
Table 15.2	Relationship between different types of bullying and main activity at age 16	79
Table 16.1	Complete list of relationships between overall bullying and other characteristics	93
Table 16.2	Complete list of relationships between being called names and other characteristics	95
Table 16.3	Complete list of relationships between social exclusion and other characteristics	97
Table 16.4	Complete list of relationships between being forced to hand over money or possessions and other characteristics	99
Table 16.5	Complete list of relationships between being threatened with violence and other characteristics	101
Table 16.6	Complete list of relationships between being subjected to actual violence and other characteristics	103
Table 16.7	Complete list of relationships between longitudinal experiences of bullying over 3 years of study and other characteristics	105
Table 16.8	Derived Variables Used in Analyses	107
Table 16.9	Fixed Predictors included all models	108

# Figures

Figure 4.1	Proportion of young people bullied at school in any way in the last 12 months	32
Figure 4.2	Proportion of young people bullied by type of bullying	33
Figure 5.1	Relationship between gender and different types of bullying (girls compared to boys)	38
Figure 6.1	Proportion of young people in LSYPE in different ethnic groups (age 14)	40
Figure 6.2	Proportion of young people according to importance of religion (age 14)	40
Figure 6.3	Relationship between ethnic group and overall bullying (compared to white young people)	41
Figure 6.4	Relationship between holding religion to be very important and name calling (compared to young people with no religion)	42
Figure 7.1	Proportion of young people with SEN (age 14)	45
Figure 7.2	Relationship between special educational needs and different types of bullying (compared to young people with no SEN)	46
Figure 8.1	Proportion of young people with disability (age 14)	47
Figure 8.2	Relationship between disability and different types of bullying (compared to young people with no disability)	48
Figure 9.1	Proportion of young people who had ever been in care (age 14)	50
Figure 9.2	Relationship between ever been in care and different types of bullying (compared to young people never in care)	51
Figure 10.1	Proportion of young people according to parental socio-economic status (age 14)	52
Figure 10.2	Proportion of young people according to mother's highest qualification (age 14)	53
Figure 10.3	Proportion of young people according to household tenure (age 14)	54
Figure 10.4	Relationship between mother's highest qualification and overall bullying (compared to mothers with no qualifications)	55
Figure 11.1	Proportion of young people according to family type (age 14)	58
Figure 11.2	Proportion of young people with caring responsibilities (age 14)	58
Figure 11.3	Relationship between family type and overall bullying (compared to young people living with two biological parents)	59
Figure 11.4	Relationship between family type and threats of violence / actual violence (compared to living with two biological parents)	60
Figure 11.5	Relationship between being a carer and different types of bullying	61
Figure 12.1	Relationship between the parental report of bullying and whether the young person escapes bullying at age 16	63
Figure 13.1	Proportion of young people who had changed school in the previous year (ages 15 and 16)	66
Figure 13.2	Relationship between changing school and different types of bullying (compared to young people who did not change school)	67
Figure 14.1	Relationship between bullying and proportion of pupils receiving FSM in a school	70
Figure 14.2	Relationship between bullying and proportion of pupils with SEN in a school	72
Figure 14.3	Proportion of young people in different school types (by pupil gender) at age 14	73
Figure 14.4	Relationship between overall bullying and pupil gender of school	73
Figure 14.5	Relationship between name calling and pupil gender of school	74
Figure 14.6	Relationship between threats of violence / actual violence and pupil gender of school	75

# Acknowledgements

The authors would like to thank Philip Noden from the London School of Economics for his insightful comments on the final report. At the National Centre for Social Research, we would like to thank Carli Lessof, Wojtek Tomaszewski and Jenny Chanfreau for their assistance in proofreading and discussing the draft report. Finally, at the Department for Children, Schools and Families, we would like to thank Helen Wood, Nabil Ali, Jo Hutchinson and Tammy Campbell for their guidance on the analyses and their input into the final report.

# Executive summary

## Introduction

The consequences of bullying can be severe in terms of young people's mental wellbeing, attitudes towards school, educational attainment and even potential suicide risk (Smith et al., 2004). It is therefore vital to gain more information about those young people who are particularly at risk of bullying so that policy interventions can be based on good evidence and targeted at the right groups. The results from this study provide robust evidence on the characteristics of bullying victims based on a representative cohort of young people aged 14 to 16 attending secondary schools in England between 2004 and 2006.

Possible risk factors for bullying that have previously been identified by DCSF in the Staying Safe Action Plan are race and ethnicity, religion, culture, sexuality, disability and being a young carer (DCSF, 2008b). Previous findings tell us that young people from ethnic minorities are less likely to be bullied than white young people (DCSF, 2008c). However, a study using matched pairs of Asian and white children found no differences in the likelihood of being bullied according to ethnicity at all, which suggests that the picture may be more complicated. Other previous research indicates that children and young people with SEN, especially learning difficulties, are particularly likely to be subjected to bullying (Norwich and Kelly, 2002) and that boys are more likely to be physically bullied and subjected to attacks on property (Mynard and Joseph, 2000).

Although some of these findings are similar to those from the present study, no previous research has attempted to take account of a large number of other characteristics that may also be risk factors for bullying. It is hugely advantageous to include a range of factors that may be related to bullying in the analysis in order to gain a better estimation of the characteristics that are important. This study therefore represents the first in-depth investigation of these characteristics in relation to bullying of secondary school pupils aged 14 to 16 in England.

## Aims of the Study

The project aims to address the following key questions:

- What are the risk factors which contribute to a young person's likelihood of reporting being bullied?

- How are gender, ethnicity, religiosity, having a special educational need (SEN) or a disability, being in care and social position all related to the likelihood of reporting being bullied?
- How does the type of bullying experienced differ by the main risk factors identified?
- How does the frequency of bullying differ by the risk factors identified?
- How does the persistence of bullying from age 14 to 16 differ by the risk factors identified?
- What is the association between being bullied and school attainment?
- What is the association between being bullied and main activity reported at age 16?

## Dataset and Methods

To explore the characteristics of bullying victims, we used data from the Longitudinal Study of Young People in England (LSYPE). This is a study which began in 2004 by interviewing over 15,500 young people (aged 14 at the beginning of the study) sampled from schools in England, as well as their main and secondary parents if they were available. The same young people have been re-interviewed every year, and we were therefore able to follow their progress up to age 16 when a number of them left full time education. A total of 12,500 of the 15,500 young people were still in the study by this age.

The LSYPE dataset contains information on the young person's family characteristics, both their own and their parents' attitudes and aspirations, and the young person's experiences of school. The data have also been linked to the National Pupil Database (NPD), which not only allows us to analyse these pupils' attainment at Key Stage 4, but also provides information on school-level factors such as the proportion of pupils receiving free school meals (FSM) and the proportion of pupils with SEN in the young person's school.

We used this dataset to explore the relationship between various factors and the likelihood of a young person reporting that they had experienced bullying in the last 12 months<sup>1</sup>, whilst controlling for a range of other factors. We looked at the five different types of bullying identified in the LSYPE survey: being called names (including text and email bullying), being socially excluded, being forced to hand over money or possessions, being threatened with violence and being a victim of actual violence. Characteristics of the

---

<sup>1</sup> Data collected in Year 10 and 11 asked specifically about experiences 'since they were last interviewed' which approximated 12 months.

young people we looked at included their gender, ethnic group, importance of their religion, whether they had special educational needs or a disability, their social position and family structure, a range of school characteristics and whether the young person's main parent also reported that they were being bullied. We were also able to explore links between bullying and educational outcomes at the age of 16.

## **Key Findings**

### **Prevalence of bullying**

The reporting of bullying was much more prevalent among the younger age groups. Almost half of young people reported being bullied at age 14 (47%), but the proportion decreased with age to 41% at age 15 and 29% by the age of 16. As with overall bullying, the prevalence of reporting being a victim of each different type of bullying also decreased with age, although some types decreased more than others. The most common type of bullying reported was name calling with 30% of young people reporting this type at age 14, but this had decreased to 15% of young people by age 16. Second was being threatened with violence which 20% of young people reported experiencing at ages 14 and 15, falling to 13% at age 16. Violence and social exclusion had similar levels of prevalence, with around 18% of young people reporting these types of bullying at age 14, falling to around 10% at age 16. But by far the least common was being forced to hand over money or possessions, with only 3% of young people reporting this type at age 14, falling to 1% by age 16.

### **Characteristics of bullying victims**

Our results showed that there were a number of characteristics of young people that were associated with reporting being bullied. These are summarised briefly below under headings corresponding to their respective chapters in the report

#### **Gender**

We found that girls were more likely to be bullied than boys at the ages of 14 and 15, but that this difference had disappeared by the age of 16. Girls were especially more likely to report psychological types of bullying (such as being called names and being socially excluded). Boys were more likely to report more physical types of bullying (such as being forced to hand over money or possessions, being threatened with violence or being victims of actual violence).

## **Ethnicity and Importance of Religion**

We found that young people from minority ethnic groups were less likely to be bullied than white young people. We found little relationship between bullying overall and the importance of a young person's religion after ethnic group had been adjusted for. We did however find that young people whose religion was important to them were more likely to report being called names than other young people. This suggests that bullying associated with young people's religion may be a more significant issue than bullying associated with their ethnicity.

## **Special Educational Needs**

Young people with SEN were more likely than other young people to report all types of bullying at all ages, and were particularly likely to report having been forced to hand over their money or possessions. These results indicate that young people with SEN are a group particularly vulnerable to bullying (possibly because they are perceived as being different from other young people). Unlike the experiences of bullying among other young people, the risk of being bullied does not appear to decline as these young people grow older.

## **Disabilities**

As with SEN, young people with disabilities were more likely than other young people to have reported all types of bullying. Again similar to young people with SEN, they were also particularly likely to have reported being forced to hand over their money or possessions. However, unlike young people with SEN, the relationship between disability and bullying does appear to decrease in strength as these young people grow older.

## **Being in Care**

There was a strong relationship between having been in care and being bullied, and one which for most types of bullying increased with age. As with other factors marking young people out as different from others, young people who had been in care were particularly likely to have had their money or possessions taken from them, and they were also more likely to have been continuously bullied across the three years of the study.

## **Social Position**

We found little relationship between bullying and socio-economic status or household tenure, suggesting that bullying is not related to social position as we might have expected, i.e. that it is not those young people who are the most socially disadvantaged who are also the most likely to report being bullied. Instead, there is some evidence to suggest that those with better-educated mothers are more likely to be bullied. Young people whose mothers had higher qualifications were more likely to be bullied (and in all ways examined) at ages 15 and 16.

## **Family Structure**

Young people living in step families (and to a lesser extent those in single parent families and those with neither biological parent in the household) were more likely to be bullied. These young people were particularly more likely to report threats of violence or actual violence at all ages. Young people who had caring responsibilities in their household were also more likely to be victims of bullying, but the results for specific types of bullying were somewhat equivocal, although this is probably due to small sample sizes.

## **Parental Reports of Bullying**

Young people who reported being bullied at the age of 14 or 15 whose parents also reported them being bullied were more likely to 'escape' being bullied by the age of 16 than those whose parents did not. This relationship was particularly strong for young people whose parents had also reported that they were being bullied at the age of 14. The findings suggest that parental awareness may be a key factor in helping these young people to escape being bullied.

## **Changing School**

Young people who had changed school in the previous year were more likely to experience most types of bullying. They were also more likely to be 'continuing victims' across all three years of the study, and were more likely to become victims of bullying at their new school if they had not previously been bullied. However, those young people who were already being bullied were more likely to escape bullying if they changed school. Changing school may therefore have different implications for different young people. For some young people a change may reduce the risk of being bullied, and might even be the reason they changed schools. For others, being the new pupil in the school might lead to an increased risk of being bullied. These relationships were not found among young people who had changed school in the year previous to Year 11, although this may be partly due to the fact that changing school was less common in this year.

## **School Characteristics**

We found a number of characteristics of the school that were associated with bullying, including the proportion of pupils receiving free school meals (FSM), the proportion of pupils with special educational needs and whether the school was a mixed or single sex school. Pupils attending schools with higher proportions of pupils receiving FSM were less likely to report being bullied, and especially less likely to report name calling. However, pupils attending schools with more pupils with SEN were more likely to report being bullied and especially likely to report being called names (the most common type of bullying identified). Overall, boys in boys' schools were more likely to report being bullied than those in mixed schools. However, girls attending all-girls' schools were less likely to report being bullied overall than girls in mixed schools.

These results show that characteristics of a school can affect a pupil's risk of being bullied in different ways. However the level of variation in young people's experiences of bullying that was attributable to differences in the schools they attended was minimal compared to differences in the characteristics of the young people themselves.

### **Educational attainment at Key Stage 4**

Young people who had reported being bullied at secondary school had a significantly lower Key Stage 4 (GCSE and equivalent) score than those who hadn't reported being bullied. This was particularly true for young people who had been forced to hand over money or possessions, and for young people who had been socially excluded. This relationship may relate to issues such as disengagement from school and increased levels of truancy, which are likely consequences of bullying and which also lead to lower attainment later on. If we are able to reduce bullying in schools then more young people may remain engaged with their education and their subsequent attainment may be higher.

### **Main activity at age 16**

Young people who reported being bullied were less likely to be in full time education at age 16 than those who had not. These young people appeared to be involved in three main alternative activities: they were more likely to be in full time work (particularly those who had reported being threatened with violence or the victim of actual violence), and were also more likely to be in part time college and part time work (particularly those who reported being forced to hand over money or possessions). However, the strongest relationship we found with main activity at age 16 was that young people who reported being bullied were much more likely to be NEET than those who were not bullied (this was true for all types of bullying but particularly those who reported being socially excluded or forced to hand over money or possessions). Again, this is likely to relate to subsequent disengagement and possibly truancy from school, although the results also indicate that some of these young people continue their education or training outside the school environment. However, the increased likelihood of young people becoming NEET following the experience of being bullied is likely to have severe consequences for their future.

### **Conclusions**

This study has shown that the range of characteristics related to bullying is wide and complex. However, we found a number of themes that may be useful to policy makers. For example, many of the characteristics of bullying victims (such as having SEN or a disability, being a young carer or having been in social services care) are factors that

mark the young person out as being different from others. In addition, we have shown that different types of young people (particularly boys and girls) are more likely to be victims of different types of bullying. Finally, we also found that school characteristics can affect young people's risk of being bullied (including the proportion of pupils with SEN and whether the school is a single-sex school), although their impact is relatively minor compared to the characteristics of the young people themselves.

One consequence of these results is an increased awareness of the kinds of young people who are at greatest risk of being bullied in our schools today. In the development of policies to reduce bullying, particular effort should be made to ensure that more is done to support these groups of young people. A greater although somewhat more difficult ambition would be to increase understanding and tolerance of diversity in the classroom and reduce the victimisation of those who are different. This might be partly achieved through an increase in lessons that focus on issues relating to diversity. The importance of interventions is clearly illustrated by the strong relationships we found between bullying and both attainment at Key Stage 4 and the likelihood of becoming NEET at age 16. These results show that bullying can have a powerful impact on young people's future prospects, and that it needs to be tackled as early as possible.

# How to Use the Report

This report is designed to be of use to a range of people who may be interested in the characteristics of and outcomes for bullying victims. As far as possible, it has been written in plain language and does not require any technical expertise with statistics or a detailed understanding of the methods used for the analyses. However, for those who are interested, these technical details are reported in the appendices. The How to Use guide indicates where readers can find the sections of the report most likely to be of interest to them, as listed below:

## **Readers looking for a non-technical summary of the main findings**

Go to Chapter 4 on page 31

## **Readers interested in bullying among girls or boys**

Go to Chapter 5 on page 37

## **Readers interested in bullying among different ethnic groups or young people who are religious**

Go to Chapter 6 on page 40

## **Readers interested in bullying among young people with special educational needs (SEN)**

Go to Chapter 7 on page 45

## **Readers interested in bullying among young people with disabilities**

Go to Chapter 8 on page 49

## **Readers interested in bullying among young people who have been in care**

Go to Chapter 9 on page 52

## **Readers interested in bullying among young people of different social positions**

Go to Chapter 10 on page 54

## **Readers interested in bullying among young people with different family structures and responsibilities**

Go to Chapter 11 on page 59

**Readers interested in parental awareness of bullying**

Go to Chapter 12 on page 64

**Readers interested in young people who have changed school**

Go to Chapter 13 on page 67

**Readers interested in school characteristics related to bullying**

Go to Chapter 14 on page 71

**Readers interested in educational outcomes related to bullying**

Go to Chapter 15 on page 78

**Statisticians or analysts looking for a description of the technical methods used in the analyses**

Go to Appendix C on page 110

**Researchers interested in the LSYPE dataset**

Go to Chapter 3 on page 23

**Readers interested in the policy implications of the report**

Go to Conclusion on page 83

If you would like further information on any aspect of this report, please contact Rosie Green at the National Centre for Social Research ([rosie.green@natcen.ac.uk](mailto:rosie.green@natcen.ac.uk) or 0207 549 7027). You can also find web pages related to this report on the National Centre for Social Research website, at <http://www.natcen.ac.uk/study/the-characteristics-of-bullying-victims-in-schools>.

# Glossary of Terms

**BME** – Black and Minority Ethnic

**EAL** – English as an additional language

**FSM** – Free school meals

**LSYPE** – Longitudinal Study of Young People in England

**NPD** – National Pupil Database

**NS-SEC** – Socio-economic class

**OR** – Odds ratio (main output measure for analyses, indicating odds of having a particular outcome – e.g. being bullied – if a young person falls into a particular category of another variable – e.g. being female)

**PLASC** – Pupil Level Annual School Census

**SEN** – Special educational needs

# 1 Introduction

DCSF's Children's Plan and the Staying Safe Action Plan outline the Department's commitment to prevent and tackle bullying and to promote equality (DCSF 2007b; DCSF 2008b). The consequences of bullying can be severe in terms of mental wellbeing, attitudes towards school, educational attainment and even potential suicide risk (Smith et al., 2004). It is therefore vital to gain more information about young people particularly at risk of bullying so that policy interventions can be based on good evidence, and targeted at the right groups.

This study uses data from the Longitudinal Study of Young People in England (LSYPE) to carry out a quantitative analysis of the risk factors related to being a victim of bullying in Years 9, 10 and 11 in 2004-06 in England, when young people were aged 14 - 16. The results provide robust evidence on the characteristics of bullying victims to add to the knowledge base from previous studies and to inform future policy interventions. We must note that although we can infer that certain characteristics of young people are risk factors for being bullied, we are unable to confirm direct causal links.

## 1.1 Background

The reduction of bullying is a key PSA<sup>2</sup> target under Delivery Agreement 13 (the Government's commitment agreement to improve the safety of children and young people). This aims to improve the safety of children and young people in order to adhere to one of the five guiding principles set out in The Children's Plan, which states that children and young people need to enjoy their childhood (Treasury, 2008; DCSF 2007b). As part of this initiative, the Staying Safe Action Plan includes measures such as issuing guidance on cyberbullying to schools, expanding peer mentoring schemes, supporting parents in dealing with bullying, considering recommendations on schools' bullying complaints systems and producing guidance on dealing with bullying outside schools (DCSF, 2008b). DCSF has also introduced Safe to Learn: embedding anti-bullying work in schools, which is the anti-bullying guidance for schools launched in September 2007 (DCSF 2007). Providing a safe and happy learning environment is integral to raising attainment, improving school attendance, promoting equality and diversity, and ensuring the wellbeing of all members of the school community. If a pupil feels safe at school, they are in a much better position to realise the five outcomes of Every Child Matters — they

---

<sup>2</sup> Since their introduction in the 1998 Comprehensive Spending Review (CSR), Public Service Agreements (PSAs) have played a vital role in galvanising public service delivery and driving major improvements in outcomes. [http://www.cabinetoffice.gov.uk/about\\_the\\_cabinet\\_office/publicserviceagreements.aspx](http://www.cabinetoffice.gov.uk/about_the_cabinet_office/publicserviceagreements.aspx)

can be healthy, stay safe, enjoy and achieve, make a positive contribution, and achieve economic wellbeing (Every Child Matters: Change for Children, 2004).

## 1.2 Aims of the Project

The project aims to address the following key questions:

- What are the risk factors which contribute to the likelihood that a young person will report being bullied?
- How are gender, ethnicity, religiosity, having a special educational need (SEN) or a disability, being in care and social position all related to the likelihood of reporting being bullied?
- How does the type of bullying experienced differ by the main risk factors identified?
- How does the frequency of bullying differ by the risk factors identified?
- How does persistence of bullying from age 14 to 16 differ by the risk factors identified?
- What is the association between being bullied and a young person's school attainment?
- What is the association between being bullied and a young person's main activity as reported at age16?

## 1.3 Structure of the Report

This report is designed to be of use to technical and non-technical readers alike. Non-technical readers will be most interested in the results section, which presents the findings simply and with easy-to-read graphs. Other readers may be interested in a summary of the previous knowledge base regarding bullying, as well as the more technical methods used in the analyses and the characteristics of the dataset used. The following section briefly summarises the structure of the report.

- In Chapter 2 we examine some of the key findings from previous studies.
- In Chapter 3 we describe the LSYPE dataset and the multilevel analysis methods used, a statistical approach that enables us to distinguish between risk factors associated with bullying that are related to the young person themselves and risk factors that are attributable to the kind of school they are attending.

- In Chapter 4 we present the prevalence of bullying as reported by young people, and provide an overview of the main results of the study including the importance of different factors for predicting whether a young person was bullied or not.
- In Chapters 5 to 14 we explore different principal risk factors for being bullied. These are: gender (Chapter 5), ethnicity and importance of religion (Chapter 6), special educational needs (Chapter 7), disabilities (Chapter 8), being in care (Chapter 9), socio-economic status (Chapter 10), family structure and responsibilities (Chapter 11), parental awareness of bullying (Chapter 12), changing school (Chapter 13), and characteristics of the school attended (Chapter 14).
- In Chapter 15 we focus on young people's outcomes at age 16. Specifically, we examine whether reporting being bullied between the ages of 14 and 16 has any relationship with Key Stage 4 scores, remaining in full-time education at the age of 16, or becoming NEET (not in education, employment or training).
- Chapter 16 summarises the key findings from the study and their policy implications.

## 2 What we already know about bullying victims

### Chapter summary

Victims of bullying can be hard to identify, as even where clear definitions are present these can often be interpreted in varying ways by different young people. The range of characteristics that are associated with bullying is wide and also frequently controversial. However, possible risk factors identified by DCSF are race and ethnicity, religion, culture, sexuality, disability and being a young carer. There is also some evidence that different groups of young people may be more likely to experience different types of bullying. However, many of these risk factors are not clearly understood, and the present study will aim to clarify these where possible.

This chapter explores the existing literature on bullying, identifying what is already known and where there is need for further research in this area. It then describes how the information available from LSYPE can fill some of these gaps.

### 2.1 Definition of Bullying

Definitions of bullying usually encapsulate a range of different behaviours that cause distress or harm to the victim. Four specific features were identified by a 2006 report from the Department for Education and Skills (DFES, 2006).

Bullying was defined as:

- being repetitive and persistent
- being intentionally harmful
- involving an imbalance of power
- causing feelings of distress, fear, loneliness or lack of confidence (DFES, 2006).

To a large extent these definitions are taken from a large Scandinavian study of bullying (Olweus, 1997).

The main types of bullying generally identified are:

- physical violence and physical threats
- verbal or written abuse
- social manipulation
- attacks on property (Mynard and Joseph, 2000).

Identifying bullying victims is difficult even when definitions have been set in place due to the way that children/young people and parents interpret these definitions themselves. People from different socio-economic backgrounds and different cultures for example are likely to have different ideas as to what constitutes bullying and what is harmful and unacceptable behaviour.

The definitions of bullying themselves can also be problematic when trying to provide measures of prevalence and severity, because the way in which the questions are worded is likely to have a strong effect on the levels of bullying reported. For example, the definition used by the TellUs survey<sup>3</sup> asks respondents to determine whether they were *deliberately* hurt or picked on, which may be a difficult judgement for the young people to make. In LSYPE this distinction is not made. LSYPE asks each young person whether or not they have been bullied in each of the ways identified by Mynard and Joseph (2000) in the last 12 months. It also asks how frequently they have been bullied in these ways.

## 2.2 Potential characteristics leading to being bullied

Attempting to identify groups of young people who are particularly susceptible to bullying is also problematic. The range of characteristics that may predict bullying is so wide that almost every young person has at least one characteristic that could potentially make them susceptible to being bullied. In addition, it is often difficult to assess causality when exploring risk factors for bullying. For example, much research has focused on personality traits of bullies and victims, but the very traits that may be risk factors for being bullied – such as having poor social skills (Fox and Boulton, 2005) – may also in some cases develop as a response to being bullied.

Since the majority of research on risk factors for bullying has been cross-sectional, such issues of cause and effect have remained largely unexplored, along with risk factors for persistent as opposed to short-term bullying (Smith et al., 2004). However, there are indications that certain groups of children and young people may be particularly vulnerable to bullying. Possible risk factors for bullying identified by DCSF in the Staying Safe Action Plan are race and ethnicity, religion, culture, sexuality, disability and being a young carer (DCSF, 2008b).

---

<sup>3</sup> The Department for Children, Schools and Families (DCSF) TellUs survey is a national survey that asks children and young people in school years 6, 8, and 10 in England about their life both inside and outside of school. See: <http://www.dcsf.gov.uk/research/programmeofresearch/projectinformation.cfm?projectId=15518&keyword=tellus&keywordlist1=0&keywordlist2=0&keywordlist3=0&andor=or&type=0&resultspage=1>

In recent years there has been an increasing awareness of racist bullying in British schools. The picture is more complex than perhaps envisaged. A survey of 243 children aged 12-15 years from ethnic minorities found that 57% of boys and 43% of girls had been bullied in the previous six weeks (Eslea and Mukhtar, 2000). Whilst the difference between boys and girls was significant in this study, there was no difference in the frequency of bullying between the different minority ethnic groups. However, it was found that the Black and Minority Ethnic (BME) children were more likely to be bullied by children from other ethnic minorities than by white children. What this tells us is that the problem of bullying among young people from ethnic minorities is likely to be extremely complex, and may vary between schools depending on the proportion of ethnic minority pupils. This is evident in earlier analysis of the LSYPE cohort undertaken by DCSF, which showed that young people from ethnic minorities were less likely to be bullied than white young people overall (DCSF, 2008c). A third study, using matched pairs of Asian and white children, found no differences in the likelihood of being bullied according to ethnicity at all, although the Asian children were more likely to be subjected to racist name-calling than other types of bullying (Moran et al., 1993).

Children and young people with special educational needs, especially learning difficulties, are also more likely to be subjected to bullying. A recent study found that 83% of pupils with moderate learning difficulties had been bullied, of whom 49% reported that this was related to their learning difficulties (Norwich and Kelly, 2002). Another study found that 36% of children with specific language impairment considered themselves at risk of being bullied compared with 12% of participants without these impairments (Knox and Conti-Ramsden, 2003). The literature on other possible risk factors for bullying, such as social position, sexuality, physical disability and being a young carer, is less well-defined, although data from LSYPE indicate that young people with physical disabilities, those with parents in routine occupations (for example bus drivers, refuse collectors) and those eligible for free school meals are all at increased risk (DCSF, 2008c). In addition, having few friends has been strongly linked to the risk of bullying, and making more friends has been suggested to be a strategy for overcoming bullying in longitudinal analyses, but as yet there is little evidence to show whether this may interact with other factors so that certain groups remain vulnerable (Smith et al., 2004).

Different groups of children and young people may also be more likely to be victims of particular *types* of bullying. For example, previous evidence suggests that boys are more likely to be physically bullied and subjected to attacks on property, whereas girls are more likely to experience indirect or manipulative attacks (Mynard and Joseph, 2000), although it has been suggested that there has been an increase in violence among girls in recent years (DFES, 2006).

## 2.3 Gaps in the existing literature

For many of these risk factors already identified in other studies, it is not clearly understood which young people are at the greatest risk of being bullied or what other characteristics may interact with the risk factor in question (e.g. are some young people from ethnic minorities at increased risk of being bullied partly because they may be more likely to attend poor, inner-city schools?). Research among older children/young people using LSYPE may go some way towards clarifying the nature of these risks.

Our analysis of LSYPE enables us to control and account for the interaction of some of the various risk factors in order to identify the proportion of young people in certain groups who are experiencing bullying (such as ethnic minority pupils or those with SEN) and who may benefit from more targeted intervention.

As LSYPE is designed to follow a single cohort of young people over time, it also contains information on whether bullying persists over time and the frequency of bullying. LSYPE is also linked into the National Pupil Database (NPD), which provides Key Stage test scores as well as information on the school. We are therefore also able to look at differences that exist between pupils and between the schools they attend using multilevel models.

## 3 The LSYPE Data

### Chapter summary

This chapter describes the LSYPE dataset. It explains when the survey started and who the participants are, the sample size and the purpose of the survey. The measures that are relevant for this study are detailed, as is the school-level information that has been linked into the survey. The dataset used in this project is taken from the first three waves of the Longitudinal Study of Young People in England which began in 2004 when the respondents were aged 13/14. The dataset provides information on whether the young people have experienced one of five types of bullying in the last year, as well as the background characteristics of the individual young people, their families and schools.

### 3.1 Background of the dataset

The Longitudinal Study of Young People in England (LSYPE) is a large, nationally representative survey designed to follow a single cohort of young people from the age of 13/14<sup>4</sup> to 24/25. The study began in 2004, when over 15,500 young people from all areas of England born between 1<sup>st</sup> September 1989 and 31<sup>st</sup> August 1990 were interviewed. These young people are tracked and re-interviewed every year. The study is now in its seventh wave of interviews, and the respondents are aged 19/20.

LSYPE is managed by the Department for Children, Schools and Families (DCSF), and fieldwork is carried out by a consortium led by the British Market Research Bureau (BMRB)<sup>5</sup>. It is a highly detailed and in-depth survey, and the data are publicly available from the UK Data Archive<sup>6</sup> (waves 1-4 are available at the time of publishing this report). Because LSYPE is a longitudinal study, it is possible to link data between waves and explore young people's transitions and changing attitudes and experiences as they grow older.

The present study has used data from the first three waves of the survey, when the young people were aged 13/14 to 15/16 and in Years 9-11 at school. The first three waves are

---

<sup>4</sup> Interviews took place over a period of successive months but mainly within the same school year. As such some young people will be (in terms of birthdays) a year older than their peers. For the sake of brevity, throughout the rest of the report we will refer to young people in Year 9 as aged 14, in Year 10 as aged 15, and in year 11 as aged 16.

<sup>5</sup> Further information on LSYPE data can be found at <https://ilsype.gide.net/workspaces/public/wiki/Welcome>

<sup>6</sup> <http://www.data-archive.ac.uk/>

used, as at the time of the study design, the data from Wave 4 were not yet available for analysis. Additionally, many young people have left school by the age of 16/17, so it would no longer be as useful to look at bullying in schools using this sample.

## 3.2 Purpose of the LSYPE

The main objectives of the study are:

- To provide evidence on key factors affecting educational progress and attainment from the age of 14.
- To provide evidence about the transitions young people make from education or training to economic roles in early adulthood.
- To help monitor and evaluate the effects of existing policy and provide a strong evidence base for the development of future policy.
- To contextualise the implementation of new policies in terms of young people's current lives.

## 3.3 Information Available

As well as interviews with the sampled young people, LSYPE also includes interviews with parents or guardians (both main and secondary if available) in its first three waves. There is also a self-completion section used to record more sensitive information from the young person. The main types of information available from the core LSYPE dataset that are relevant to this study are listed below:

- *Family background* – including household situation, languages spoken in the home, parental qualifications and education and parental occupations.
- *Parental reports and attitudes* – including attitudes to education and whether the parent reports their child being bullied.
- *Young person characteristics* – including demographics, health, household responsibilities.
- *Young person self-completion* – including attitudes, aspirations and whether the young person has been bullied or not.
- *Household grid* – includes information about every household member (sex, marital status, employment status and ethnic group) and their relationship to other household members including the young person.

### 3.4 Data Linkage

The LSYPE data have been linked to administrative data held on the National Pupil Database (NPD), a pupil-level database which matches pupil and school characteristics to attainment. The data are also linked to school-level and Local Authority-level indicators such as school size, proportion of pupils gaining five or more GCSEs at grades A\*-C and ethnic composition.

This data linkage enables researchers to draw links between the data collected at all waves of LSYPE and subsequent educational attainment in the same pupils. It also means that characteristics of particular schools (e.g. ethnic composition or percentage of pupils receiving free school meals) can be investigated in conjunction with individual pupil characteristics. Linkage to the NPD database has enabled a range of other measures to be recorded that have been used in this study, including:

- *Individual-level data* – including attainment at Key Stage 4, free school meal eligibility and special educational needs.
- *School-level data* – percentage of pupils eligible for free school meals, percentage of pupils with special educational needs, ethnic composition, percentage for whom English is not a first language and school-level attainment at Key Stage 4.

### 3.5 Sampling / Response Rates / Missing Data

The original sample drawn for the first wave of the study was of over 33,000 young people in Year 9 attending maintained schools, independent schools and pupil referral units (PRUs) in England in February 2004 (Ward and D'Souza, 2008). The final issued sample was approximately 21,000 young people, all of whom were born between 1<sup>st</sup> September 1989 and 31<sup>st</sup> August 1990. The young people sampled for the study were aged 13-14 when the study began, and are now aged 19-20 as the study enters its seventh wave.

The sample was taken from a school census database supplied by DCSF, and 892 schools were selected in total. Of these, 647 schools (73%) co-operated with the study. School-level non-response was a specific problem with LSYPE, especially in inner London, where only 56% of schools responded, and in the independent sector, where only 57% co-operated with the study. The final issued sample was therefore much smaller than the initial sample drawn from the census database. Further information on the sample design and weighting can be found in Appendix D.

Of the 21,000 young people sampled at Wave 1 (age 14), the survey reached 15,770 households (74%) in England. This comprises 13,914 full interviews (66%) and 1,856 partial interviews (9%), most of which were cases where the second adult in the household was not interviewed. At Wave 2 (age 15), the survey reached 86% of the total households, and at Wave 3 (age 16) it reached 92% of the total households. For further details on missing data in the survey, see Appendix C.

### **3.6 Relevance of LSYPE to the Present Study**

The LSYPE dataset is ideally suited to this project, and can be used to build on the findings of the TellUs surveys. The Department for Children, Schools and Families (DCSF) TellUs survey is a national survey that asks children and young people in school years 6, 8 and 10 in England about their life both inside and outside of school. Although Tell Us does include general bullying questions, it does not contain information concerning different types of bullying such as exclusion from friendship groups, upsetting name-calling, taking of possessions, violence and threats of violence as LSYPE does. LSYPE can also provide information on whether bullying persists over time (for the three waves of the study while all respondents were still in full-time education) and parental viewpoints on whether the young person has been bullied (which may not be congruent with the young person's own viewpoint). A wide variety of variables related to family and ethnic background, school factors and educational needs are available in the LSYPE dataset, which enables us to identify a range of potential risk factors for bullying.

In addition, we draw on information from the National Pupil Database (NPD). This additional information provides us with the cohort members' Key Stage test scores and free school meal eligibility as well as school-level information (such as the school's ethnic mix and information relating to SEN). This information, coupled with the LSYPE data, helps to clarify which groups are particularly at risk of different types of bullying and whether this affects their attainment or likelihood of remaining in education post-16.

Whilst this is a large, robustly sampled survey, it must be noted that it is of a single cohort of young people. We are therefore only able to look at how the pattern for bullying changes as the young people get older and not as a cross-sectional analysis by age. However, cross-sectional analyses are available from the TellUs survey, and LSYPE therefore provides a useful counterpoint to these findings from a longitudinal perspective. There are also implications for the sample size in the analyses as a result of sample attrition (respondents dropping out of the study), which is a common difficulty when following the same people over time. For example, in the longitudinal analyses such as

the persistence of bullying over time, data were used only for the young people for whom we had data at ages 14, 15 and 16.

Due to its sampling structure (in which pupils were sampled within schools), LSYPE is also suitable for multilevel modelling. This type of modelling can not only take account of the structure of the data to give more accurate results, it can also clarify the levels at which policy interventions should be made (Goldstein, 2007). As well as identifying characteristics of individuals who may be more susceptible to bullying, we can explore school-level characteristics (using NPD data) that might modify this relationship, serving to increase or decrease young people's risk of bullying depending on the kind of school they attend. In addition, the multilevel models can be used to assess what proportion of the variation in bullying is attributable to differences between individuals and what proportion is attributable to differences between schools. This will assist with the targeting of future policy interventions at the school or individual level in addition to the identification of groups of young people on which to focus these interventions.

### **3.7 Bullying information available in LSYPE**

The LSYPE asks young people whether or not they have been bullied in one of five different ways in the last 12 months. The questions are as follows:

- In the last 12 months, have you ever been upset by being called hurtful names by other students, including getting text messages or emails from them?
- In the last 12 months, have you ever been excluded from a group of friends or from joining in activities?
- In the last 12 months, have other students at your school ever made you give them money or personal possessions?
- In the last 12 months, have other students ever THREATENED to hit you, kick you or use any other form of violence against you?
- In the last 12 months, have other students ever ACTUALLY hit you, kicked you or used any other form of violence against you?

An overall bullying variable was derived using this information:

- Whether the young person has been bullied or not in any way in the last 12 months

We also used information about bullying collected from the main parent, as they were also asked to report whether or not the young person was being bullied.

Specifically, the main parent was asked, 'As far as you know, have any of these things happened to (name of sample member) at (his/her) school in the last 12 months?

1. Called names by other pupils at his/her school
2. Sent offensive or hurtful text messages or emails
3. Shut out from groups of other pupils or from joining in things
4. Made to give other pupils his or her money or belongings
5. *Threatened* by other pupils with being hit or kicked or with other violence
6. *Actually* being hit or kicked or attacked in any other way by other pupils
7. Any other sort of bullying
8. No, none of these things have happened in the last 12 months
9. Don't know
10. Don't want to answer

It must be noted that parent and young person reports of bullying do not always match, i.e. with cases where parents reported that their child was being bullied when the young person did not, and *vice versa*.

### 3.8 Variables included in the analyses

The list of variables to be included in the analyses is drawn from Wave 1, Wave 2 and Wave 3 of LSYPE, corresponding to young people aged 14, 15 and 16. It also contains variables drawn from the NPD at the pupil and school level. The tables below list all variables included in the analytical models (see Appendix E for technical details of the analytical methods used in the study)<sup>7</sup>. This fixed set of predictors was included in the analysis regardless of whether their relationship with the outcome was statistically significant or not to allow for all key policy-relevant variables to be compared by different outcomes. Only statistically significant results are discussed in the body of this report<sup>8</sup>. See Appendix A for detailed tables for each model.

---

<sup>7</sup> These measures are available from DCSF or the UK Data Archive: <http://www.data-archive.ac.uk/>

<sup>8</sup> Our analysis is based on a sample of young people drawn from the wider population of young people in England. We can never be 100% certain that the relationships we find will also exist in the wider population of young people. However, because it is a representative random probability sample we can use statistical tests which tell us with absolute precision *how likely* these relationships will also exist in the wider population. A result is considered statistically significant (and therefore valid) if there is only 5% or lower chance that this relationship will NOT exist in the wider population.

## Pupil Characteristics

Table 3.1 lists the pupil characteristics included in all the models as individual-level characteristics to determine the extent to which these individual factors can explain the variation in young people reporting being bullied.

**Table 3.1 Individual pupil characteristics from LSYPE data/NPD data**

Variable Label	Source	Waves
Gender	LSYPE	1 - 3
Whether young person has a special educational need (asked of main parent)	LSYPE	1 - 3
Housing tenure	LSYPE	1 - 3
Family type (both biological parents, 1 parent, step family)	NatCen	1 - 3
Whether young person has caring responsibilities	LSYPE	1 - 3
Ethnicity (grouped)	LSYPE	1 - 3
School gender (mixed school, boys school or girls school)	LSYPE	1 - 3
Importance of religion	LSYPE	1 - 3
Whether young person has a disability/long term illness or health problem	LSYPE	1 - 3
Whether young person has ever been in care	LSYPE	1 - 3
Mother's highest educational qualification	NatCen	1 - 3
Whether young person had changed school since the last wave	NPD	2, 3
English as a second language	LSYPE	1 - 3
NSSEC of father (and of mother if father not present)	NatCen	1 - 3

Note on source: Natcen means the variable was derived by NatCen using LSYPE core variables

Originally both ethnicity and religion were included in the fixed list of predictors for bullying. However, our initial investigations showed that the relationship between ethnicity and religion was so strong that to include both of them in the same analysis would cause severe estimation problems (it would also be redundant to include both measures). For this reason it was decided that 'main religion' would not be included. In its place the analysis included a variable which asks the young person how important religion is in their lives. This variable was also related to ethnicity, for example Bangladeshi and Pakistani young people were more likely to report that religion was very important to them than other young people, but in this case the relationship was not so strong as to cause estimation problems.

## School Characteristics

Table 3.2 lists the variables that are included in the models as school-level covariates, which describe particular characteristics of the school a young person attended.

**Table 3.2 School-level characteristics from LSYPE/NPD data**

<b>Variable Label</b>	<b>Source</b>	<b>Waves</b>
Pupil teacher ratio (for relevant year)	NPD	1 - 3
Percentage of pupils known to be eligible for free school meals (for relevant year)	NPD	1 - 3
Percentage of pupils with SEN (for relevant year) with or without statements	NPD	1 - 3
Percentage of white British pupils (for relevant year)	NPD	1 - 3
Percentage of pupils whose first language is other than English (for relevant year)	NPD	1 - 3

## 4 Bullying: An Overview

### Chapter summary

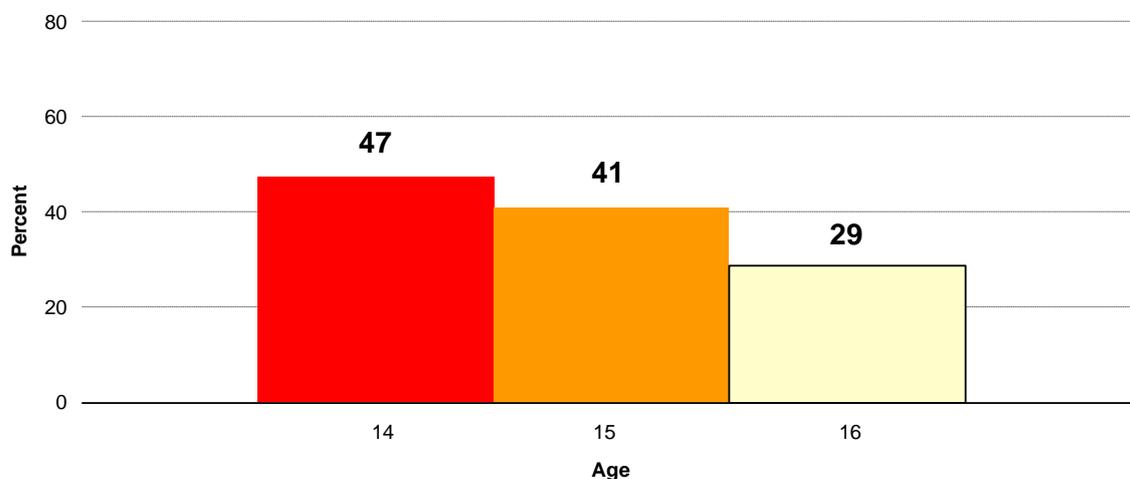
Nearly half of the young people reported being bullied in some way at the age of 14, although this decreased with age. The most common type of bullying reported was name calling (which includes text and email bullying), and the least common was having money or possessions taken. We found a number of risk factors associated with young people reporting having been bullied in at least one way, including gender, special educational needs and having a disability.

This chapter gives an overview of the results of the study, showing the characteristics of young people that were associated with experiencing bullying. This includes a summary of the prevalence of bullying as reported by young people, a summary of the factors found to be associated with the reporting of bullying, and whether these factors increased or decreased the likelihood that a young person experienced bullying.

### 4.1 How many young people are bullied at school?

Figure 4.1 shows the proportion of young people who reported being bullied at school in any way at age 14, 15 and 16. An immediate observation is that the prevalence of reporting bullying decreases with age. Almost half of young people reported being bullied at age 14 (47%), but this decreased with age to 41% at age 15 and 29% by the age of 16. This decrease in prevalence has been found elsewhere (Nansel et. al., 2001) and can be the result of a number of different processes. Young people may develop strategies to avoid bullying as they get older, for example, by conforming to social norms or developing strong friendship groups. They may simply become more confident and less vulnerable to bullying as they develop their personality and identity, and establish themselves as individuals. There is also evidence to suggest that perpetrators of bullying tend to be older than victims of bullying, so as young people get older those most likely to bully them may have left school (Solberg et. al., 2007). On the other hand, the decrease in prevalence might also reflect greater awareness of the unacceptability of bullying as these young people get older, or alternatively, an increased acceptance of certain types of bullying behaviour so that young people no longer consider or report these as bullying. To a certain degree all of the above are likely to contribute to this decline, but establishing which of these factors is the more important is beyond the remit of this study.

**Figure 4.1 Proportion of young people bullied at school in any way in the last 12 months**

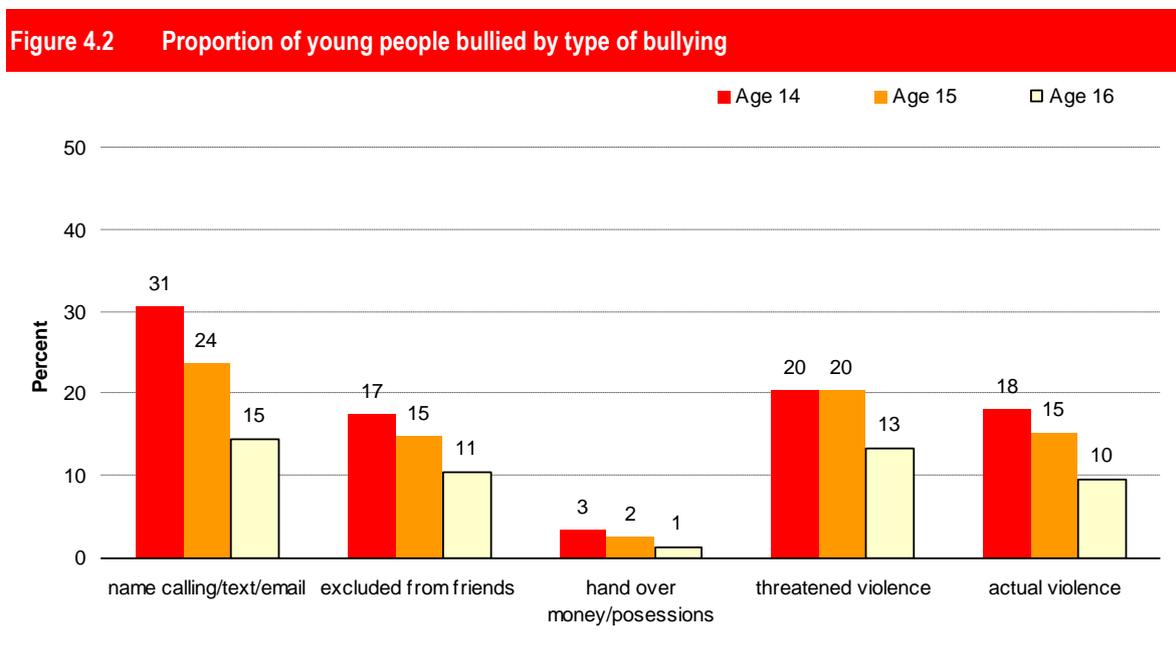


At this point it is useful to note that these analyses are based on the young people's self reports of their experience of various behaviours which may constitute bullying, as bullying is inherently a subjective concept and therefore extremely difficult to independently measure. However, this creates potential problems for analysis, as different young people are likely to have different conceptions and perceptions of their experiences and of whether their experiences tally with the definitions of various behaviours that are presented to them. For example, young people who have grown up in a home environment where they are regularly exposed to bullying behaviour may not interpret the actions of other young people as behaviours that merit reporting, but nonetheless they are likely to be adversely affected by these actions and may also be more likely to become bullies themselves (Schwartz et. al, 1997).

This is a difficulty inherent in any research looking into bullying, but the present study aims to clarify the experiences of the young people in LSYPE as far as possible by distinguishing between the different ways in which young people may have been bullied. Some types (such as social exclusion and name-calling) may be more open to individual interpretation than others (such as violence and having money or possessions taken). However, separating bullying into a range of more specific types at least brings us closer to the actual experiences of the young people and may make it easier for them to determine whether bullying behaviours have taken place. The prevalence of reporting of these different types of bullying is described below in Figure 4.2.

As with overall bullying, prevalence of reporting being a victim for each different type of bullying decreased with age, although the difference was more marked for certain types of

bullying. The most common type of bullying reported was name calling (including cyberbullying)<sup>9</sup> followed by threats of violence, actual violence and exclusion from friendship groups. Having money or possessions taken was least reported.



Name calling was reported by 31% of the young people when they were aged 14 (comprising nearly two thirds of all bullying experienced by young people at this age). However, this proportion had halved by the age of 16. The second most common type of bullying reported was being threatened with violence. A fifth of young people reported being bullied in this way at ages 14 and 15, falling to 13% at age 16. This was closely followed by the reporting of actual violence or being socially excluded (17-18% of young people at age 14 falling to 10-11% of young people at age 16). Three percent of 14 year olds reported having had their money or possessions taken decreasing to 1% of 16 year olds. These patterns indicate that, while the reporting of bullying decreased with increasing age for all the sub-types, overall prevalence and the rate of this decline can be very different depending on the type of bullying.

## 4.2 What are the risk factors for being bullied?

This section summarises the main risk factors that are related to bullying. Although a number of the risk factors examined in this study had already been identified, existing research has not adequately described which young people are at greatest risk of being bullied, and it is not clear whether some factors are more associated with bullying than others. Table 4.1 illustrates all the factors examined in this study and summarises their

<sup>9</sup> Cyberbullying is when a person, or a group of people, uses the internet, mobile phones or other digital technologies to threaten, tease or abuse someone.

relationship (or lack of relationship) with the reporting of bullying. We indicate whether the relationship between bullying and each factor was statistically significant, as well as the direction of this relationship. For a relationship to be positive, the presence of the factor (or a 1-unit increase in the factor if the measure is continuous) is associated with an increased likelihood of being bullied. For the relationship to be negative, the presence of the factor (or a 1-unit increase in the factor if the measure is continuous) is associated with a decreased likelihood of being bullied.

In most cases, the category examined for each measure represents those young people thought to be at greatest risk (for example living in council accommodation). Other categories of these factors have been explored in more detail in the following chapters. As such, we would expect most if not all relationships described in the table below to be positive, indicating an increased likelihood of being bullied among these groups. However, as can be seen from the table, some of the relationships were found to operate in the opposite direction (i.e. they are negative), including being of a non-white ethnic group or having a mother with low educational qualifications, suggesting they are associated with a reduced risk of being bullied.

**Table 4.1 Overview of factors found to be associated with bullying**

<b>Factor</b>	<b>Significant Relationship?</b>	<b>Direction of Relationship*</b>
Being female	Yes (ages 14 and 15)	Positive
Being of a non-white ethnic group	Yes (all ages)	Negative
Having a religion that is important to the young person	No	N/A
Having a special educational need	Yes (all ages)	Positive
Having a disability	Yes (all ages)	Positive
Living in council accommodation	No	N/A
Living in a single parent family or step family	Yes (ages 14 and 15)	Positive
Having caring responsibilities	Yes (age 14)	Positive
Having unemployed parents	No	N/A
Having a mother with low educational qualifications	Yes (ages 15 and 16)	Negative
Having been in care	Yes (all ages)	Positive
Having changed school	Yes (age 15)	Positive
Being in a mixed-sex school	Yes (all ages)	Negative
Attending a school with more ethnic minority pupils	No	N/A
Attending a school with more pupils receiving FSM	Yes (ages 15 and 16)	Negative
Attending a school with more pupils with SEN	Yes (ages 15 and 16)	Positive
Attending a school with more EAL pupils	No	N/A

\*Positive = increased risk; Negative = decreased risk  
(EAL = English as an Additional Language)

Later in the report we examine the relationship these factors have with bullying in far greater detail, including those that appear from the table above to have no relationship with bullying. In some instances, other categories of these same measures were found to be associated with reporting of bullying (for example, having a religion that is very important - see chapter 6). Additionally, some variables were found to be associated with

particular types of bullying. All of these more nuanced findings will be drawn out in later chapters, beginning with an exploration of the relationship between bullying and gender.

### 4.3 Being bullied over time

Using data collected over consecutive years enabled us to examine the persistence of bullying over time. Specifically, we were able to see whether the young people who reported being bullied at age 14 continued to report being bullied as they grew older, as well as whether young people who were not victims at age 14 or 15 reported becoming a victim at a later age. In order to look at the persistence of bullying over time, young people who had reported being bullied were divided up into 4 different types of victims:

- Continuing victims      bullied at all ages
- Escaped victims        bullied at an earlier age but not at a later age
- New victims            not bullied at an earlier age but bullied at a later age
- Sporadic victims        bullied at age 14 and 16 (i.e. not consecutively)

This breakdown was based on previous research undertaken by Smith et. al. (2004) looking at the profiles of similar types of bullying victims in relation to friendships, coping strategies and behavioural characteristics. Table 4.2 shows the frequency and proportion of 'continuing', 'escaped', 'new' and 'sporadic' victims at age 16. The frequencies are for young people aged 16 who reported being bullied at least once at ages 14, 15 or 16, with 40% of young people not being bullied at any age. The table shows that a total of 16% of young people were persistent bullying victims who reported being bullied at ages 14, 15 and 16. One in five young people (20%) reported being bullied at an earlier age but were not bullied later on, and a slightly lower proportion (18%) were 'sporadic' victims, who reported being bullied at ages 14 and 16. Only 7% of young people were 'new' victims at ages 15 or 16, having not been bullied earlier on. This suggests that if a young person did not report being bullied at age 14 then the probability of them reporting being bullied at an older age was much lower.

**Table 4.2 Continuing, new, escaped and sporadic victims of bullying**

*LSYPE*

	Frequency	% of total (6,945)
<b>Continuing Victims</b>	1,123	16.2%
<b>Escaped Victims</b>	1,319	19.0%
<b>New Victims</b>	480	6.9%
<b>Sporadic Victims</b>	1,245	17.9%

These different types of bullying victims are explored further in later chapters in relation to specific characteristics of young people. For example, we investigate whether boys or girls were more likely to have been continually bullied across the three years of the study, whether they were more likely to have escaped bullying in later years or whether they were more likely to become new victims with increasing age.

## 5 Bullying and Gender

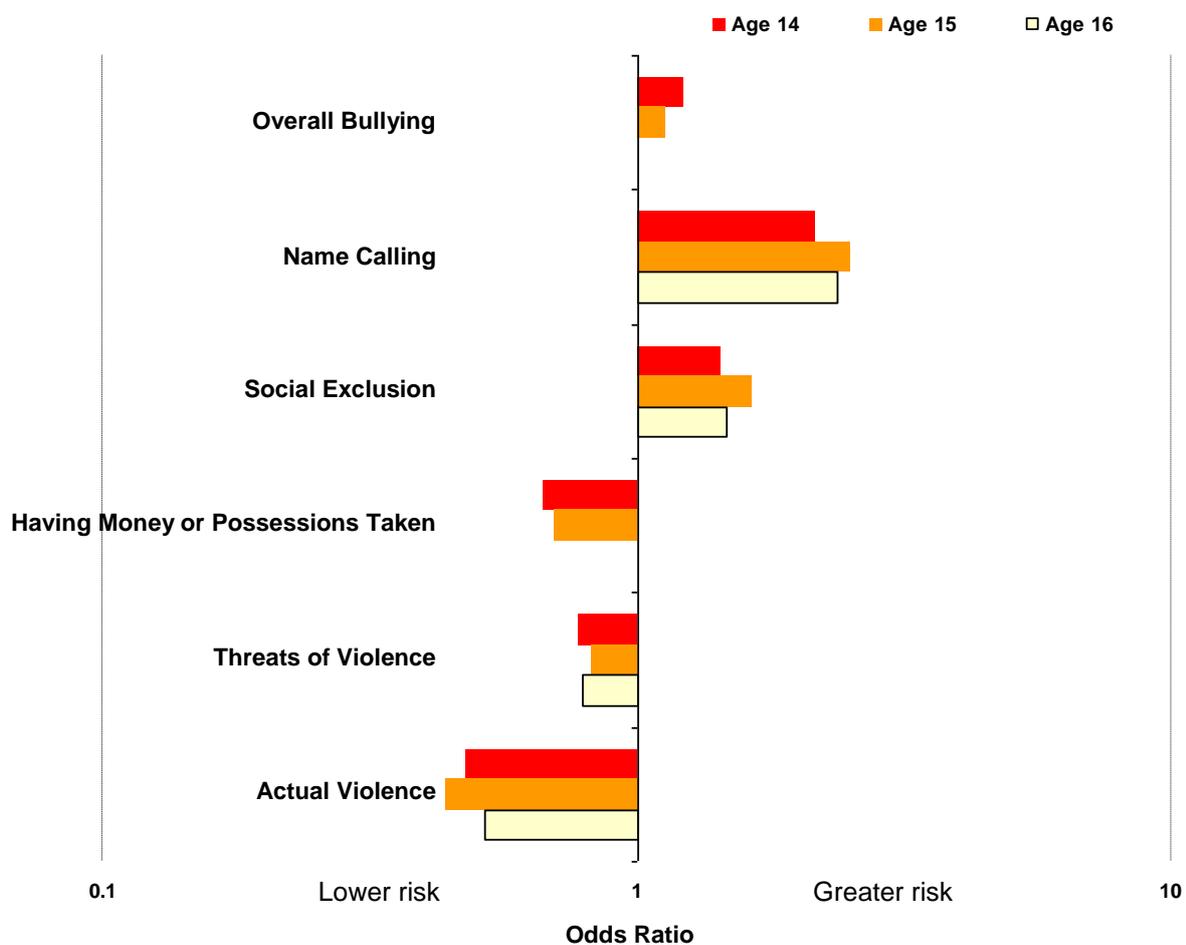
### Chapter summary

Girls were slightly more likely to be bullied than boys overall, largely because they were more likely to report being called names. They were also more likely to report being socially excluded, whereas boys were more likely to report having money or possessions taken, being threatened with violence or experiencing actual violence. Girls were more likely than boys to report being bullied continuously over the three years we examined, but were also slightly more likely than boys to 'escape' bullying at older ages.

Girls were slightly more likely to report being bullied than boys at ages 14 and 15, although this gender difference had disappeared by the time they were aged 16. When examining the different types of bullying separately, it is clear that the largest part of this higher level of bullying experienced by girls was due to a greater degree of name calling. Girls had more than twice the odds of reporting being called names at all three ages compared to boys. Social exclusion was an experience also more frequently reported by girls at all ages, although the gender difference was smaller than it was for name calling. All the other three types of bullying (having money or possessions taken, threats of violence and actual violence) however, were more commonly reported by boys. This was particularly true for actual violence, which boys had around twice the odds of reporting compared to girls at all three ages.

These results are summarised below in Figure 5.1 which shows the increased odds (if the bars are to the right of the centre line) or decreased odds (if the bars are to the left of the centre line) of being bullied in the ways listed for girls compared to boys. For example, the odds of being called names were much greater for girls than they were for boys. Missing bars in the graph indicate that the relationship between bullying and gender was not statistically significant at that age. All the results are adjusted for the full list of other factors described above in Chapter 4.

**Figure 5.1 Relationship between gender and different types of bullying (girls compared to boys)**



ORs >1 indicate that girls were more likely to be bullied, ORs <1 indicate that girls were less likely to be bullied

The results of these analyses support previous evidence which shows that boys and girls tend to experience bullying in different ways (see Chapter 2). Headline figures for overall bullying indicate that girls are more likely to be bullied than boys and should be a focus of anti-bullying policies, but when bullying is broken down by type the picture is more complex. Girls are more likely to be bullied in psychological ways (such as name calling and social exclusion), and because these are more common types of bullying this means that girls are more at risk overall. However, boys are more likely to be bullied in more physical ways (being forced to hand over money or possessions, being threatened with violence or experiencing actual violence), which although less common are shown to have greater implications for young people’s educational outcomes in Chapter 15.

When we looked at experiences of bullying over time, we found that girls were slightly more likely than boys to be persistently bullied across all three ages studied. However, they were also more likely to be ‘escaped victims’, indicating that they were more likely to report being bullied at earlier ages but not at later ages (see Appendix A, Table 16.7 for a full reproduction of these results).

## 6 Bullying, Ethnicity and Importance of Religion

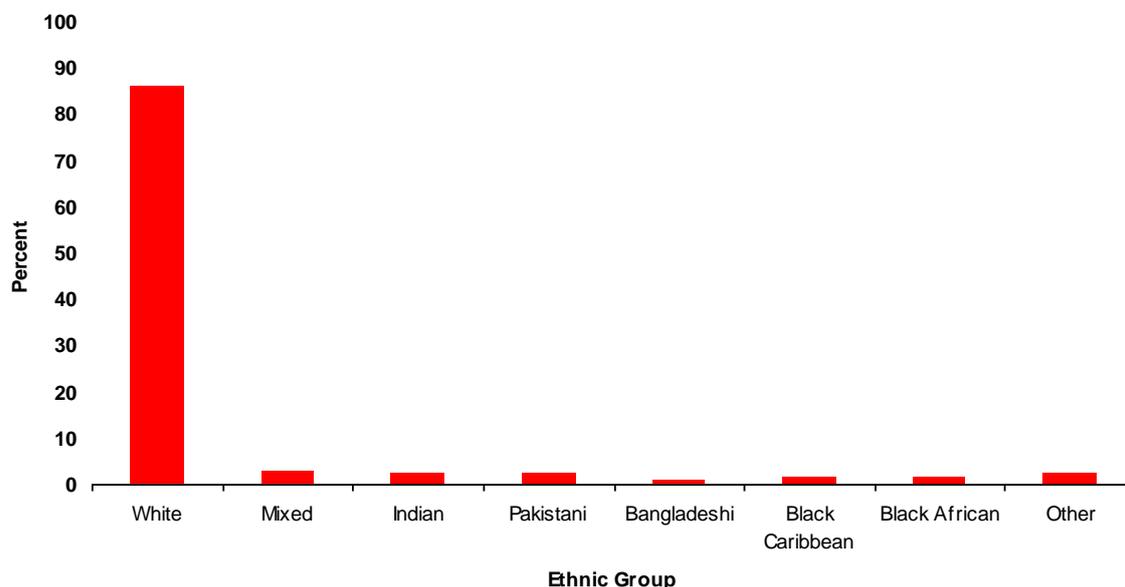
### Chapter summary

Young people from minority ethnic groups were less likely to report being bullied than white young people at all ages. We found little relationship between bullying and importance of religion, with the exception of name calling. Young people whose religion was very important to them were more likely to report name calling at all ages, which may indicate that this type of bullying was targeted directly towards their religion.

Contrary to what might have been expected, recent studies have found that white young people were actually more likely to be bullied than those from minority ethnic groups (DCSF 2008c). However, these studies tended not to adjust for factors such as social position, and therefore the differences between ethnic groups may have been overestimated. Despite this, it can be seen from the results summarised in Chapter 4 that the present study also found higher levels of bullying being reported by white young people. These results are further investigated in the present chapter.

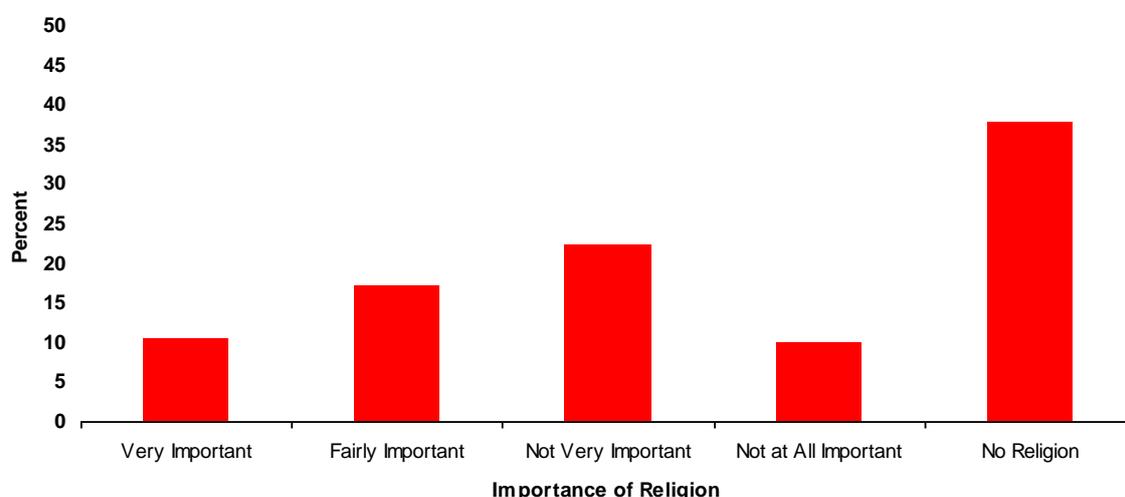
The proportions of young people in LSYPE who reported being in the 8 different ethnic groups coded by the survey (at age 14) are summarised below in Figure 6.1. This graph shows that by far the largest proportion of young people (87%) were in the white group (these figures are similar to national data for England), with only 1-3% falling into each of the other ethnic groups. These proportions mean that sample sizes for the minority ethnic groups are often small in the analyses, but LSYPE contains a boost sample for minority ethnic groups (which is then weighted for in the analyses) which should ameliorate this problem somewhat. However, it is therefore worth bearing in mind in the analyses that follow that some relationships with ethnic group may not be statistically significant due to small sample sizes. On the other hand, where these relationships are consistently present, they are likely to be strong and robust because they will have reached statistical significance in spite of this small sample size.

**Figure 6.1 Proportion of young people in LSYPE in different ethnic groups (age 14)**



A breakdown of the importance of religion among the young people who responded to LSYPE is presented below in Figure 6.2. It can be seen here that this measure is much more evenly distributed than ethnic group and therefore the sample sizes in all the sub-categories will be higher. However, the proportion of young people who said that their religion was very important to them was relatively small (around 10%)<sup>10</sup>.

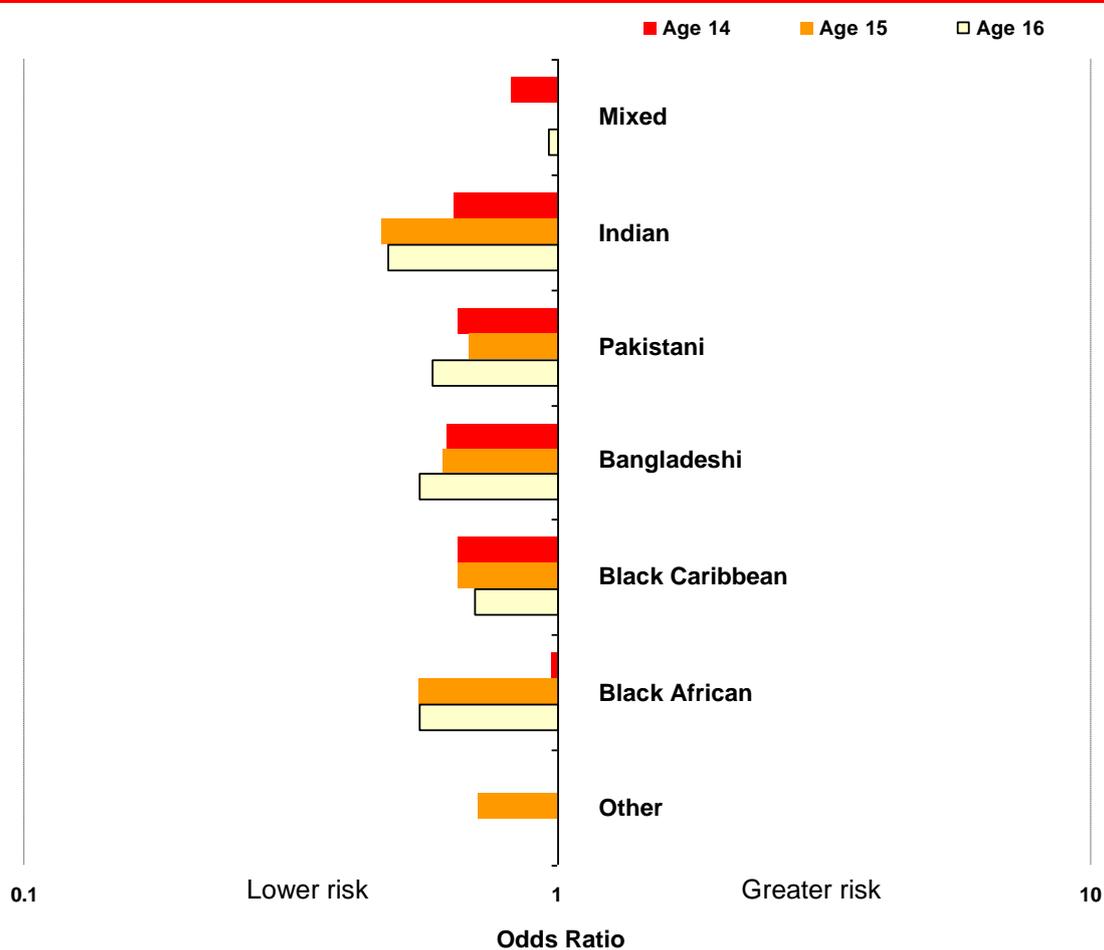
**Figure 6.2 Proportion of young people according to importance of religion (age 14)**



<sup>10</sup> We did consider merging young people who considered their religion as *very important* with those who considered it as *fairly important*, however it was the former young people who were at particular risk of being bullied.

The results of our analyses for overall bullying (see Figure 6.3 below) show that in most cases, young people from minority ethnic groups were much less likely to report being bullied than white young people, even after adjustment for all the other factors (see Table 4.1 above for a list of these factors that were included in all models). For Indian, Pakistani and Bangladeshi young people, this amounted to having around half the odds of reporting being bullied compared to white young people. These results were less strong for Black Caribbean young people, and were not consistent across age groups for young people from the Black African, mixed or 'other' groups. However, white young people consistently reported the highest levels of bullying across all age groups.

**Figure 6.3 Relationship between ethnic group and overall bullying (compared to white young people)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

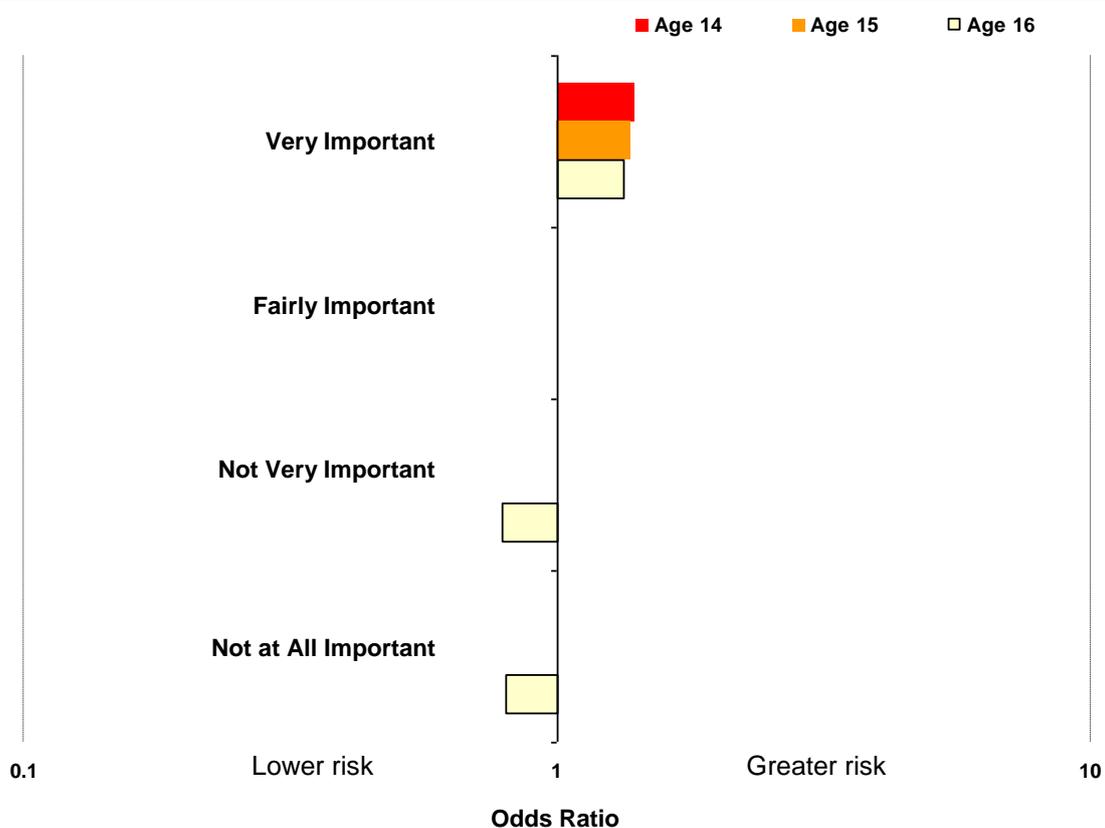
The results were very similar when we looked at different ethnic groups according to the five types of bullying (results are reported in Appendix A, Table 16.1 to Table 16.7). In general, white young people were more likely to report the experience of all types of bullying, although some relationships were not statistically significant due to small sample sizes. The only exceptions were that Black African young people were more likely to have

money or possessions taken from them at age 14, and that young people of mixed ethnicity were more likely to be subjected to violence at the age of 15.

It is difficult to speculate on the reasons for this difference between ethnic groups. They may range from different social norms or conceptions of what constitutes bullying, to pupils' potential awareness of the more serious consequences involved with racist bullying. However, whatever the underlying reasons, it appears that young people from ethnic minorities are substantially less likely to report being bullied, and this is likely to have consequences for their experiences of school and later attainment. This will be discussed further in Chapter 15.

There was little relationship between the importance of religion to a young person and the reporting of bullying overall (see Chapter 4). However, when bullying was broken down into the different types, we found that young people who considered their religion to be very important to them were significantly more likely to report being called names than those with no religion (see Figure 6.4 below). Name calling was the only sub-type of bullying to show a consistent relationship with importance of religion.

**Figure 6.4 Relationship between holding religion to be very important and name calling (compared to young people with no religion)**



ORs greater than 1 indicate increased odds of name calling, ORs less than 1 indicate decreased odds

It is interesting that these results seem to be independent of the relationship found with ethnicity, in which young people from minority ethnic groups were less likely to report being subjected to name calling (ethnicity was adjusted for in this analysis). It therefore appears that name calling related to religion may be a more prevalent form of bullying in schools than name calling related to ethnicity.

## 7 Bullying and Special Educational Needs

### Chapter summary

Young people with SEN were more likely to report all types of bullying than other young people, and were particularly likely to report having money or possessions taken. They were also more likely to report being continuously bullied across all three years of the study. It is unclear however whether these results may apply particularly to young people with certain types of SEN.

The term 'special educational needs' (SEN) has a legal definition, referring to children or young people who have learning difficulties or disabilities that make it harder for them to learn or access education than most children or young people of the same age (Directgov website)<sup>11</sup>. Some of these young people have a statement of special need, which describes the young person's SEN and the special help they should receive. In order to obtain a statement of special need the young person's Local Authority has to carry out an assessment. The Local Authority usually makes a statement if they decide that this help cannot be provided from within the young person's school. Help provided within a school is termed 'School Action' or 'School Action Plus' and may include further assessment, additional or different teaching materials, different teaching methods or additional adult support<sup>12</sup>.

Young people with statements are usually educated in mainstream schools. However, some attend special schools. For the purpose of this analysis pupils with SEN both with and without statements are included in our definition. Special schools included in the sample were also included in our models. Additional analyses not presented in this report showed that young people attending a special school were not significantly different from those attending a mainstream school in terms of bullying. We therefore do not distinguish between pupils with SEN in a special or non-special school.

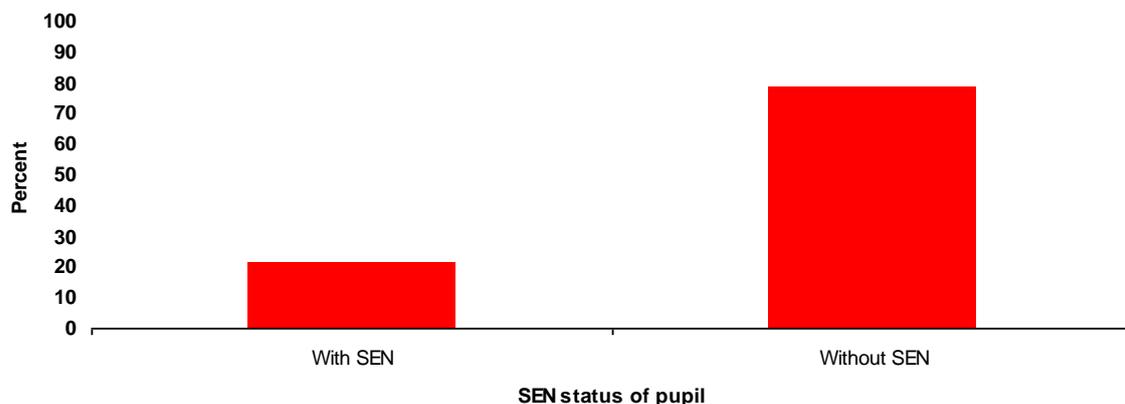
The proportion of young people in the LSYPE cohort with SEN is summarised below in Figure 7.1, which shows that just over 20% of the pupils were defined as having some type of special educational need. This is a relatively high proportion and therefore sample sizes are likely to be mostly adequate for these analyses. However, this is unlikely to have been the case if SEN was broken down into its constituent conditions (e.g. dyslexia etc.).

<sup>11</sup> [http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/SpecialEducationalNeeds/DG\\_187](http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/SpecialEducationalNeeds/DG_187)

<sup>12</sup> <http://www.teachernet.gov.uk/management/atoz/s/senidentificationandassessment/>

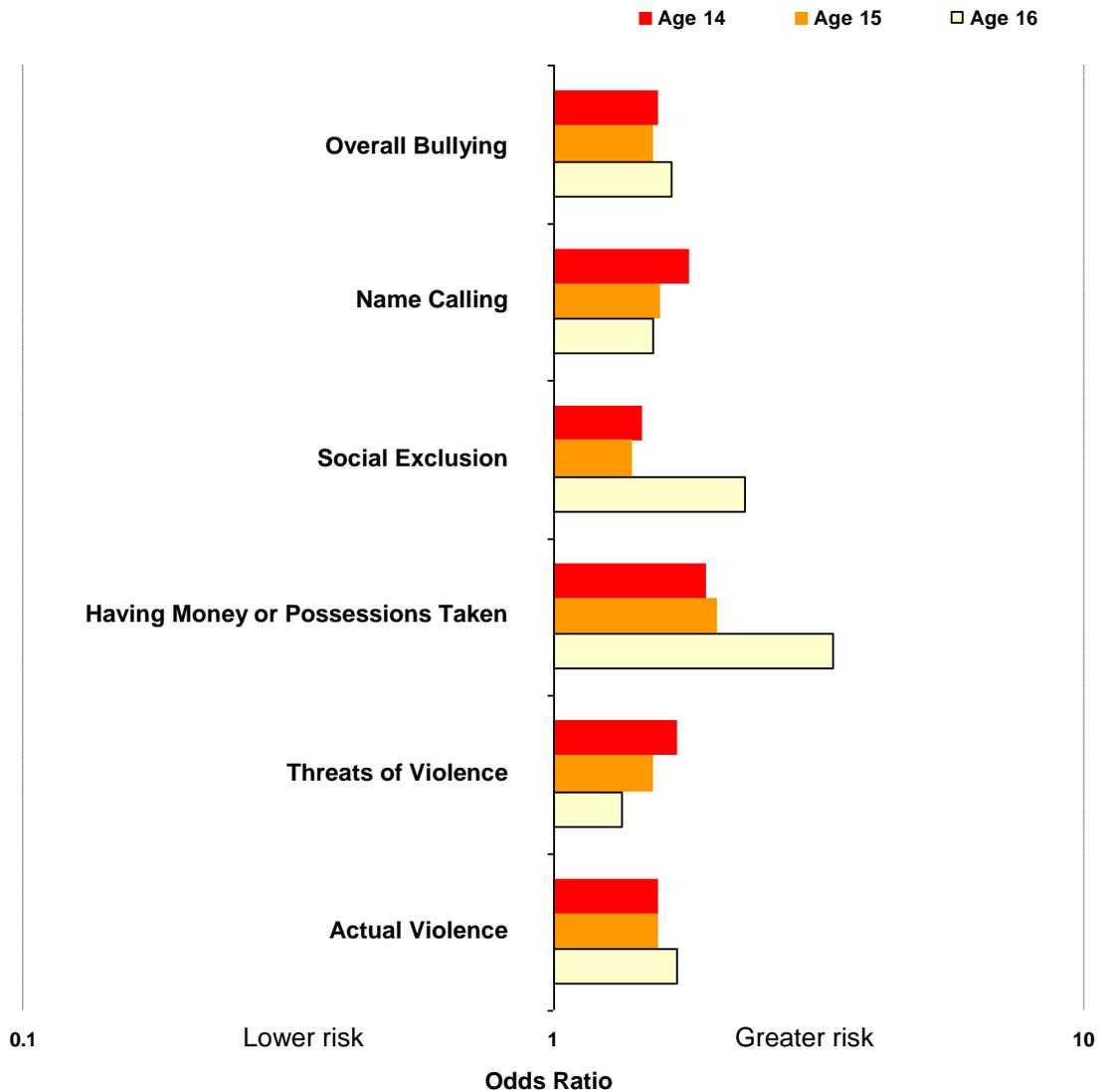
For these analyses we therefore combined all types of SEN in order to look for an overall relationship with bullying.

**Figure 7.1** Proportion of young people with SEN (age 14)



We found a strong relationship between special educational needs (SEN) and reporting of bullying, which was consistent across all types of bullying (see Figure 7.2 below). The strongest relationship was between SEN and having money or possessions taken, and the strength of this relationship also increased with age (whereas the prevalence of this type of bullying among all young people decreased with age). However, all the types of bullying were significantly associated with having SEN, and only the relationships with name calling and threats of violence were found to decrease in strength with age.

**Figure 7.2 Relationship between special educational needs and different types of bullying (compared to young people with no SEN)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

In addition to these results, young people with SEN also had nearly twice the odds of reporting being continually bullied across the three years of the study compared to other young people (for full results from these longitudinal analyses, see Appendix A, Table 16.7). These results indicate that young people with SEN are much more likely to report all kinds of bullying, and that this is likely to persist over time. However, it is difficult to speculate on the precise causes of this because of the broad nature of the SEN measure used in this study, which encompasses young people with a wide range of needs. However, it may be the case that young people with SEN of any type are marked out as distinct from other pupils, which may make them a particular target for bullying of all kinds. A possibility for future exploration would be to look in detail at the same bullying outcome variables but split by different type of SEN. This information is also available in LSYPE although sample sizes will be particularly small as we noted above.

## 8 Bullying and Disabilities

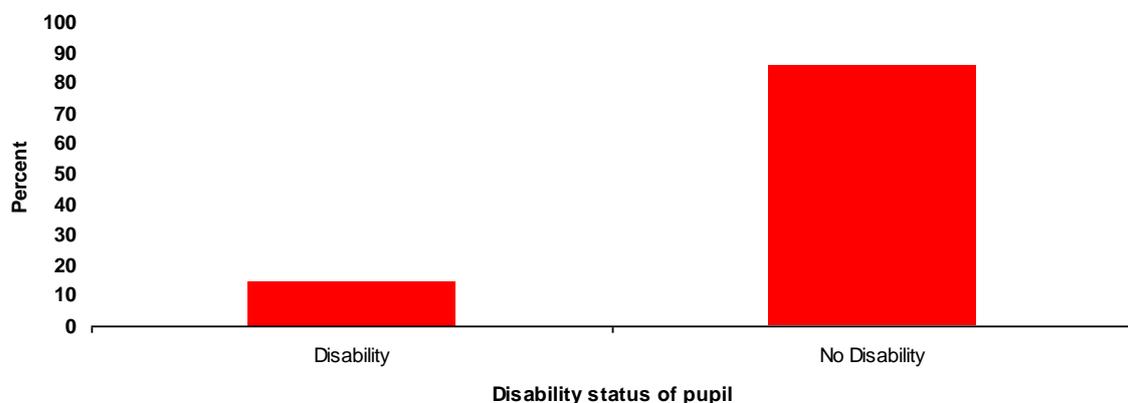
### Chapter summary

In general, young people with disabilities were more likely than other young people to report all types of bullying. They were particularly more likely to report having money or possessions taken, which indicates an increased risk of serious victimisation for this group of pupils. However, their risk of bullying decreased with age.

The Disability Discrimination Act (DDA) defines a disabled person as someone who has a physical or mental impairment that has a substantial and long-term adverse effect on his or her ability to carry out normal day-to-day activities. It must be noted that in LSYPE disability is self-reported by the young person<sup>13</sup>. As with young people with SEN, this project does not break down the results by the type of disability.

The proportion of young people in LSYPE defined as having a disability is summarised below in Figure 8.1. It can be seen from this graph that the proportion of young people with disabilities in LSYPE is slightly lower than the proportion with SEN, and therefore these analyses will have slightly less power than those in the previous chapter. However, more than 10% of the pupils were classified as having a disability, indicating that the sample size was adequate enough for the analysis to be robust.

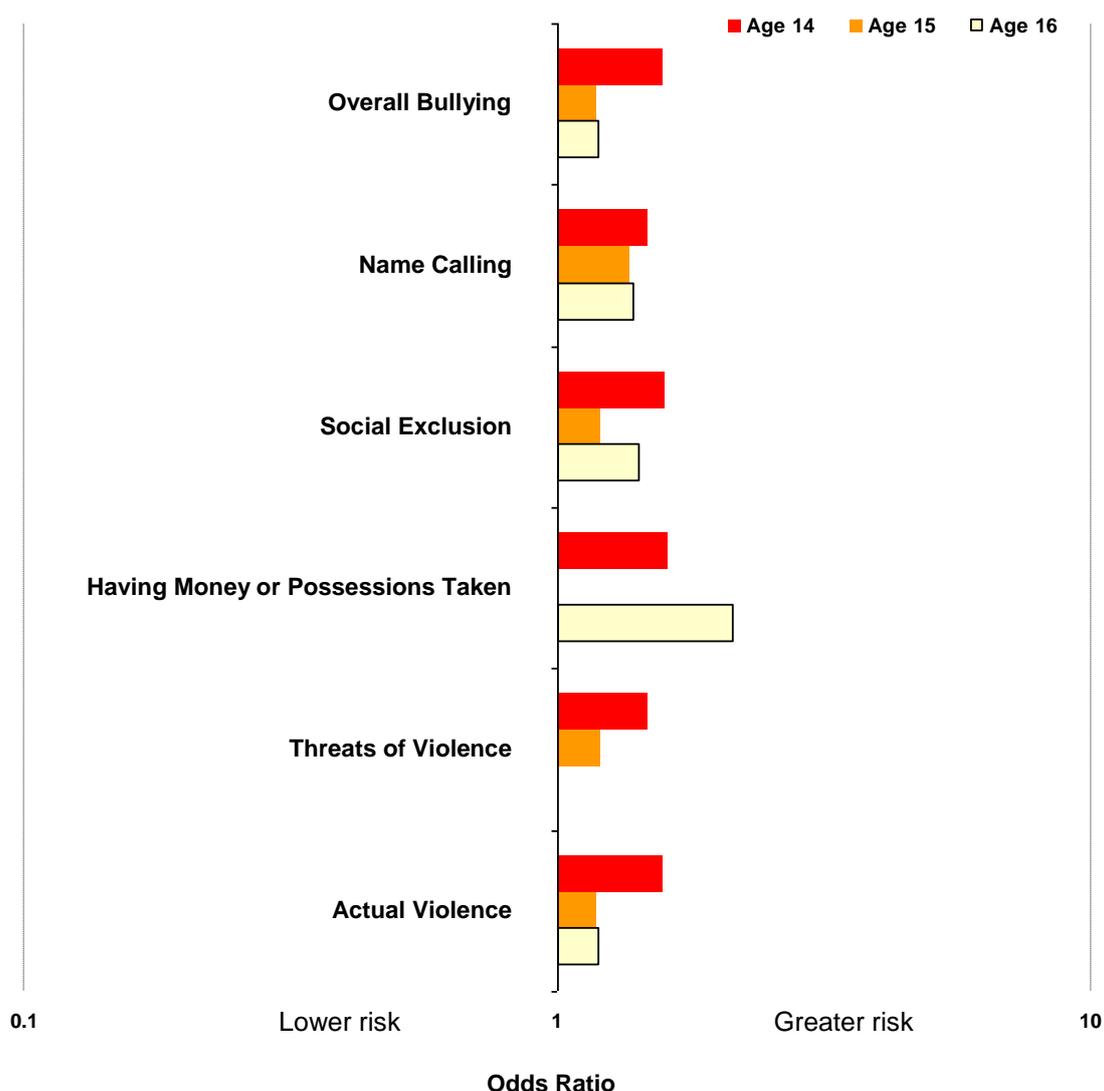
Figure 8.1 Proportion of young people with disability (age 14)



As with SEN, young people with disabilities were more likely than other young people to report being victims of all types of bullying (see Figure 8.2 below). This relationship was slightly weaker and less consistent than for SEN. In addition, not all types of bullying were

statistically significant at all age groups, but this may be due to the smaller numbers of young people with disabilities compared to those with SEN. Again similar to the relationship with SEN, having money or possessions taken had the strongest relationship with having a disability, and this relationship increased in strength with age (this was not statistically significant at age 15, but again this may be due to small sample sizes). However, unlike the relationship with SEN, the experience of bullying among young people with a disability does not appear to be consistent over time. Most of the relationships between bullying and disability decreased with age, except for reporting 'money or possessions taken' which increased, and reporting social exclusion which initially decreased at 15, and then increased again at 16. In addition, pupils with disabilities were no more likely than other young people to be 'continuing victims' across the three years of the study.

**Figure 8.2 Relationship between disability and different types of bullying (compared to young people with no disability)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

<sup>13</sup> The definition of disability is therefore not the same as the officially recognised definition of disability. Please see the Office for Disabilities website for further guidance <http://www.officefordisability.gov.uk/>

Young people with disabilities are a particularly vulnerable group of pupils, and our results suggest that this leads to them being more likely to be victims of bullying of all kinds. The similarities of the results for SEN and disabilities make sense, as some young people who have disabilities are likely to also have related SEN. However, the strong relationship with SEN appears to indicate that any characteristics which may lead to young people being perceived as different by their peers can be related to bullying, and not merely those which are classed as disabilities.

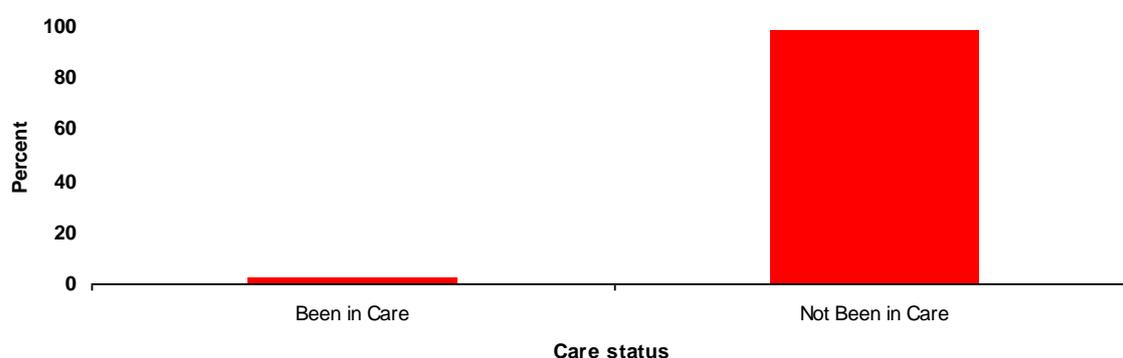
## 9 Bullying and Being in Care

### Chapter summary

Young people who had been in care were more likely to have reported being victims of all types of bullying. They were especially likely to report having money or possessions taken from them, and were also more likely to report being continuously bullied for all three years of the study. These results indicate that this group of young people is particularly vulnerable to bullying, perhaps because they are identified as being different by other young people.

Young people in care are identified by DCSF as being a particularly vulnerable group, and in need of particular support to ensure that they can reach their educational potential and overcome their early life difficulties (DCSF 2008a). The proportion of young people who had ever been in care in LSYPE is very small (only 1.6% at age 14), and therefore these results may be less robust than for other factors tested in this study (see Figure 9.1 below). However, we felt that it was important to look at this relationship as the overview of results in Chapter 4 indicated that there was an increased risk of being bullied among this group. Also, where consistent relationships have been found with bullying, these are likely to be strong and robust because they are significant even with such a small sample size.

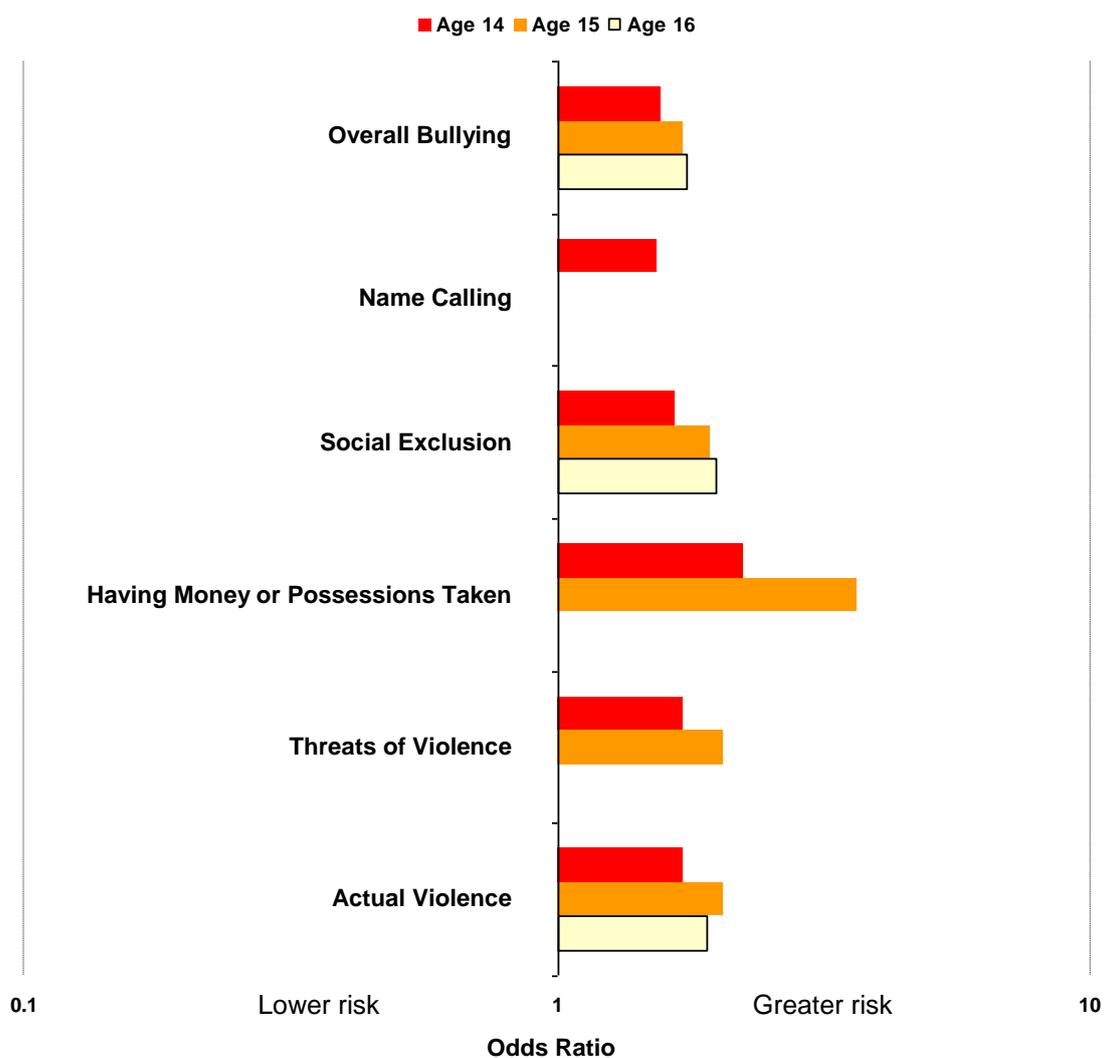
**Figure 9.1** Proportion of young people who had ever been in care (age 14)



Young people who had ever been in care were more likely than other young people to have reported being victims of all types of bullying (see Figure 9.2 below). The strongest relationship was with having money or possessions taken (although this was not statistically significant at age 16, most likely due to small sample size). However, there

were also strong relationships with violence and social exclusion. The weakest relationship found was with name calling, which was small and only significant at age 14 (the lack of relationship at ages 15 and 16 is not likely to be due to small sample size in this case, since name calling was the most prevalent type of bullying overall).

**Figure 9.2 Relationship between ever been in care and different types of bullying (compared to young people never in care)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

These results show that young people who have been in care are a particularly vulnerable group in terms of bullying. This view is supported by the fact that they were also much more likely to be ‘continuing victims’ of bullying across the three years of the study (for full results, see Appendix A, Table 16.7). As with SEN and having a disability, this is likely to be an example of young people being at greater risk of bullying if they are perceived as somehow different from their peers. However, it may also be the case that young people who have been in care may have experienced more conflict in their lives than other young people, which in turn may make them more outwardly vulnerable and more likely to be victims of bullying.

# 10 Bullying and Social Position

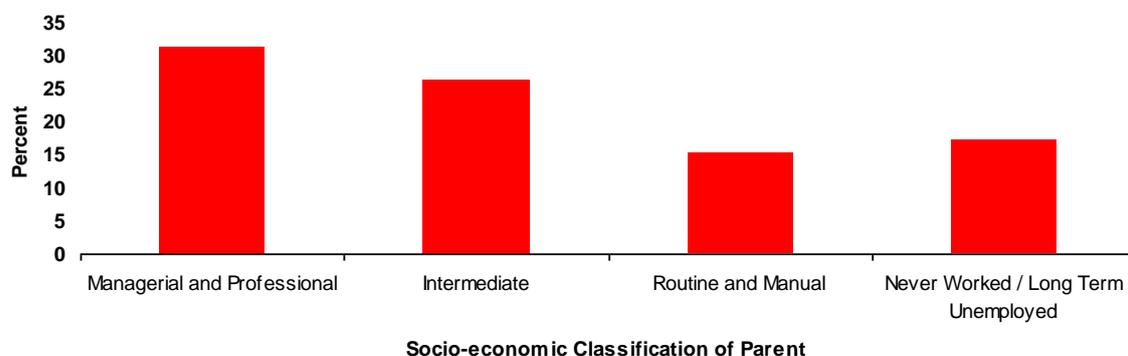
## Chapter summary

There was no relationship between bullying and parental socio-economic status or household tenure. However, young people whose mothers had higher educational qualifications were more likely to be bullied at ages 15 and 16. It therefore appears that the most socially disadvantaged young people are not more likely to report being bullied.

We used three measures of social position that had been measured in LSYPE: parental socio-economic status (calculated on the basis of the father’s occupation, or the mother’s occupation if the father was not present), mother’s highest qualification and household tenure. We found that, although all three measures were correlated with one another, they were not so strongly correlated that they could not all be included in the same models. The results presented here are therefore adjusted for the other two measures of social position as well as all the other factors described in Chapter 4 (see Table 4.1) enabling us to look at the independent influence of each.

We explored the breakdown of all three measures of social position in the LSYPE dataset as a whole by looking at the proportion of young people who fell into each category. The results for parental socio-economic status can be found in Figure 10.1 below. These figures are roughly comparable to England as a whole, and show that all categories of this variable have a reasonable sample size for calculating differences in bullying prevalence.

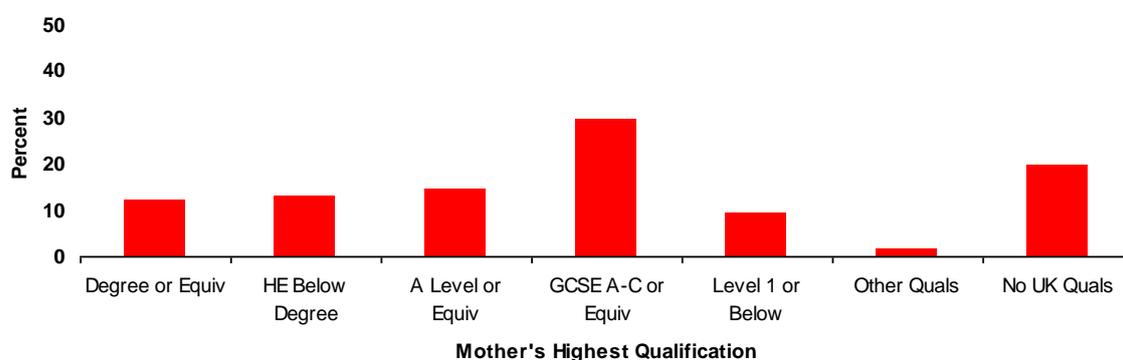
**Figure 10.1** Proportion of young people according to parental socio-economic status (age 14)



The results for the breakdown of mother’s highest qualification can be found below in Figure 10.2. These show that (again similar to the population of England as a whole) the

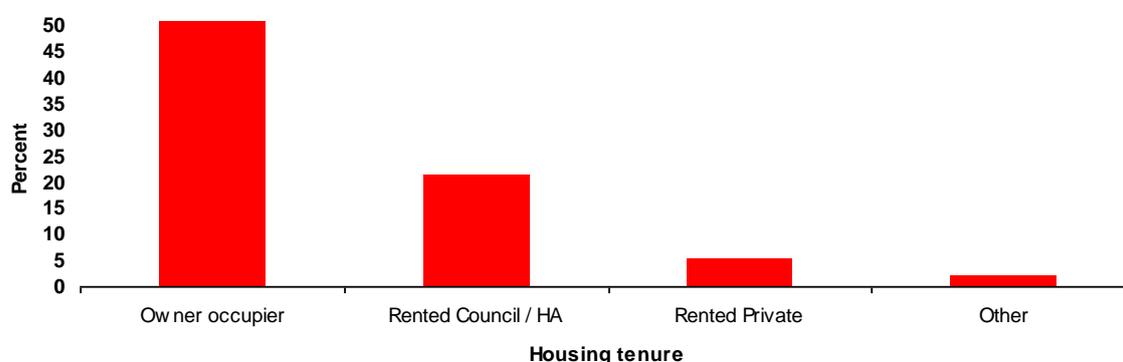
most common level of qualification was GCSE grades A-C or equivalent. This was followed by having no UK qualifications at all, although there was also a relatively high proportion of young people whose mothers had higher education qualifications. All categories had a reasonable sample size other than the 'other qualifications' group, in which the sample size was very small. Unsurprisingly, results for this category were non-significant and have therefore been omitted from the analyses that follow, but all other categories yielded some statistically significant relationships.

**Figure 10.2** Proportion of young people according to mother's highest qualification (age 14)



Finally, the results for the breakdown of household tenure are presented below in Figure 10.3. These results show that owner-occupiers formed the majority of the households in LSYPE, with only a small percentage being private renters or having some other living arrangement. This may mean that the results for some forms of tenure may have been less likely to reach significance due to small sample sizes. However, since the largest relationship was expected to be with young people living in Council or Housing Association accommodation (a group with a reasonable sample size) this is unlikely to have substantially affected the results.

**Figure 10.3** Proportion of young people according to household tenure (age 14)

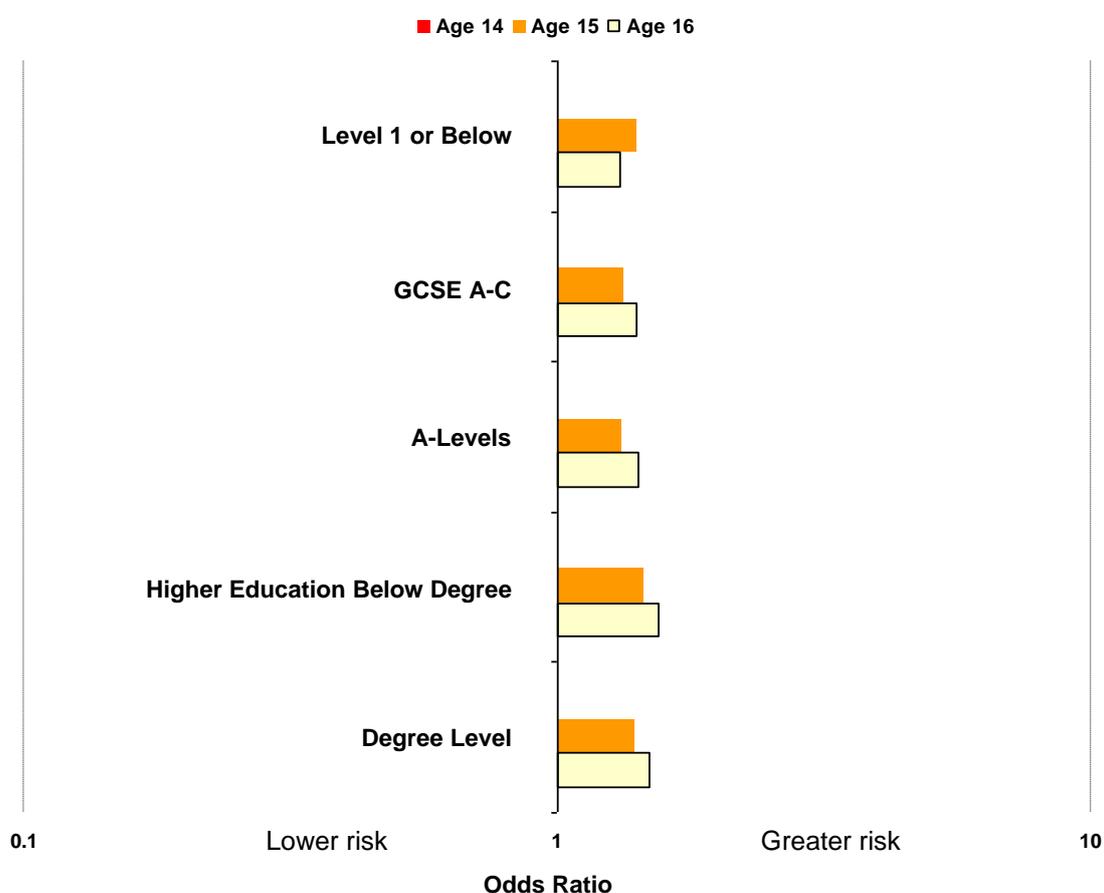


NB: owner occupier includes those with a mortgage

Parental socio-economic status was not significantly related to any type of bullying, with the exception of a weak and age-specific relationship with young people reporting threats of violence or actual violence. Young people with parents in intermediate occupations were a little more likely to report threats of violence or actual violence at age 15 compared to those with parents in professional occupations (see Appendix A for these results). However, these relationships were not consistent and were not strong enough to demonstrate an important relationship between parental socio-economic status and bullying. What this does indicate, however, is that the most disadvantaged young people in this respect (i.e. those with unemployed parents) are not more or less likely to have reported being bullied than other young people.

There was a slightly stronger and more consistent relationship between bullying and the level of education of the young person's mother. Figure 10.4 below shows that, for overall bullying, young people whose mothers had any qualifications were more likely to be bullied than those whose mothers had no qualifications at all. However, this relationship was only statistically significant at ages 15 and 16, and appeared to become slightly stronger with increasing age. Young people whose mothers had higher education qualifications were the most likely to report having been bullied.

**Figure 10.4 Relationship between mother's highest qualification and overall bullying (compared to mothers with no qualifications)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

Similar results were also found for the different sub-types of bullying, although we found no statistically significant relationship between the level of education of the young person's mother and being forced to hand over money or possessions, and a weaker relationship for reports of actual violence. However, these differences may be due to small sample sizes given that these types of bullying were less common, and the relationships with the other three types of bullying (name calling, social exclusion and threats of violence) were very similar to the results presented for overall bullying (for a further breakdown of these results, see Appendix A, Tables 16.1-16.6).

These results, like those for parental socio-economic status, again indicate that the most disadvantaged young people are not more likely to report bullying. The results for mother's highest qualification in fact show the reverse, although this may in part be due to different interpretations of bullying among young people from different social backgrounds. It is unlikely that the results found are due to confounding by ethnic group or type of school attended (single-sex or mixed), as these were both factors adjusted for in the analyses.

Finally, we also looked at the household tenure of young people with regard to bullying, and found no consistent relationship. There was some evidence that young people living in private rented accommodation were slightly more likely to be bullied (especially with regard to name calling), but this finding was only found at the age of 14 and is therefore not particularly robust. Other findings were weak and inconsistent, and we therefore cannot conclude that tenure has any bearing on whether a young person is likely to be bullied or not.

Overall, these results show that social position is not as strongly related to bullying as we might have expected, and that it is not those young people who are the most socially disadvantaged who are also the most likely to report being bullied. Instead, there is some evidence to suggest that those with better-educated mothers are more likely to be bullied.

# 11 Bullying and Family Structure

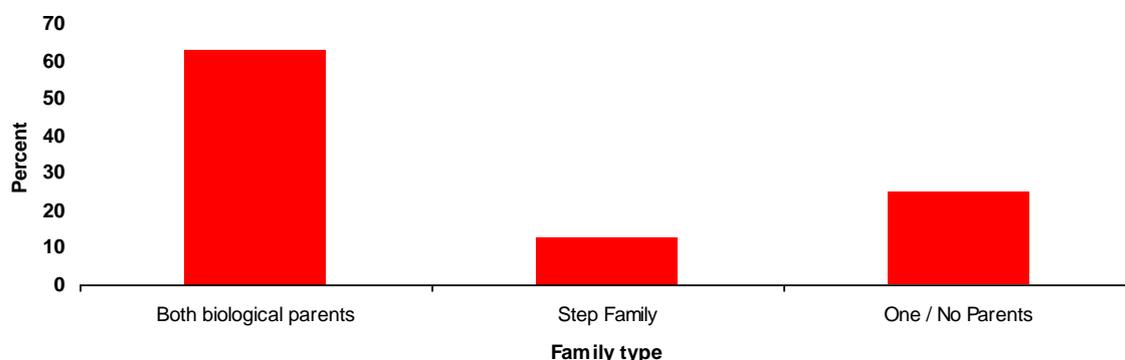
## Chapter summary

We found that young people living in step families (and to a lesser extent those in single parent families and those not living with either of their biological parents) were more likely to be bullied overall, and in particular were more likely to report threats of violence or actual violence. We also found that young people with caring responsibilities were more likely to report being bullied, particularly at the age of 14, but were also more likely to become new victims of bullying as the study progressed.

To explore the relationship between bullying and family structure, we looked at the family types of the young people (whether there were two biological parents in the household, whether it was a step-family or whether the young person was living with a single parent/other carers) and also at whether the young person had caring responsibilities for anyone in the household. These two factors were somewhat related to one another (young people living in single parent families were more likely to have caring responsibilities), but this relationship was not so strong that we could not include a measure of both in the same models.

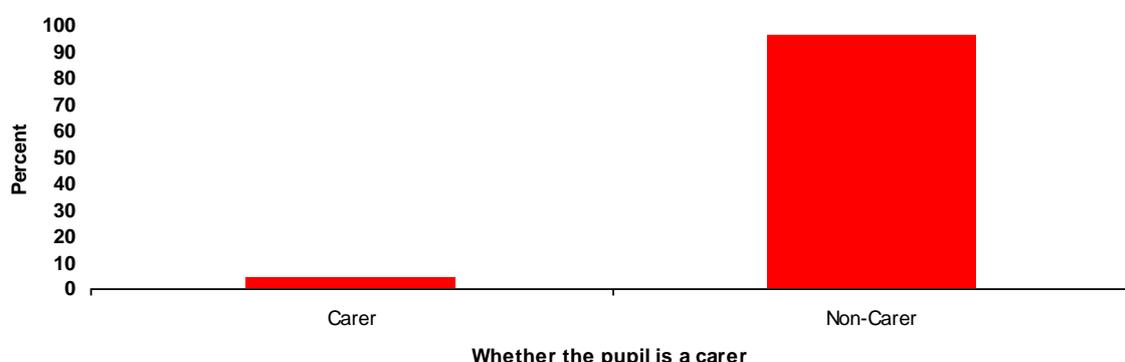
The proportion of young people in LSYPE with each family type is illustrated below in Figure 11.1. The graph shows that over 60% of young people lived with both biological parents, but that another quarter lived in families with one or no biological parents present. The smallest category was step-families, which comprised just over 10% of young people. However, this proportion is still likely to be large enough to produce robust results, so any relationships that we find that are not statistically significant are unlikely to be due to small sample sizes.

**Figure 11.1 Proportion of young people according to family type (age 14)**



Young people were asked whether they had caring responsibilities, i.e. whether they had to provide some kind of care for someone who was disabled or sick in their household. The proportion of young people in LSYPE who had caring responsibilities in their household is reported in Figure 11.2 below. The graph shows that only about 5% of young people were carers, and therefore some of the analyses relating to carers might have an inadequate sample size. This is particularly reflected in the analyses below looking at sub-types of bullying, and it is possible that stronger and more consistent relationships may have been found with a larger sample size or a larger proportion of young carers in the survey. Nevertheless young carers are recognised as a potentially vulnerable group of young people and were therefore included in the study.

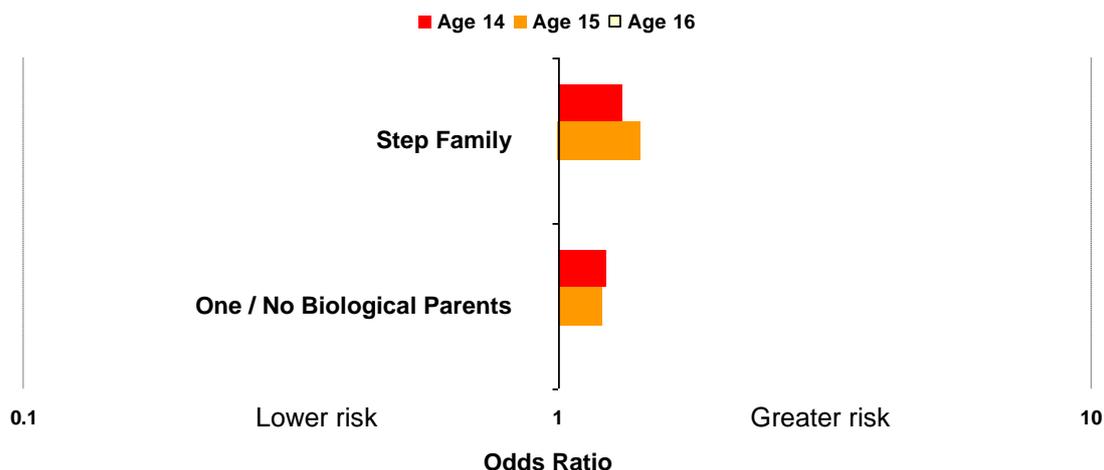
**Figure 11.2 Proportion of young people with caring responsibilities (age 14)**



Young people not living with both biological parents were more likely to report being bullied overall than those who were living with both biological parents (see Figure 11.3 below), although only at ages 14 and 15. This was particularly the case for young people

living in step families. There was a similar relationship between family type and the risk of being bullied for the sub-types of bullying, although the relationship was not statistically significant for being forced to hand over money or possessions (however, we have already noted that the sample size for this category of bullying was particularly small).

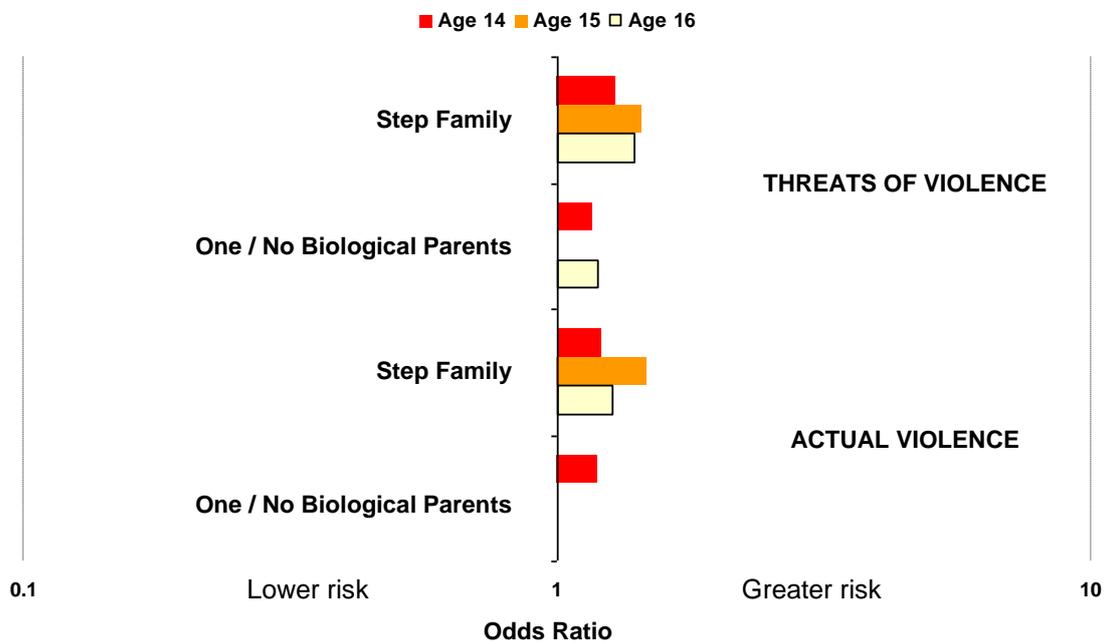
**Figure 11.3 Relationship between family type and overall bullying (compared to young people living with two biological parents)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

The strongest relationships found with family type were for threats of violence and actual violence, both of which were substantially more likely among young people from step families at all three ages (see Figure 11.4). This relationship was much weaker among young people living in single parent families or with other carers, and was not significant for all age groups. For both of these types of bullying, the risk was strongest for young people in step families at the age of 15.

**Figure 11.4 Relationship between family type and threats of violence / actual violence (compared to living with two biological parents)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

It is difficult to know exactly why young people living in step or single parent families are more likely to experience bullying, but this may be due to an increased instability related to family break-up and upheaval that some of these young people may have recently or are currently going through. It is possible that young people living with family instability may feel more vulnerable and lack confidence, which may make them both more sensitive to bullying as well as more likely to become victims. Further investigation would be useful to establish these links.

When we looked at the experiences of young people with caring responsibilities, we found that they were much more likely to be victims of bullying overall, and that this was also true to a lesser degree for the different types of bullying (see Figure 11.5 below). Most of the relationships for the sub-types of bullying were age-specific, but this is likely to be due to small sample sizes since the proportion of pupils in LSYPE with caring responsibilities was small. However, our longitudinal analyses showed that young people with caring responsibilities were also more likely to be 'new' victims of bullying as they grew older (i.e. they were not being bullied in Year 9 when aged 14 but subsequently began to be bullied in later years).

These results show that young people with caring responsibilities are another vulnerable group who are more likely to report being bullied. A reason for this could be because

these young people are less able to participate in social activities than other young people because of a need to return home and provide care, which may (again) consequently lead to them being perceived as different. This might also explain why carers were more likely to become ‘new victims’ of bullying. As young people grow older their social lives become more important and these young people may increasingly become isolated from their peers due to having more responsibilities at home.

**Figure 11.5 Relationship between being a carer and different types of bullying**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

Taken together, these results show that young people who have more responsibilities in their household and who are from family structures that are associated with upheaval and periods of instability are more likely to report being bullied at school. These results are more equivocal than some others from this study, and do not apply to all types of bullying or to all ages (being strongest at the age of 14), but they still provide an indication of young people who may be more vulnerable, and also show that what is actually going on in the household may be more important when it comes to developing interventions for bullying than the socio-economic status of that household (as shown in Chapter 10 above).

# 12 Parental Reports of Bullying

## Chapter summary

Young people who reported being bullied at ages 14 or 15 were less likely to report still being bullied at age 16 if their parents had also reported that they were being bullied. This suggests that parental awareness of bullying is an important factor in young people escaping bullying. The relationship was particularly strong at age 14, indicating that young people whose parents became aware that they were being bullied at an earlier age were the most likely to escape future bullying.

In LSYPE the main parent<sup>14</sup> of the young person is asked whether their child has been bullied in any way in the last 12 months. The young person’s and their parent’s reports of bullying can differ from one another, and the reasons for this may range from the young person not wanting to report that they are being bullied to the parent believing that their child was being bullied but the young person not interpreting such an experience as bullying. The latter may particularly be the case for text or cyberbullying (because such a wide range of interpretations can be placed on written language), and any types of bullying which may be interpreted more ambiguously (as compared to violence or threats of violence, which are less equivocal). Such differences of interpretation may also work in the other direction, with a young person believing they are being bullied but their parent not agreeing with their definition. The congruence between the young person’s own report of bullying and parental reports of bullying is summarised below in Table 12.1.

**Table 12.1 Congruence between young people’s and parental reports of bullying**

Wave	Percentage of all young people in LSYPE reporting bullying		
	Young Person and Parent	Young Person Only	Parent Only
Wave 1 (age 14)	28.3%	17.9%	11.5%
Wave 2 (age 15)	19.5%	19.8%	8.9%
Wave 3 (age 16)	11.8%	15.0%	9.0%

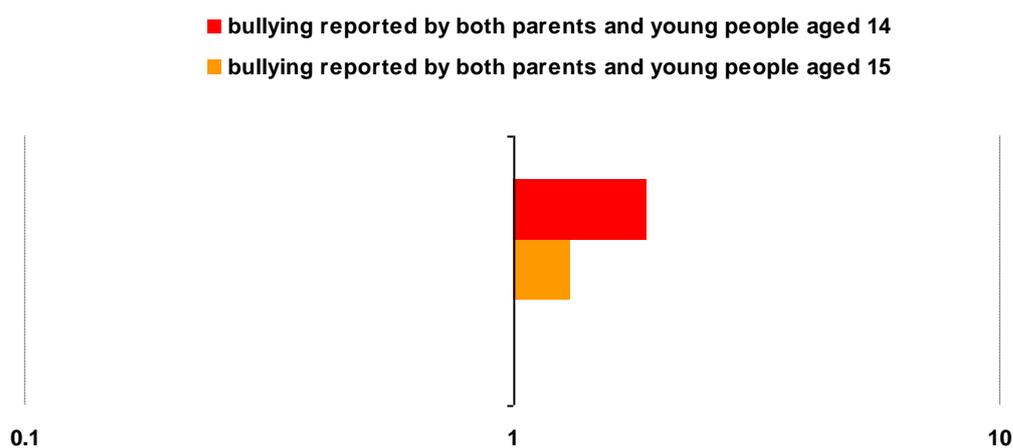
As evident from the table, the numbers of young people and parents who jointly reported that the young person was being bullied decreased quite markedly over the three years of the study. To a certain degree this is to be expected because the number of young people reporting being bullied overall also fell. However, cases where only young people reported being bullied or where only the parent reported the young person was being bullied showed a much smaller decrease. In fact, the numbers of young people reporting

<sup>14</sup> Main parent was defined as the parent or guardian who was most involved in the young person’s education (in the large majority of cases this was the young person’s mother)

being bullied whose parents did not report bullying actually increased between the ages of 14 and 15. This may indicate that young people become less likely to tell their parents that they are being bullied as they grow older.

Figure 12.1 below reports the results of an analysis in which we examine how likely it was that a young person who reported being bullied at ages 14 or 15 also reported being bullied at age 16, comparing the results for those whose parents had also reported them being bullied with those whose parents did not report them being bullied. What we are interested in measuring is whether parental awareness of the young person being bullied at ages 14 or 15 was associated with a lower risk of being bullied when they were aged 16.

**Figure 12.1 Relationship between the parental report of bullying and whether the young person escapes bullying at age 16**



ORs greater than 1 indicate increased odds of escaping bullying, ORs less than 1 indicate decreased odds

Young people whose parents had also reported them being bullied when they were 14 had almost twice the odds of ‘escaping’ being bullied at age 16 compared to young people whose parents had not also reported them being bullied at age 14. There was also a positive, statistically significant relationship between parental reporting at age 15 and ‘escaping’ at age 16 (OR 1.31), although this relationship was not as strong. This suggests not only that parental awareness of bullying is strongly related to ‘escaping’ bullying later on but that the earlier parents become aware of the bullying the more likely the young person is to stop being bullied.

This evidence suggests that young people should be encouraged to tell their parents if they are experiencing bullying (and to tell them as early as possible), as this appears to give them a much greater chance of stopping it. However, it may also be that young

people whose parents also report them being bullied have better relationships with their parents, and that this feeling of support or having close family relationships helps them to cope and potentially escape from bullying. LSYPE collects information on the quality of relationship young people have with their parents, making this a possibility for future research.

## 13 Bullying and Changing School

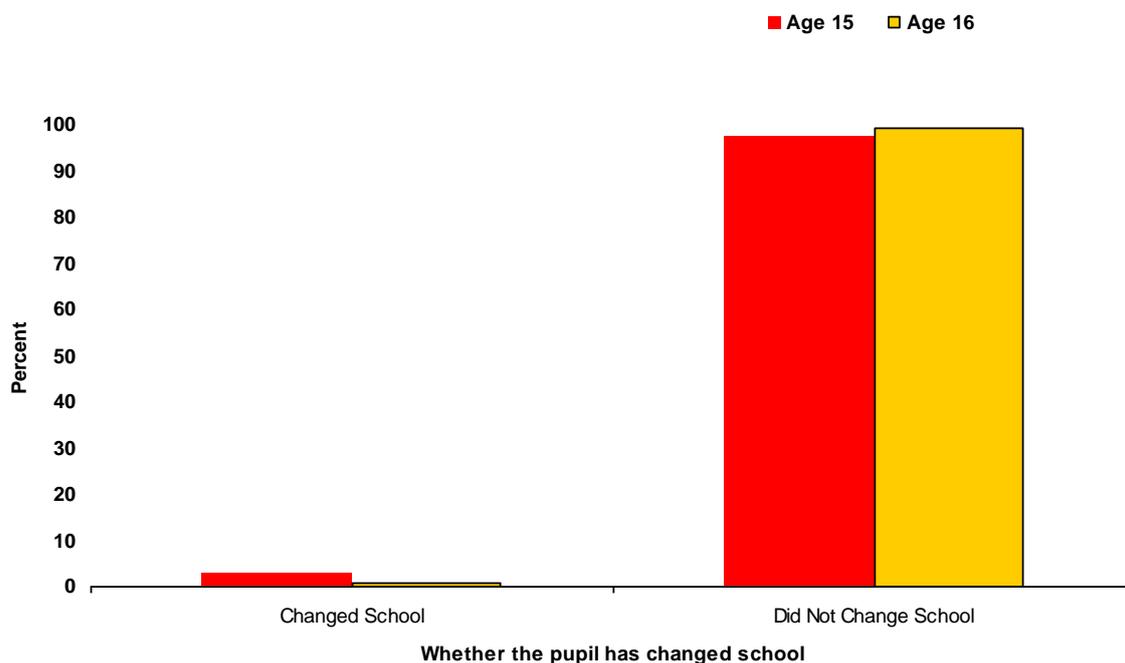
### Chapter summary

Young people in Year 10 who had changed school within the previous year were more likely to experience most types of bullying. They also had three times the odds of being 'continuing victims' over the three years of the study, and were more likely to become new victims of bullying at their new school. Conversely, for some young people there was also evidence that they may have actually escaped bullying by changing schools.

Young people change secondary schools for a variety of reasons, both planned (such as pre-organised transitions between different schools for the purposes of taking certain exams or courses, or a move into the catchment area of a good school) and unplanned (such as a family break up or young people being excluded from school). We investigated the association that school moves have with bullying, although we were unable to distinguish between different reasons for changing schools, or clarify how many times a given pupil might have changed school during the three years of the study.

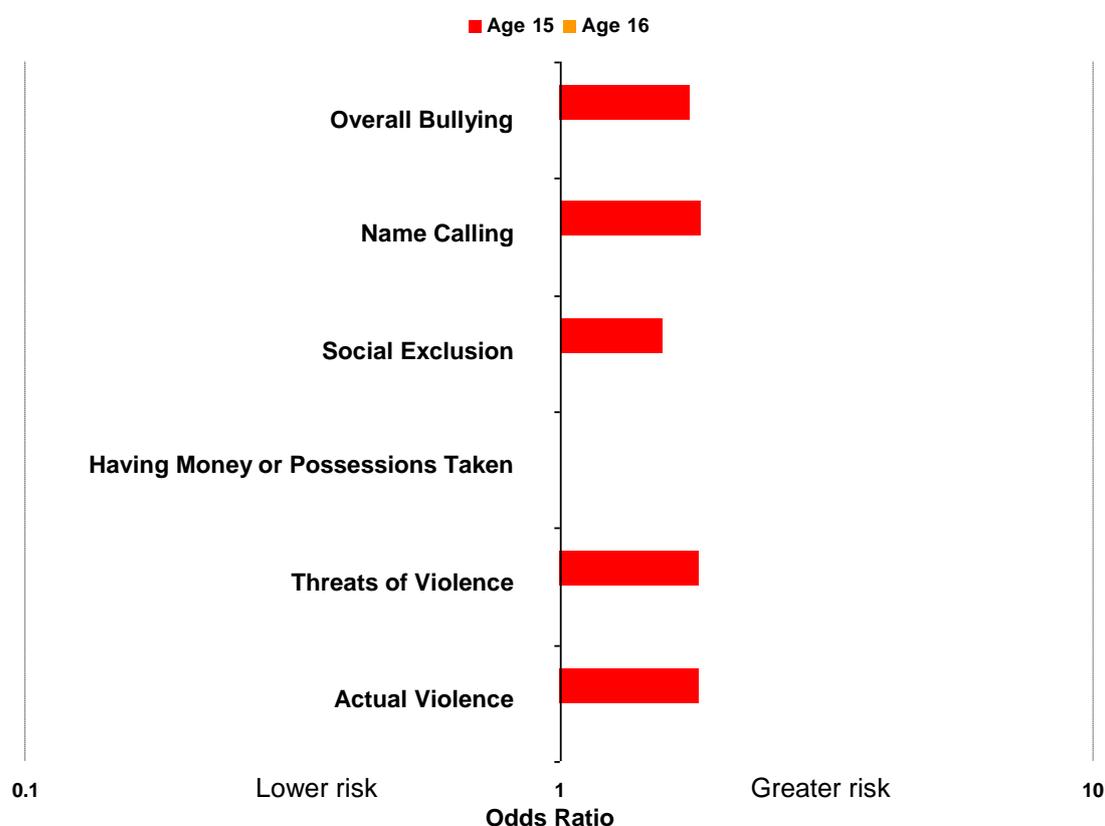
Figure 13.1 below shows the proportion of young people in LSYPE who had changed school within the previous year when asked both at age 15 and 16 (changes of school at age 14 were not recorded because this was prior to the beginning of the study). The graph shows that only a very small percentage of the young people had changed school in each year, and this was substantially smaller at age 16 than at 15 (probably because it is less desirable for young people to change school in the year of their GCSEs). This will have implications for the analysis in this chapter, particularly at age 16, but as with other chapters any remaining consistent relationships should be robust as they are statistically significant despite the small sample size.

**Figure 13.1 Proportion of young people who had changed school in the previous year (ages 15 and 16)**



The results show that young people were more likely to be bullied at the age of 15 if they had changed school in the previous year, but not at the age of 16. However, as we noted above, the lack of a relationship at the age of 16 may be due to smaller sample sizes. An inadequate sample size might also explain why the relationship between changing schools and being forced to hand over money or possessions was not statistically significant, as this was the least common type of bullying reported. All the other types of bullying showed a relatively strong relationship with having changed school at the age of 15 (see Figure 13.2 below).

**Figure 13.2 Relationship between changing school and different types of bullying (compared to young people who did not change school)**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

A possible reason why young people who change school are more likely to report being bullied is that they are less likely to be integrated into social groups and are perhaps therefore isolated and easier targets for bullying. We also found that young people who had changed school at the age of 15 had three times the odds of being ‘continuing victims’, i.e. they reported bullying across all three years of the study, and were also more likely to be ‘new victims’ of bullying having not previously been bullied. This suggests that bullying is more sustained among young people who change school. It is possible that these young people move school because of bullying but then continue to be bullied in the new school, suggesting that they are particularly vulnerable to bullying for reasons other than changing school. Becoming a ‘new victim’ of bullying after changing school also supports the point made above which suggests that some of these young people may not be properly integrated into their new school.

However, we also found that young people who changed school were more likely to be ‘escaped’ victims of bullying, which may indicate that the opposite scenario might be true for other young people, i.e. that they have successfully escaped bullying by moving school. There are therefore complex factors at work with young people who change

school, which may be further clarified by asking young people why they moved school and if this was related to bullying. For further details of our longitudinal analyses, see Appendix A, Table 16.7. Nevertheless, it is important to note that overall young people who change school (at least those who change at the age of 15) are more likely to experience bullying and should therefore be included as a target group in future policy interventions.

# 14 Bullying and School Characteristics

## Chapter summary

Young people who attended schools with a higher proportion of pupils receiving free school meals were less likely to be bullied overall, and even less likely to be called names. However, young people attending schools with a higher proportion of pupils with special educational needs were more likely to be bullied, and were particularly likely to be called names. Girls attending all-girls' schools were less likely to report most types of bullying at age 16 than those attending mixed schools, including overall bullying, being forced to hand over money or possessions, being threatened with violence and being victims of actual violence.

As well as looking at the characteristics of individuals that might be related to being bullied, we also explored the influence of characteristics relating to the schools they attended using data from the National Pupil Database (NPD) matched to the LSYPE cohort. These included the proportion of white pupils, the proportion of pupils receiving free school meals (FSM), the proportion of pupils with special educational needs (SEN) and the type of school (single-sex or mixed sex). As described in Chapter 4, we also aimed to explore whether there was any relationship with the proportion of pupils in a school for whom English was a second language, but after controlling for the proportion of white pupils this was no longer found to be related to bullying.

The median proportions of pupils with each of the characteristics we looked at are shown below in Table 14.1. We present the median proportion as most of the data were heavily skewed (i.e. they had an average far from 50%) and therefore the median is more meaningful. The table shows that the median proportion of white pupils was very high, but the median proportions of pupils receiving FSM or with SEN were very low.

**Table 14.1** Cut off points for new variables for interaction analysis

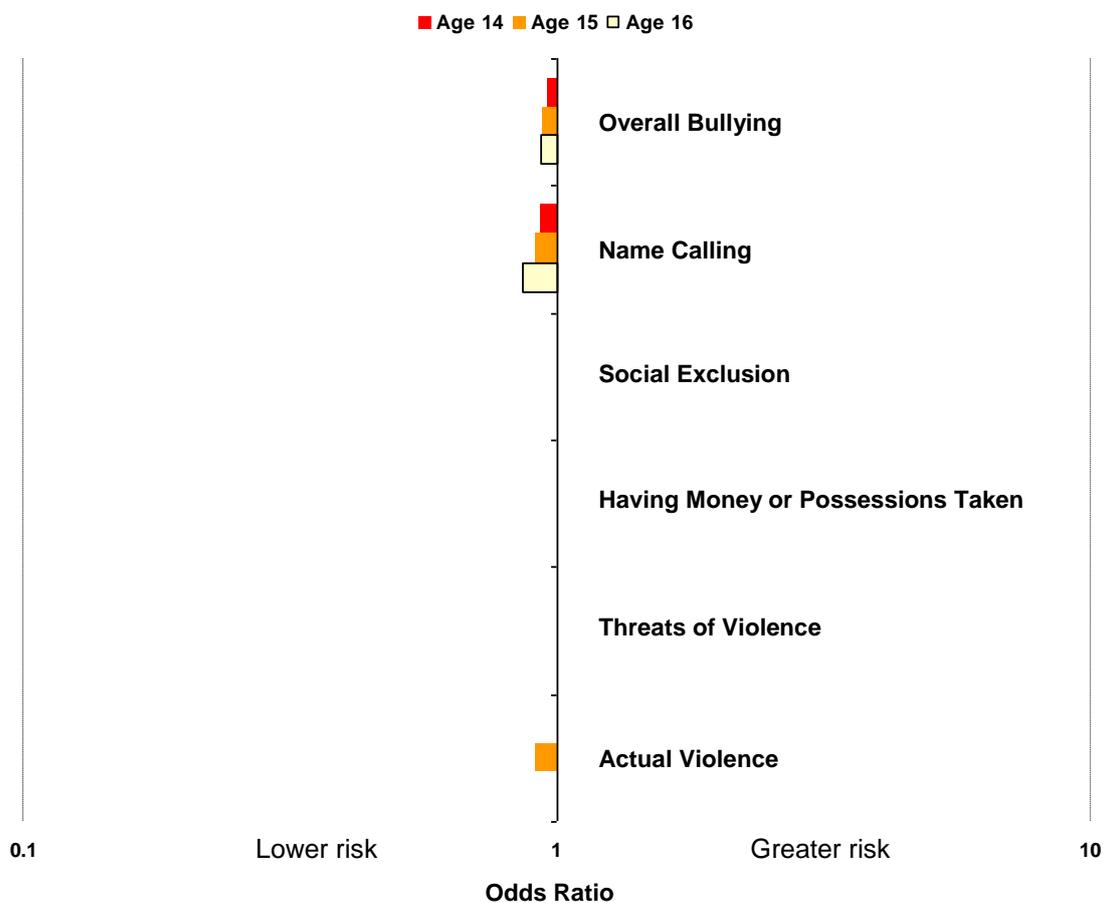
	LSYPE		
	Age 14	Age 15	Age 16
	%	%	%
Median proportion of white pupils	93	87	87
Median proportion of pupils receiving free school meals	9.7	11.1	9.1
Median proportion of pupils with SEN	13.3	15.2	15.4

There was no significant relationship between the proportion of white pupils in a school and the odds of a young person in that school reporting being bullied. We also explored whether the young person's own ethnicity was important depending on the ethnic make up

of the school they attended (i.e. an interaction between the ethnic group of the young person and the proportion of white young people in their school). Previously we had found that white young people were more likely to report being bullied than young people from an ethnic minority background. However, we found no consistent relationships either for bullying overall or the five sub-types. Therefore the proportion of white pupils in a school has little impact on the level of bullying in that school, at least after other characteristics of the school have been accounted for.

The proportion of pupils receiving FSM in a school was significantly related to the odds of a young person reporting being bullied overall. Because the proportion of pupils receiving FSM in a school is measured on a continuous scale, Figure 14.1 below shows the increased odds of bullying associated with a 10% increase in the proportion of pupils at that school receiving FSM. It can be seen that for overall bullying and name calling, young people were less likely to have experienced bullying if they were going to a school with a higher proportion of pupils receiving FSM.

**Figure 14.1 Relationship between bullying and proportion of pupils receiving FSM in a school**

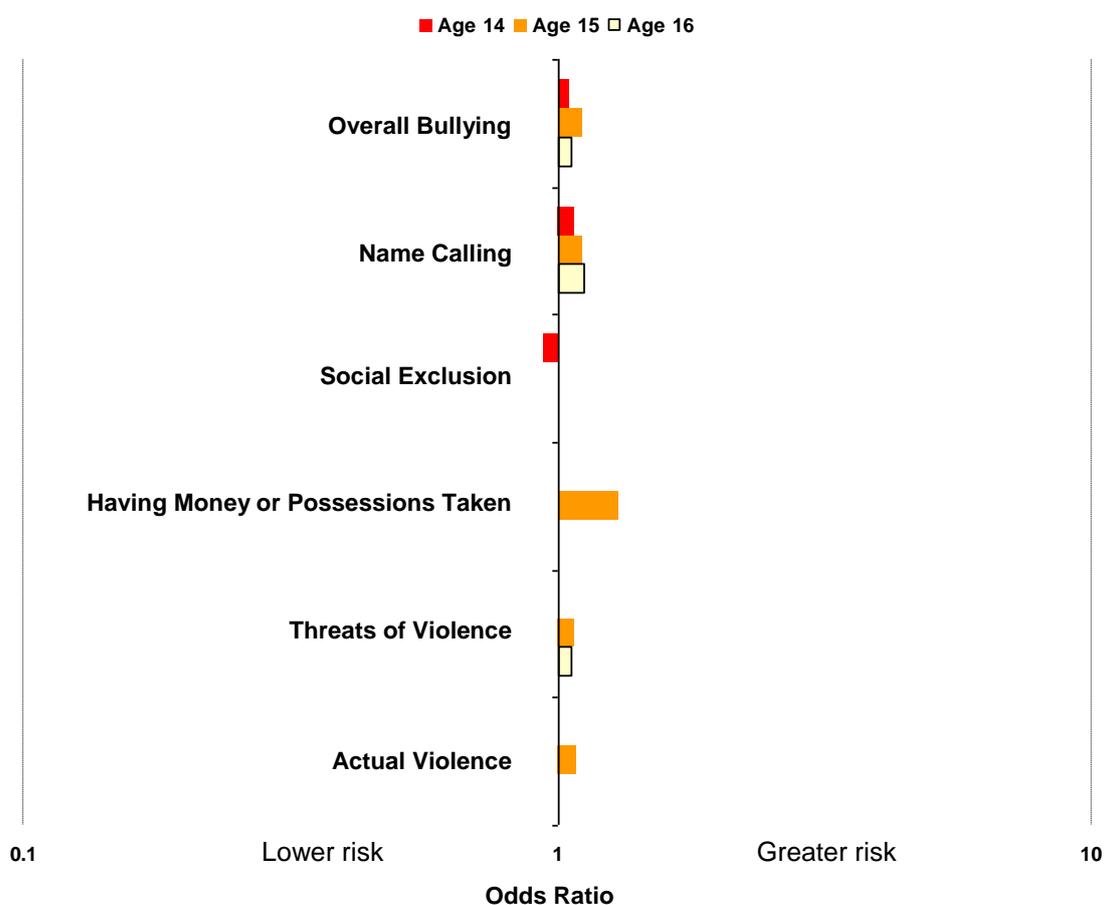


ORs greater than 1 indicate increased odds of having been bullied associated with a 10% increase in pupils receiving FSM, ORs less than 1 indicate decreased odds

These results indicate that (for the most common type of bullying at least) the greater the number of disadvantaged pupils in a school the less likely a young person was to report being bullied in that school. This effect also increased as the young person got older. As with our results for individual social position, this relationship shows that disadvantage (in this case with schools rather than pupils) is not associated with an increase in the reporting of bullying, as might have been expected. These results are unlikely to relate to the type of school the pupils are attending as we tested a number of models in which we adjusted for school gender, school type (comprehensive, grammar or independent), and school religious denomination. We also examined whether characteristics of the young person mattered depending on the proportion of young people receiving FSM within the school (for example, whether a young person receiving FSM was more likely to be bullied in a school where few pupils received FSM), however we found no consistent relationship.

Next, we explored the influence of the proportion of pupils in a school with SEN, and found a statistically significant relationship with overall bullying (see Figure 14.2). The results show that young people attending a school with a higher proportion of pupils with SEN were more likely to report being bullied overall. They were also more likely to report being called names (a relationship that increased in strength over the three years of the study), and slightly more likely to have money or possessions taken, to experience threats of violence or to experience actual violence (although these latter three relationships were age-specific and are therefore somewhat equivocal). Young people who attended schools with more pupils who had SEN were slightly less likely to be socially excluded. However, this may be a chance result since it was age-specific and both the sample size and strength of relationship were relatively small.

**Figure 14.2 Relationship between bullying and proportion of pupils with SEN in a school**



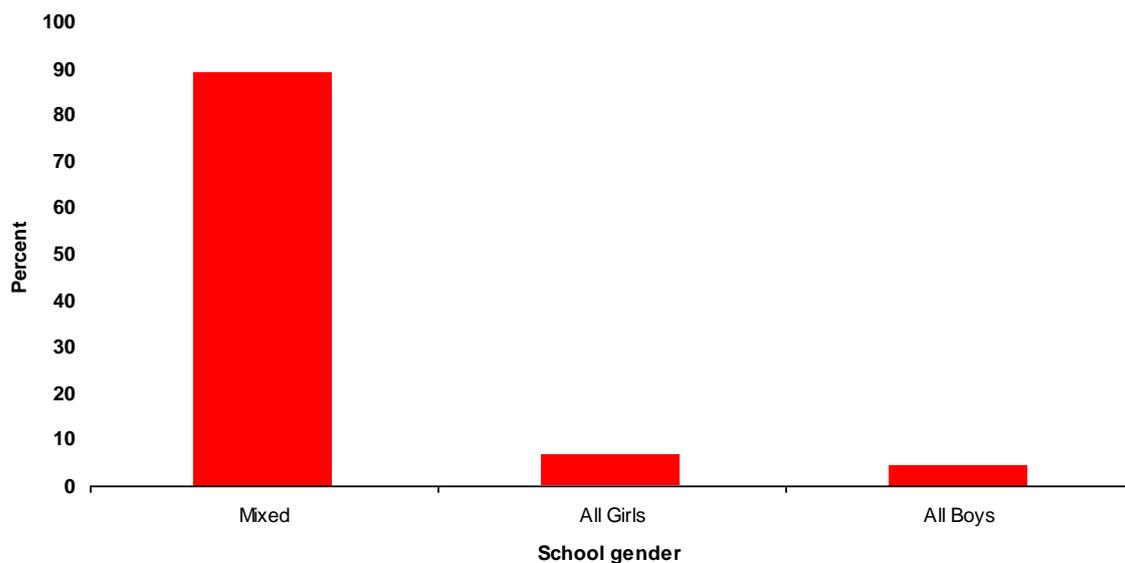
ORs greater than 1 indicate increased odds of having been bullied associated with a 10% increase in pupils with SEN, ORs less than 1 indicate decreased odds

These results show that the proportion of young people with SEN in a school appears to be an important correlate of bullying regardless of whether the individual young person has SEN or not, suggesting that schools with more SEN pupils do have more problems with bullying. As already noted in Chapter 7 in which we looked at pupils with SEN, it is difficult to draw conclusions about the mechanisms behind this relationship without investigating the specific types of SEN that make some young people more vulnerable to being bullied, but we hope that future studies will be able to tackle this question in more detail. We found no consistent interactions between young people’s individual SEN status and the proportion of pupils with SEN in their school, indicating that young people attending schools with larger proportions of pupils with SEN are more likely to be bullied than other young people regardless of whether they themselves have SEN.

Finally, we explored the gender mix of the schools young people attended, in order to determine whether single-sex schools might be a more or less damaging environment than mixed schools in terms of the reporting of bullying. The proportion of LSYPE respondents in all-girls’ and all-boys’ schools at the age of 14 is summarised below in

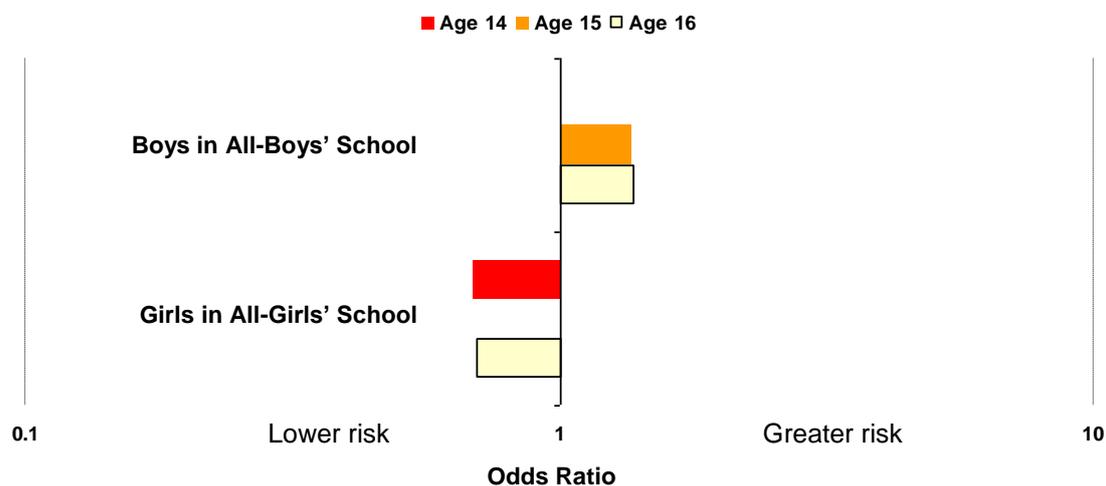
Figure 14.3. The graph shows that around 90% of pupils attended mixed schools, with slightly more attending all-girls' than all-boys' schools. Sample sizes for single-sex schools are therefore relatively small, but we should still be able to identify statistically significant relationships for the more prevalent types of bullying.

**Figure 14.3 Proportion of young people in different school types (by pupil gender) at age 14**



Overall, girls in all-girls' schools were less likely to report being bullied than girls in mixed schools at the ages of 14 and 16, and boys in all-boys' schools were more likely to report being bullied than boys in mixed schools at the ages of 15 and 16. These results are reported below in Figure 14.4. The fact that these results were age-specific may be due to small sample size as noted above.

**Figure 14.4 Relationship between overall bullying and pupil gender of school**

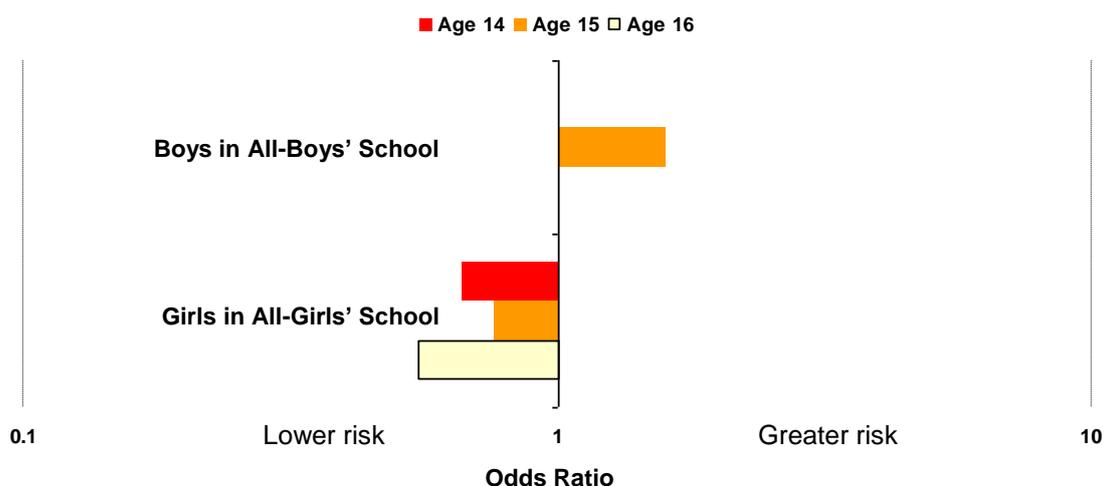


ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

These results indicate that bullying may be more prevalent in all-boys' schools but less prevalent in all-girls' schools after individual factors such as social position and ethnic group are adjusted for. This might suggest that boys are more likely to be bullies than girls, or simply that there is a different pupil dynamic in all-boys' schools which makes bullying more prevalent.

When we looked at specific types of bullying, we found different relationships with school gender for different types of bullying. The results showed that boys in all-boys' schools were slightly more likely to be called names than boys in mixed schools, but only at the age of 15. However, girls in girls' schools were significantly less likely to be bullied in this way than girls at mixed schools at all three ages (see Figure 14.5 below). This appears to indicate that girls attending single-sex schools are less vulnerable than other girls to what is the most common type of bullying overall, particularly among girls.

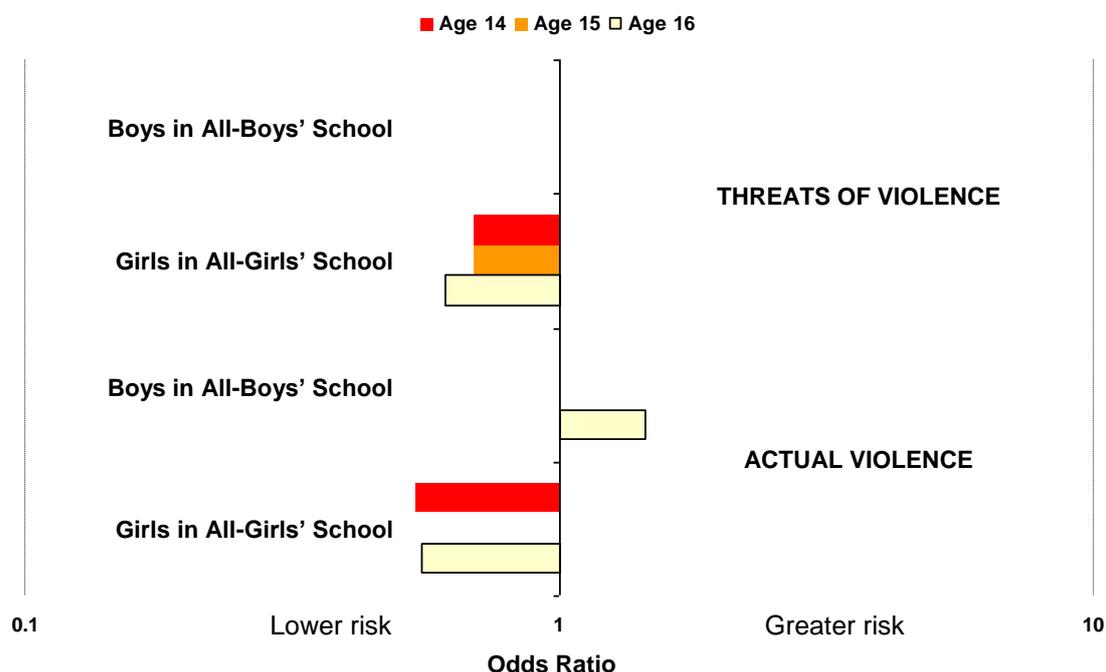
**Figure 14.5 Relationship between name calling and pupil gender of school**



ORs greater than 1 indicate increased odds of having been called names, ORs less than 1 indicate decreased odds

We also found a statistically significant relationship between the pupil gender of a school and the violence-related types of bullying: threats of violence and actual violence (see Figure 14.6 below). Again, these analyses showed little difference for boys between attending a mixed-sex or single-sex school, but the results for girls were quite markedly different. For both threats of violence and actual violence (as with overall bullying), girls attending all-girls' schools were less likely to be bullied in these ways at the ages of 14 and 16 than girls attending mixed schools. These results therefore indicate that all-girls' schools appear to be safer environments for girls than mixed-sex schools, particularly in terms of protecting them from violence.

**Figure 14.6 Relationship between threats of violence / actual violence and pupil gender of school**



ORs greater than 1 indicate increased odds of having been bullied, ORs less than 1 indicate decreased odds

Overall, the results have shown that some school-level factors are significant in affecting young people’s risk of being bullied. There was no relationship with the proportion of white pupils in a school, but other factors did show consistent relationships with bullying. In particular, it is interesting that schools with a higher proportion of pupils receiving FSM were linked with a lower risk of bullying, as this mirrored our results for individual social position in indicating that those with lower social position are less likely to report bullying. However, an increased likelihood of bullying for pupils in schools with more pupils with SEN is of some concern, and may indicate that more attention needs to be paid to these pupils as potential victims. It may also indicate that these young people are potential perpetrators of bullying. Finally, we found evidence that boys attending all-boys’ schools may be more vulnerable to bullying, but that girls attending all-girls’ schools may be less vulnerable than those attending mixed schools.

Taken together, these results indicate that, while we have found many individual-level factors that have important associations with bullying among young people, there are also school-level factors that are also significant. Relatively speaking, however, characteristics of the school were far less important overall than characteristics relating to the young people themselves, accounting for just 3% of the variation in the experiences of bullying.

# 15 Young People's Outcomes at age 16

## Chapter summary

Bullying is associated with lower attainment at Key Stage 4, particularly being forced to hand over money or possessions and social exclusion. Young people who were bullied were also more likely to leave full time school at the age of 16, and particularly likely to become NEET. Again, there was a particularly strong relationship with being forced to hand over money or possessions. Young people who are bullied may therefore become disengaged with school or even education and learning as a whole, leading to poorer future prospects.

This chapter shows how bullying is related to young people's educational outcomes at age 16. In these analyses, bullying is considered as a predictor of other outcomes, namely Key Stage 4 test scores and main activity at the age of 16. However, these are not causal models, and therefore we cannot be absolutely certain that bullying directly leads to changes in educational outcomes, only that the two are associated and that the bullying has been shown to occur earlier in time than the educational outcome. It is entirely possible that both bullying and educational outcomes have common antecedents, but we have tested for this as far as possible in our analyses by presenting the results both before and after adjustment for all the factors (both individual and school-level) included in the analyses presented in previous chapters.

## 15.1 Key Stage 4 scores

Here we examined whether being bullied at any age had implications for the young person's attainment in Year 12. In order to do this we carried out six linear regression analyses in which we examined the effect of reporting being bullied (in any way) and then also examined the different effects associated with reporting being bullied in each of the five different ways measured in LSYPE. In these analyses, the outcome is the difference in GCSE (or equivalent) score that is associated with reporting being bullied as compared to not reporting being bullied.

The results are given in Table 15.1 and show that young people who had been bullied at secondary school at any time from Years 9 to 11 had a significantly lower Key Stage 4 score than those who had not been bullied, and that this relationship remained after adjustment for other factors. On average, young people who had been bullied had a Key Stage 4 score 13 points lower than those who hadn't been bullied after all other factors

that might be related to attainment were adjusted for. This is the equivalent of just over 2 GCSE grades (there are 6 new-style points in each grade, so that for example 58 points would gain a pupil an A\* grade, and 52 points would lead to an A grade).

The difference of 13 points that is associated with being bullied is smaller than the differences in GCSE scores that are associated with being male (-29 points) and with having been in care (-53 points), and therefore being bullied is less strongly associated with attainment than these factors. However, it is roughly equal in magnitude to the difference in attainment associated with having a disability and therefore does still appear to be a very important factor.

**Table 15.1 Relationship between different types of bullying and Key Stage 4 attainment in points**

LSYPE

Outcome = Key Stage 4 points	Unadjusted	Adjusted
Overall Bullying	-23.6	-13.0
Name calling	-13.9	n/s
Exclusion	-43.4	-26.6
Money or Possessions taken	-65.0	-39.4
Threatened by violence	-18.8	n/s
Actual Violence	-33.8	-14.1

n/s: not statistically significant

Table 15.1 shows that before all the other characteristics had been taken into account in the model, all of the relationships between each type of bullying and attainment were statistically significant. Once the relationships were adjusted for other factors that might explain these differences in attainment (such as gender and social position) most of these relationships remained. However, all were reduced in size, indicating that other factors also play an important role with regard to both bullying and attainment (for example, white young people were more likely to have lower attainment, and, as we have seen, also more likely to be bullied). Other factors most strongly related to attainment were gender, ethnic group, mother's highest qualification, socio-economic status, having a special educational need, having changed school and having been in care.

Some types of bullying had much stronger relationships with attainment than others, the strongest being the reporting of having money or possessions taken. This was the least prevalent type of bullying, but these results indicate that it should be a particularly important target for interventions. Not only are the implications of this type of bullying serious in themselves, but it was also found to have a very strong relationship with attainment, being associated with a level of attainment equivalent to 6.5 grades lower at

GCSE after adjustment for other factors, which is a difference between an A\* and an F in one subject. There was also a strong relationship between social exclusion and attainment, an equivalent of 4.5 grades lower after adjustment, or the difference between an A\* and a D in one subject. Relationships between attainment and other types of bullying, including name calling, threats of violence and actual violence were much weaker, with only actual violence remaining statistically significant after adjustment for other factors.

It is possible that these relationships between bullying and attainment are due to a reduced engagement with school and education brought about by the experience of being bullied. If young people are being bullied at school they are less likely to be engaged with learning and may not attend, which could have further consequences for their later attainment. The analyses show that both overtly threatening types of bullying (such as being forced to hand over money or possessions) and more subtle types (such as being excluded from social groups) are strongly related to the attainment of young people.

## **15.2 Main activity at age 16**

Here we examine whether reporting being bullied at any age between 14 and 16 had implications for the young person's main activity at age 16 - that is whether being bullied was related to the young person being in full time school, full time work, part time college and part time work, training, part time work, or not in employment, education or training (NEET). As the outcome variables for each model were dichotomous (2 outcomes, for example either in full time work or not) we carried out separate logistic regression models for each outcome. Table 15.2 shows the results for unadjusted (no other characteristics in the model) and adjusted odds ratios (other characteristics that might explain main activity at age 16 were included in the model).

**Table 15.2 Relationship between different types of bullying and main activity at age 16**

LSYPE

Outcome = Main Activity at Age 16	Odds Ratios	
	Unadjusted	Adjusted
<b>Full Time School</b>		
Overall bullying	0.74	0.81
Social exclusion	0.72	0.78
Having money or possessions taken	0.53	0.56
Threats of violence	0.67	0.76
Actual violence	0.60	0.73
<b>Full Time Work</b>		
Overall bullying	1.22	1.13
Threats of violence	1.49	1.32
<b>Part Time College, Part Time Work</b>		
Having money or possessions taken	4.20	4.42
<b>Training Course or Apprenticeship</b>		
No types of bullying significant		
<b>Part Time Work</b>		
No types of bullying significant		
<b>NEET</b>		
Overall bullying	1.87	1.71
Name calling	1.81	1.78
Social exclusion	2.25	2.00
Having money or possessions taken	2.54	2.08
Threats of violence	1.79	1.57
Actual violence	1.91	1.64

NB: In order to reduce the overall size of the table non-significant results are not reported

The results show that young people who had reported being bullied at secondary school at any time from Years 9 to 11 were significantly less likely to be in full time school in Year 12 than those who had not, even after adjustment for a range of other factors. A possible explanation is that these young people wanted to leave school because the experience of being bullied had put them off staying on. It is also likely that the experience of bullying may have affected their confidence and this may also be a reason for these young people not continuing their education. In addition, as we have seen above, bullying may lead some young people to underachieve and therefore there may simply be fewer options that are open to these young people. Those who had been forced to hand over money or possessions were the least likely to be in full time school compared to those who had not been bullied in this way.

We found that the strongest relationship with overall bullying was seen in the NEET group, with young people who had experienced any type of bullying having almost twice the odds of being NEET compared to those who had not been bullied (even after adjustment for other factors). This is a particular concern, indicating that there may be severe

consequences associated with being bullied. The relationship between bullying and being NEET was especially strong for young people who reported being forced to hand over money or possessions and those who reported being socially excluded, but all types of bullying were significantly associated with becoming NEET. This suggests that bullying is not only associated with young people becoming disengaged from school, but also detached from education and training altogether, which is likely to have serious consequences for their future lives.

Young people who had reported being bullied, particularly if they had reported being threatened with violence, were also more likely to be in full time work at the age of 16. In addition, young people who reported being forced to hand over money or possessions had more than four times the odds of being in part time college and part time work at the age of 16 compared to those who had not been bullied in this way. This shows that there may be another distinct group of bullying victims who, like others, may have become disengaged from the school environment, but who do wish to continue their educational experience outside of the setting in which they were bullied.

Overall, the results show that bullying is strongly linked both with attainment and with main activity at the age of 16. In particular, being forced to hand over money or possessions had a strong relationship with lower attainment at Key Stage 4 and with leaving full time school. This is a type of bullying that may need particular attention even though it is the type with the lowest prevalence in LSYPE. However, all types of bullying were strongly associated with becoming NEET, and therefore bullying is a key aspect to be tackled in the drive to reduce the numbers of young people becoming NEET.

# 16 Conclusions

As we stated in the introduction to this report, the consequences of bullying can be severe. It is therefore of primary importance to gain more information about those young people who are particularly at risk of bullying so that policy interventions can be based on good evidence and targeted at the right groups. This research reinforces and lends weight and solidity to existing knowledge in this area. The results provide robust evidence concerning the characteristics of bullying victims based on a representative cohort of young people aged 14 to 16 attending secondary schools in England between 2004 and 2006. This final chapter will summarise the main findings and key messages that have come out of this research and where possible discuss potential interpretations of the results and how these may relate to future bullying policy.

## 16.1 The prevalence of bullying

Reporting of bullying was much more prevalent among the younger age groups, with a subsequent decrease in bullying as the young people grew older. This decrease may occur because young people find strategies to avoid bullying, for example by conforming to social norms or developing strong friendship groups. There is also evidence to suggest that perpetrators of bullying tend to be older than victims of bullying, so that as young people get older those most likely to bully them may have left school. In addition, bullying may become seen as a less acceptable behaviour as young people get older. The prevalence of reporting of each individual type of bullying also decreased with age, particularly that of name calling, which was by far the most common type of bullying at age 14 but had a more similar prevalence to other types of bullying by the age of 16.

## 16.2 Characteristics of bullying victims

We found a number of characteristics (highlighted in Chapters 5-14) that were associated with young people reporting being bullied.

### Gender

We found that girls were more likely to be bullied than boys at ages 14 and 15, but that this gender difference had disappeared by the time the young people were aged 16. However, girls and boys appeared to experience different types of bullying. Girls were

more likely to report psychological bullying (such as being called names or being socially excluded) whereas boys were more likely to report physical types of bullying (such as having their money or possessions taken, being threatened with violence or being victims of actual violence).

These results show that the mechanisms of bullying may work very differently for girls and boys, which is perhaps not unexpected given the different social relationship styles boys and girls have been shown to display at secondary school (interacting with one another in different ways and forming different types of friendship groups) (Whitehead, 2006). It is also important to note that, although girls were more likely to be bullied overall, boys were more likely to experience the kind of bullying that was most strongly associated with poorer educational outcomes at age 16 (see Chapter 15). Boys are therefore especially likely to fall victim to types of bullying that could be harmful to their future prospects.

## **Ethnicity and Importance of Religion**

Previous studies have found that young people from minority ethnic groups were less likely to be bullied than white young people, and this study supports these results. Since we were also able to adjust for a range of other factors, the results can therefore add robustness to these earlier conclusions. We found little relationship between bullying and the importance of a young person's religion after their ethnic group had been taken into account. However, we did find that young people whose religion was important to them were more likely to report being called names than other young people.

This indicates that, while racist bullying does not appear to be a particular problem in this study, name calling directed against a young person's religion may be more prevalent and may reflect recent wider trends of prejudice within British society since 2001 which have targeted particular religious groups rather than ethnic groups (Sheridan and Gillett, 2005). These results are important, as they could reflect a changing focus of young people's prejudice and suggest further education is needed in order to help young people accept all forms of diversity.

## **Special Educational Needs**

Young people with SEN were more likely than other young people to report all types of bullying at all ages, and were particularly likely to report having been forced to hand over their money or possessions. These results indicate that young people with SEN are a group particularly vulnerable to bullying, and remain so throughout Years 9 through to 11.

The definition of SEN used in this study encompasses a wide range of needs. It is therefore difficult to determine what the mechanisms are that link SEN with bullying, but a likely explanation is that young people with SEN stand out as being different from other young people. Further analyses examining the different types of SEN would be useful in order to investigate this relationship further.

## **Disabilities**

As with SEN pupils, young people with disabilities were more likely than other young people to report all types of bullying. Also similar to young people with SEN, they were especially likely to report being forced to hand over money or possessions. However, unlike young people with SEN, the relationship between disability and bullying decreased in strength as young people grew older.

The results show that young people with disabilities are another group that are vulnerable to bullying. The fact that the relationship reduces in magnitude with age is somewhat encouraging, but there are still strong suggestions from these results that young people who are perceived to be different by their peers in some way are particularly vulnerable to bullying.

## **Being in Care**

There was a strong relationship between having been in care and being bullied, and one which increased with age for most types of bullying. As with other characteristics noted above that mark young people out as different from others, these young people were particularly likely to report having had money or possessions taken from them, and they were also more likely to have been continuously bullied between the ages of 14 and 16.

Again, as with having SEN or a disability, this may be driven by these young people being identified as different. Some young people who have been in care may also have experienced a greater degree of conflict and neglect in their lives, which may make them more vulnerable and consequently increase their risk of being bullied.

## **Social Position**

We looked at three different measures of social position, which included socio-economic status, household tenure and the level of education of the young person's mother. The socio-economic status of the young person's parents, or whether the house they lived in was owned or not made little difference to their risk of being bullied. However, we did find that young people whose mothers had higher qualifications were more likely to be bullied at the ages of 15 and 16.

We therefore found little relationship between bullying and socio-economic status or household tenure, suggesting that bullying is not related to social position as we might have expected, and that it is not those young people who are the most socially disadvantaged who are also the most likely to report being bullied. Instead, there is some evidence to suggest that those with better-educated mothers are more likely to be bullied.

## **Family Structure and Caring Responsibilities in the Home**

Young people living in step families (and to a lesser extent those living in single parent families or with neither biological parent) were more likely to be bullied. They were especially more likely to report being threatened with violence or being the victim of actual violence at all ages. Young people who had caring responsibilities in their household were also more likely to be victims of bullying, but the results for specific types of bullying were somewhat equivocal, probably due to small sample sizes (only about 5% of young people were carers).

These results indicate that young people who have caring responsibilities in their household or may have some history of household instability are more likely to report being bullied. These results are less strong and consistent than those for SEN, disability or having been in care, but they still indicate that these groups of young people tend to be more vulnerable to bullying.

## **Parental Reports of Bullying**

Young people who reported being bullied at the age of 14 or 15 and whose parents also reported them being bullied were more likely to 'escape' bullying by the age of 16 than those whose parents did not report that they were being bullied. This relationship was particularly strong for young people whose parents had also reported that they were being bullied at the age of 14.

This suggests that parental awareness of bullying may be an important factor in helping young people to escape being bullied, particularly if parents are aware at an earlier age. It is possible that young people whose parents are aware that they are being bullied already have a closer relationship with their parents, and that this familial support makes them more likely to escape from bullying through more effective coping strategies. However, it is also likely that some parents are able to assist in stopping the young person from being bullied, and this therefore implies that young people should be encouraged to tell their parents if they are being bullied.

## **Changing School**

Young people who had changed school before the second year of the study (when they were aged 14-15) were more likely to experience most types of bullying than other young people. They were more likely to be 'continuing victims' between ages 14 and 16, and were also more likely to become victims of bullying at their new school if they had not previously been bullied. On the other hand, some young people who were already being bullied were more likely to 'escape' being bullied if they changed school. These different findings reflect the different experiences associated with changing school that young people go through. These relationships did not hold for young people who had changed school before the third year of the study, although this may be due to the fact that changing school was less common in this year and sample sizes were relatively small.

An explanation for these results may be that young people who move schools are less likely to be integrated into social groups, and may therefore be more isolated and easier targets for bullying with fewer friends to protect them. However, other young people appear to escape bullying by changing school, indicating that in some cases this can be a positive strategy for some young people. It would be useful to clarify these relationships further in future studies by asking young people why they changed school, i.e. whether this was indeed related to bullying.

## **School Characteristics**

We found a number of school-level characteristics associated with bullying, including the proportion of pupils receiving free school meals, the proportion of pupils with special educational needs and the pupil gender of the school. Pupils attending schools with higher proportions of pupils receiving FSM were less likely to be bullied, and particularly less likely to experience name calling. However, pupils attending schools with more pupils with

SEN were more likely to be bullied, again particularly with name calling (the most common type of bullying identified). Boys attending all-boys' schools were more likely to be bullied than those attending mixed schools, but girls attending all-girls' schools were actually less likely to be bullied.

These results show that characteristics of a school can impact on young people's risks of being bullied in different ways. These results therefore add weight to the idea that school-level interventions may be beneficial to reduce bullying in some cases, particularly in schools with high proportions of pupils with SEN. Overall, however, the level of variation in young people's experiences that was attributable to the different kinds of schools they attended was minimal compared to individual characteristics of the young people themselves.

### **16.3 How does bullying relate to attainment?**

One of the most important findings in this research was how bullying relates to attainment. The analysis clearly shows that, even having adjusted for other important factors, educational attainment at GCSE level was significantly lower if the young person had reported being bullied at any time between ages 14 and 16. This was particularly true for young people who had been forced to hand over money or possessions, and for young people who had been socially excluded. Clearly, by targeting those young people who are at greatest risk of being bullied, there is an opportunity to not only increase their immediate wellbeing, but also their attainment at age 16 and consequently their future prospects.

The relationship between bullying and attainment was reduced when we adjusted for a range of other factors that might explain this association. However, the fact that the relationship for most types of bullying remained statistically significant after this adjustment suggests that whether a young person has been bullied or not is important for their attainment. This may be related to issues such as disengagement from school and truancy, which are likely to be consequences of bullying. If bullying in schools can be reduced, more young people may remain engaged with education and their subsequent attainment may be higher.

## 16.4 How does bullying affect main activity at age 16?

The analyses also showed that young people who had reported being bullied were less likely to be in full time education at age 16 than those who had not reported being bullied. These young people appeared to be involved in three main alternative activities: they were more likely to be in full time work (particularly in the case of those who had reported being threatened with violence or being a victim of actual violence), and were more likely to be in part time college and part time work (particularly if they had been forced to hand over money or possessions), but most of all they were more likely to be NEET (for all types of bullying but particularly for those who had been socially excluded or forced to hand over money or possessions).

This indicates that bullying is strongly associated with young people not remaining in school beyond the compulsory age, and the mechanisms are likely to be similar to those linking bullying and attainment, although lower attainment could also be a driving factor. These results were little altered by adjustment for other factors, indicating that there is a strong relationship between bullying and main activity at the age of 16, independent of the other factors we were able to test for (see Table 4.1). It is likely that young people who have been bullied at school have a stronger desire to leave this environment than other young people. For some, this may mean leaving education altogether to go into full time work, but for others this may have particularly negative consequences. Young people who had been bullied were a lot more likely to become NEET than other young people, suggesting that being bullied can have a huge impact on young people's futures even after they have left the environment in which they were bullied. For these reasons schools must be able to identify and address this bullying.

## 16.5 Limitations to the study

There are several limitations to this study. Firstly and most notably we were unable to identify who the bullies were, and it is likely that some of the victims may have also been bullies themselves. Also, although we can infer that certain characteristics are risk factors for being bullied, we were unable to confirm direct causal links. However, in some cases the suggestion of a causal relationship is stronger: for example, it is likely when looking at school attainment and main activity at age 16 that bullying may indeed play a causal role, as bullying was measured at an earlier stage in the young people's lives than their educational outcomes.

There are other key variables that were not included in this study which would have enhanced the results, most notably sexual orientation, which was another key potential characteristic of bullying victims identified by DCSF. LSYPE did not collect this information when the young people were 14, 15 and 16, but it has been included in the survey at age 18 so will be available for future research. We were also unable to look at individual religions because of the strong overlap between religion and a young person's ethnicity. In further investigation, religion was found to have a weaker relationship with bullying than ethnicity which is why this was the variable chosen to be excluded from the analyses. Instead, a variable that records the importance of religion to a young person was used, as this was not as strongly related to ethnicity and also had an independent relationship with bullying.

The study could have been enhanced by breaking down SEN into different types. Without being able to distinguish between different types of SEN it is difficult to form any clear conclusions and recommendations from this part of the analysis, other than to recommend additional support for pupils with SEN and possibly future interventions to increase understanding and tolerance of diversity within the classroom.

A final potential limitation relates to reporting of bullying in LSYPE. As bullying is self-reported, this measure is therefore open to interpretation and this may differ between young people of different backgrounds, cultures and characters. However, self reports of bullying are likely to be the best available measure for large-scale population studies such as LSYPE in which bullying is not the main focus. In addition, young people report whether they were bullied or not in a self-completion section of the interview in which they enter their answers directly into a laptop computer and are reassured that the interviewer does not have access to their answers. As a consequence, we do not feel that any major inaccuracies are likely to be present in the results as a consequence of using self-reported bullying as a measure. Moreover, as bullying is to an extent about perception, it is likely that if young people feel they are being bullied it is also likely to affect them as we have shown.

Despite these limitations, we believe that LSYPE is a rich and useful data source for examining bullying among young people, and that the results obtained from this study are robust. Where these have been based on relatively small sample sizes this has been clearly recognised in the text, and such results have only been included if they were consistent across different age groups and/or types of bullying. Below, we outline some recommendations for further research which will be possible with future data from LSYPE as well as from other potential sources.

## 16.6 Recommendations

This study has produced a number of recommendations for potential future analysis and policy development. Most importantly, we have identified a number of characteristics of bullying victims and the kind of schools that these young people are more likely to attend which should help inform policy in the development of future bullying initiatives. These characteristics appear largely to centre on perceived difference. This includes young people whose religion is important to them, those with SEN or disabilities, those who have been in care, those who live in step families, those who have caring responsibilities in the home, and those who have recently arrived in a new school. There are also other characteristics that make young people more likely to be victims of certain types of bullying. For example, boys are more likely to be physically bullied, whereas girls are more likely to be psychologically bullied, and the experiences of both are different depending whether the young people attend mixed or single sex schools. This suggests that a range of different approaches is needed both to identify and deal with bullying in different situations and contexts.

As noted above, there are additional characteristics of young people that we were not able to explore in this research which may also be related to bullying, such as sexual orientation. As this is to be included in future LSYPE datasets, such an analysis will be possible at a later stage. Also, breaking down analyses into the different types of SEN may shed more light on the relationship identified between this characteristic and bullying. There may also be additional characteristics to add to the list of vulnerable characteristics identified in this study, and such a list is also likely to develop further in future as different characteristics may be more stigmatising at different times. The list of characteristics identified here is therefore by no means an exhaustive list.

It would also be of value to further investigate the difference in reports of bullying by the young person and by their parents. For instance, comparisons could be made between those young people who have reported being bullied but whose parents did not believe they were being bullied and those young people where bullying was reported both by the pupil and by their parents. Such analyses would be important in order to identify the mechanisms behind parental awareness of bullying and potentially to identify ways in which young people who are being bullied in Year 9 or 10 may escape this bullying.

In conclusion, this study has sought to explore the characteristics of bullying victims as well as the relationship bullying has with educational outcomes. It has identified a wide range of characteristics that are associated with being bullied, many of which identify groups who are already vulnerable in other ways such as having a disability or Special

Educational Need for example. It will be important to target future policy initiatives towards these groups in order to have the greatest impact on bullying, which has also been shown to be related to poorer educational outcomes and being NEET. A greater although somewhat more difficult ambition would be to increase understanding and tolerance of diversity in the classroom and reduce the victimisation of those who are perceived to be different. This might be partly achieved through an increase in lessons that focus on issues relating to diversity. It is encouraging that we found the prevalence of bullying decreasing with age, but we also suggest that policy interventions would have the greatest benefit if targeted at younger age groups.

# References

- DCSF (2007). *Safe to Learn: embedding anti-bullying work in schools*  
<http://www.teachernet.gov.uk/wholeschool/behaviour/tacklingbullying/safetolearn/>
- DCSF (2007b). *The Children's Plan* The Stationery Office, Norwich
- DCSF (2008a). *Care Matters: Time to deliver for children in care. An implementation plan.* HM Government, Association of Directors of Children's Services and Local Government Association.
- DCSF (2008b). *Staying Safe: Action Plan. Department for Children, Schools and Families,* Nottingham.
- DCSF (2008c). *Youth Cohort Study and Longitudinal Study of Young People in England: The activities and experiences of 16 year olds: England 2007.* DCSF Statistical Bulletin, Office of National Statistics.
- DFES (2006). *Bullying Around Racism, Religion and Culture.* Department for Education and Skills, London.
- Eslea M and Mukhtar K (2000). Bullying and racism among Asian schoolchildren in Britain. *Educational Research* 42: 207.
- Goldstein H (2007). Becoming familiar with multilevel modelling. *Significance* 4: 133.
- Knox E and Conti-Ramsden G (2003). Bullying risks of 11-year-old children with specific language impairment (SLI): does school placement matter? *International Journal of Language and Communication Disorders* 38: 22.
- Marks, G. N. (2008) Are father's or mother's socioeconomic characteristics more important influences on student performance? Recent international evidence. *Social Indicators Research* 85: 2 293
- Moran S, Smith PK, Thompson D and Whitney I (1993). Ethnic differences in experiences of bullying: Asian and white children. *British Journal of Educational Psychology* 63: 431.

Mynard H and Joseph S (2000). Development of the multidimensional peer-victimization scale. *Aggressive Behavior* 26: 169.

Norwich B and Kelly N (2002). Pupils' views on inclusion: moderate learning difficulties and bullying in mainstream and special schools. *British Educational Research Journal* 30: 43.

Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association*, 285: 2094

Ofsted (2007). *TellUs2 Questionnaire Summary Sheet: National*. Accessed from: [www.ofsted.org.uk](http://www.ofsted.org.uk).

Olweus D (1997). Bully/victim problems in school: facts and intervention. *European Journal of Psychology of Education* 12: 495.

Schwartz, D., Dodge, K. A., Pettit, G. S., Bates, J. E. (1997). The Early Socialization of Aggressive Victims of Bullying. *Child Development* 68: 665

Sheridan, L.P. and Gillett, R. (2005). Major world events and discrimination. *Asian Journal of Social Psychology* 8(2): 191.

Smith PK, Talamelli L, Cowie H, Naylor P and Chauhan P (2004). Profiles of non-victims, escaped victims, continuing victims and new victims of school bullying. *British Journal of Educational Psychology* 74: 565.

Solberg, M., Olweus, D. and Endresen, I. (2007). Bullies and victims at school: are they the same pupils? *British Journal of Education and Psychology* 77: 441

Treasury (2008). *PSA Delivery Agreement 13: Improve children and young people's safety*. The Stationery Office, London.

Whitehead, J. M. (2006). Starting school: why girls are already ahead of boys *Teacher Development: An international journal of teachers' professional development* Vol. 10: 249

# Appendix A Tables of results

Odds Ratio tables showing significant results in bold.

**Table 16.1 Complete list of relationships between overall bullying and other characteristics**

Characteristics	Odds Ratios		
	Age 14	Age 15	Age 16
<i>LSYPE</i>			
<b>Sex of young person</b>			
male	1.00	1.00	1.00
female	<b>1.22</b>	<b>1.13</b>	1.07
<b>SEN</b>			
Yes	<b>1.57</b>	<b>1.54</b>	<b>1.66</b>
No	1.00	1.00	1.00
<b>Tenure</b>			
owned/mortgage	1.00	1.00	1.00
rented from council/housing association	1.10	1.10	1.16
rented privately	<b>1.20</b>	1.15	1.17
other	<b>1.70</b>	1.03	0.92
<b>Family Type</b>			
2 parents	1.00	1.00	1.00
step family	<b>1.32</b>	<b>1.43</b>	1.17
1 parent	<b>1.23</b>	<b>1.21</b>	1.11
<b>Caring responsibilities household</b>			
Yes	<b>1.33</b>	<b>1.23</b>	<b>1.40</b>
No	1.00	1.00	1.00
<b>NSSEC 4 categories</b>			
Managerial and Professional	1.00	1.00	1.00
Intermediate	1.13	1.11	1.03
Routine and manual	0.92	0.96	1.03
Never worked and long term unemployed	0.96	0.97	1.16
<b>Ethnicity</b>			
White	<b>1.00</b>	1.00	1.00
Mixed	<b>0.82</b>	0.95	<b>0.96</b>
Indian	<b>0.64</b>	<b>0.47</b>	<b>0.48</b>
Pakistani	<b>0.65</b>	<b>0.68</b>	<b>0.58</b>
Bangladeshi	<b>0.62</b>	<b>0.61</b>	<b>0.55</b>
black Caribbean	<b>0.65</b>	<b>0.65</b>	<b>0.70</b>
black African	<b>0.98</b>	<b>0.55</b>	<b>0.55</b>
Other	0.98	<b>0.71</b>	0.95
<b>School gender</b>			
Mixed	1.00	1.00	1.00
Boys	1.17	<b>1.36</b>	<b>1.37</b>
Girls	<b>0.69</b>	0.81	<b>0.70</b>
<b>First Language</b>			
English	1.00	1.00	1.00
Other	1.03	1.15	0.98

<b>Religion</b>			
None	1.00	1.00	1.00
Very important	1.04	1.14	1.22
Fairly important	0.94	0.94	0.91
Not very important	1.03	0.97	<b>0.82</b>
Not at all important	1.08	0.99	0.90
<b>Disability/long term illness or health problem</b>			
Disability	<b>1.57</b>	<b>1.18</b>	<b>1.19</b>
no disability	1.00	1.00	1.00
<b>Ever in Care</b>			
Yes	<b>1.56</b>	<b>1.72</b>	<b>1.75</b>
No	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>			
no qualification	1.00	1.00	1.00
level 1 below	1.10	<b>1.41</b>	<b>1.31</b>
GCSE A-C	1.11	<b>1.33</b>	<b>1.41</b>
GCE A Level	1.12	<b>1.32</b>	<b>1.42</b>
Higher ed below degree	1.15	<b>1.45</b>	<b>1.55</b>
Degree	1.09	<b>1.39</b>	<b>1.48</b>
<b>School change</b>			
different school	n/a	<b>1.76</b>	1.96
same school	n/a	1.00	1.00
% of pupils eligible for fsm	<b>1.00</b>	<b>0.99</b>	<b>0.99</b>
% of pupils white	<b>1.00</b>	1.00	1.00
% of pupils with special needs with or without statements	<b>1.01</b>	<b>1.01</b>	<b>1.01</b>
pupil teacher ratio	<b>1.03</b>	<b>1.03</b>	1.01
Figures in bold are significant at the 5% level, other figures are non-significant			

**Table 16.2 Complete list of relationships between being called names and other characteristics**

*LSYPE*

Characteristics	Odds Ratios		
	Age 14	Age 15	Age 16
<b>Sex of young person</b>			
Male	1.00	1.00	1.00
Female	<b>2.16</b>	<b>2.50</b>	<b>2.37</b>
<b>SEN</b>			
Yes	<b>1.80</b>	<b>1.59</b>	<b>1.54</b>
No	1.00	1.00	1.00
<b>Tenure</b>			
owned/mortgage	1.00	1.00	1.00
rented from council/housing association	0.95	1.10	1.13
rented privately	<b>1.27</b>	1.04	1.15
Other	<b>1.52</b>	0.86	0.85
<b>Family Type</b>			
2 parents	1.00	1.00	1.00
step family	<b>1.24</b>	<b>1.42</b>	1.19
1 parent	<b>1.20</b>	<b>1.16</b>	1.09
<b>Caring responsibilities household</b>			
Yes	<b>1.50</b>	1.16	1.26
No	1.00	1.00	1.00
<b>NSSEC 4 categories</b>			
Managerial and Professional	1.00	1.00	1.00
Intermediate	1.17	1.01	1.04
Routine and manual	0.92	0.66	0.91
Never worked and long term unemployed	0.96	0.88	1.15
<b>Ethnicity</b>			
White	1.00	1.00	1.00
Mixed	<b>0.71</b>	1.00	0.88
Indian	<b>0.57</b>	<b>0.60</b>	<b>0.48</b>
Pakistani	<b>0.51</b>	0.71	0.74
Bangladeshi	<b>0.52</b>	<b>0.59</b>	0.69
black Caribbean	<b>0.51</b>	<b>0.61</b>	<b>0.54</b>
black African	<b>0.76</b>	<b>0.63</b>	<b>0.54</b>
Other	0.83	0.92	1.03
<b>School gender</b>			
Mixed	1.00	1.00	1.00
Boys	1.11	<b>1.59</b>	1.40
Girls	<b>0.66</b>	<b>0.76</b>	<b>0.55</b>
<b>First Language</b>			
English	1.00	1.00	1.00
Other	1.10	0.98	1.29
<b>Religion</b>			
None	1.00	1.00	1.00
Very important	<b>1.40</b>	<b>1.37</b>	<b>1.33</b>
Fairly important	1.05	0.98	0.96
Not very important	1.04	0.97	<b>0.79</b>
Not at all important	1.15	0.96	<b>0.80</b>

<b>Disability/long term illness or health problem</b>			
Disability	<b>1.48</b>	<b>1.36</b>	<b>1.39</b>
no disability	1.00	1.00	1.00
<b>Ever in Care</b>			
Yes	<b>1.54</b>	1.49	0.97
No	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>			
no qualification	1.00	1.00	1.00
level 1 below	1.09	<b>1.43</b>	<b>1.51</b>
GCSE A-C	1.07	<b>1.40</b>	<b>1.66</b>
GCE A Level	1.03	<b>1.27</b>	<b>1.43</b>
Higher ed below degree	1.14	<b>1.28</b>	<b>1.61</b>
Degree	1.15	<b>1.32</b>	<b>1.69</b>
<b>School change</b>			
different school	n/a	<b>1.84</b>	1.11
same school	n/a	1.00	1.00
% of pupils eligible for fsm	<b>0.99</b>	<b>0.99</b>	<b>0.99</b>
% of pupils white	1.00	1.00	1.00
% of pupils with special needs with or without statements	<b>1.01</b>	<b>1.01</b>	<b>1.01</b>
pupil teacher ratio	1.02	1.02	1.01

Figures in bold are significant at the 5% level, figures not in bold are non-significant

---

**Table 16.3 Complete list of relationships between social exclusion and other characteristics**

*LSYPE*

Characteristics	Odds Ratios		
	Age 14	Age 15	Age 16
<b>Sex of young person</b>			
Male	1.00	1.00	1.00
Female	<b>1.44</b>	<b>1.65</b>	<b>1.47</b>
<b>SEN</b>			
Yes	<b>1.47</b>	<b>1.41</b>	<b>2.29</b>
No	1.00	<b>1.00</b>	1.00
<b>Tenure</b>			
owned/mortgage	1.00	1.00	1.00
rented from council/housing association	<b>1.19</b>	1.07	1.23
rented privately	1.15	0.94	1.24
Other	0.85	0.90	<b>0.41</b>
<b>Family Type</b>			
2 parents	1.00	1.00	1.00
step family	<b>1.26</b>	<b>1.48</b>	1.03
1 parent	<b>1.21</b>	<b>1.25</b>	1.04
<b>Caring responsibilities household</b>			
Yes	<b>1.26</b>	1.12	1.21
No	1.00	1.00	1.00
<b>NSSEC 4 categories</b>			
Managerial and Professional	1.00	1.00	1.00
Intermediate	0.94	1.05	1.09
Routine and manual	0.95	0.93	<b>1.21</b>
Never worked and long term unemployed	0.99	1.00	1.12
<b>Ethnicity</b>			
White	1.00	1.00	1.00
Mixed	0.91	1.05	0.89
Indian	<b>0.54</b>	<b>0.39</b>	0.64
Pakistani	0.74	1.04	0.83
Bangladeshi	0.37	0.72	0.53
black Caribbean	0.84	0.92	1.15
black African	0.72	0.71	0.70
Other	<b>0.59</b>	0.93	1.23
<b>School gender</b>			
Mixed	1.00	1.00	1.00
Boys	0.78	1.23	1.21
Girls	0.88	0.86	1.15
<b>First Language</b>			
English	1.00	1.12	1.00
Other	1.00	1.00	0.99
<b>Religion</b>			
None	1.00	1.00	1.00
Very important	0.92	1.14	0.81
Fairly important	0.96	0.96	0.87
Not very important	0.99	0.86	<b>0.80</b>
Not at all important	0.95	0.89	0.89

<b>Disability/long term illness or health problem</b>			
Disability	<b>1.58</b>	<b>1.20</b>	<b>1.42</b>
no disability	1.00	1.00	1.00
<b>Ever in Care</b>			
Yes	<b>1.67</b>	<b>1.94</b>	<b>1.99</b>
No	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>			
no qualification	1.00	1.00	1.00
level 1 below	1.06	<b>1.39</b>	<b>1.37</b>
GCSE A-C	1.15	1.17	<b>1.51</b>
GCE A Level	1.10	1.13	1.09
Higher ed below degree	1.19	1.25	<b>1.63</b>
Degree	1.12	1.10	<b>1.43</b>
<b>School change</b>			
different school	n/a	<b>1.56</b>	2.36
same school	n/a	1.00	1.00
% of pupils eligible for fsm	1.00	1.00	1.00
% of pupils white	1.00	1.00	1.00
% of pupils with special needs with or without statements	<b>0.99</b>	1.00	1.00
pupil teacher ratio	0.98	0.98	1.02

Figures in bold are significant at the 5% level, figures not in bold are non-significant

---

**Table 16.4 Complete list of relationships between being forced to hand over money or possessions and other characteristics**

*LSYPE*

Characteristics	Odds Ratios		
	Age 14	Age 15	Age 16
<b>Sex of young person</b>			
male	1.00	1.00	1.00
female	<b>0.67</b>	<b>0.70</b>	0.79
<b>SEN</b>			
Yes	<b>1.93</b>	<b>2.04</b>	<b>3.37</b>
No	1.00	1.00	1.00
<b>Tenure</b>			
owned/mortgage	1.00	1.00	1.00
rented from council/housing association	<b>0.73</b>	0.69	<b>2.62</b>
rented privately	0.77	0.99	1.82
other	1.01	0.26	0.00
<b>Family Type</b>			
2 parents	1.00	1.00	1.00
step family	1.14	<b>1.63</b>	0.31
1 parent	1.23	1.42	1.35
<b>Caring responsibilities household</b>			
Yes	1.37	1.51	0.62
No	1.00	1.00	1.00
<b>NSSEC 4 categories</b>			
Managerial and Professional	1.00	1.00	1.00
Intermediate	1.31	<b>1.91</b>	0.44
Routine and manual	1.00	1.03	<b>0.50</b>
Never worked and long term unemployed	<b>1.46</b>	0.81	0.54
<b>Ethnicity</b>			
White	1.00	1.00	1.00
Mixed	1.13	0.45	1.17
Indian	0.91	1.00	1.11
Pakistani	1.15	0.43	1.41
Bangladeshi	1.15	1.06	0.64
black Caribbean	1.19	<b>0.31</b>	0.75
black African	<b>2.22</b>	0.64	0.33
Other	1.47	0.48	1.73
<b>School gender</b>			
Mixed	1.00	1.00	1.00
Boys	1.18	1.30	1.25
Girls	0.90	0.93	<b>0.10</b>
<b>First Language</b>			
English	1.00	1.00	1.00
Other	0.88	1.68	0.59
<b>Religion</b>			
None	1.00	1.00	1.00
Very important	1.00	1.14	<b>2.25</b>
Fairly important	1.23	0.61	0.70
Not very important	1.19	<b>0.60</b>	0.50
Not at all important	0.99	0.89	<b>0.71</b>

<b>Disability/long term illness or health problem</b>			
Disability	<b>1.61</b>	1.31	<b>2.13</b>
no disability	1.00	1.00	1.00
<b>Ever in Care</b>			
Yes	<b>2.23</b>	<b>3.66</b>	2.24
No	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>			
no qualification	1.00	1.00	1.00
level 1 below	0.92	1.22	1.52
GCSE A-C	0.75	0.98	1.40
GCE A Level	0.73	0.90	0.69
Higher ed below degree	0.73	0.83	0.66
Degree	<b>0.61</b>	0.72	1.01
<b>School change</b>			
different school	n/a	1.43	2.76
same school	n/a	1.00	1.00
% of pupils eligible for fsm	1.00	0.99	0.99
% of pupils white	1.00	0.99	0.99
% of pupils with special needs with or without statements	1.01	<b>1.03</b>	1.00
pupil teacher ratio	<b>1.06</b>	1.05	<b>1.17</b>

Figures in bold are significant at the 5% level, figures not in bold are non-significant

---

**Table 16.5 Complete list of relationships between being threatened with violence and other characteristics**

LSYPE

Characteristics	Odds Ratios		
	Age 14	Age 15	Age 16
<b>Sex of young person</b>			
male	1.00	1.00	1.00
female	<b>0.78</b>	<b>0.82</b>	<b>0.79</b>
<b>SEN</b>			
Yes	<b>1.71</b>	<b>1.54</b>	<b>1.34</b>
No	1.00	1.00	1.00
<b>Tenure</b>			
owned/mortgage	1.00	1.00	1.00
rented from council/housing association	1.09	1.09	1.09
rented privately	<b>1.29</b>	1.21	0.90
other	1.39	1.10	1.25
<b>Family Type</b>			
2 parents	1.00	1.00	1.00
step family	<b>1.29</b>	<b>1.44</b>	<b>1.39</b>
1 parent	<b>1.16</b>	1.12	<b>1.19</b>
<b>Caring responsibilities household</b>			
Yes	<b>1.26</b>	1.20	1.26
No	1.00	1.00	1.00
<b>NSSEC 4 categories</b>			
Managerial and Professional	1.00	1.00	1.00
Intermediate	1.21	<b>1.31</b>	1.11
Routine and manual	1.01	0.95	1.09
Never worked and long term unemployed	1.02	1.00	<b>1.32</b>
<b>Ethnicity</b>			
White	1.00	1.00	1.00
Mixed	<b>0.61</b>	0.92	0.90
Indian	<b>0.48</b>	<b>0.34</b>	<b>0.38</b>
Pakistani	<b>0.56</b>	<b>0.46</b>	0.71
Bangladeshi	<b>0.51</b>	<b>0.23</b>	0.45
black Caribbean	0.77	<b>0.56</b>	0.65
black African	0.80	<b>0.42</b>	<b>0.53</b>
Other	0.72	<b>0.54</b>	0.98
<b>School gender</b>			
Mixed	1.00	1.00	1.00
Boys	1.02	1.30	1.20
Girls	<b>0.69</b>	<b>0.69</b>	<b>0.61</b>
<b>First Language</b>			
English	1.00	1.00	1.00
Other	1.21	1.04	1.04
<b>Religion</b>			
None	1.00	1.00	1.00
Very important	1.03	1.18	1.02
Fairly important	<b>0.85</b>	0.94	0.90
Not very important	0.99	0.92	<b>0.78</b>
Not at all important	1.05	0.96	0.82

<b>Disability/long term illness or health problem</b>			
Disability	<b>1.47</b>	<b>1.20</b>	1.07
no disability	1.00	1.00	1.00
<b>Ever in Care</b>			
Yes	<b>1.72</b>	<b>2.05</b>	<b>1.91</b>
No	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>			
no qualification	1.00	1.00	1.00
level 1 below	<b>1.24</b>	<b>1.38</b>	<b>1.25</b>
GCSE A-C	1.13	<b>1.23</b>	<b>1.47</b>
GCE A Level	1.13	<b>1.34</b>	<b>1.46</b>
Higher ed below degree	1.13	<b>1.47</b>	<b>1.49</b>
Degree	1.13	<b>1.54</b>	<b>1.65</b>
<b>School change</b>			
different school	n/a	<b>1.83</b>	1.79
same school	n/a	1.00	1.00
% of pupils eligible for fsm	1.00	1.00	<b>0.99</b>
% of pupils white	1.00	<b>1.00</b>	1.00
% of pupils with special needs with or without statements	1.00	<b>1.01</b>	<b>1.01</b>
pupil teacher ratio	1.03	1.02	0.98

Figures in bold are significant at the 5% level, figures not in bold are non-significant

---

**Table 16.6 Complete list of relationships between being subjected to actual violence and other characteristics**

*LSYPE*

Characteristics	Odds Ratios		
	Age 14	Age 15	Age 16
<b>Sex of young person</b>			
male	1.00	1.00	1.00
female	<b>0.48</b>	<b>0.44</b>	<b>0.52</b>
<b>SEN</b>			
Yes	<b>1.57</b>	<b>1.57</b>	<b>1.71</b>
No	1.00	1.00	1.00
<b>Tenure</b>			
owned/mortgage	1.00	<b>1.00</b>	1.00
rented from council/housing association	1.12	<b>1.21</b>	1.24
rented privately	<b>1.30</b>	1.17	0.92
other	1.15	1.13	1.00
<b>Family Type</b>			
2 parents	1.00	1.00	1.00
step family	<b>1.21</b>	<b>1.47</b>	<b>1.27</b>
1 parent	<b>1.19</b>	1.12	0.95
<b>Caring responsibilities household</b>			
Yes	<b>1.33</b>	<b>1.33</b>	1.30
No	1.00	1.00	1.00
<b>NSSEC 4 categories</b>			
Managerial and Professional	1.00	1.00	1.00
Intermediate	<b>1.35</b>	<b>1.35</b>	1.17
Routine and manual	1.08	1.16	<b>3.10</b>
Never worked and long term unemployed	1.14	1.13	1.24
<b>Ethnicity</b>			
White	1.00	1.00	1.00
Mixed	<b>0.79</b>	<b>1.36</b>	0.86
Indian	<b>0.61</b>	<b>0.54</b>	<b>0.30</b>
Pakistani	<b>0.61</b>	0.80	<b>0.52</b>
Bangladeshi	<b>0.57</b>	<b>0.40</b>	<b>0.23</b>
black Caribbean	<b>0.73</b>	0.95	0.78
black African	0.92	0.87	<b>0.44</b>
Other	0.75	<b>0.51</b>	<b>0.50</b>
<b>School gender</b>			
Mixed	1.00	1.00	1.00
Boys	1.19	1.21	<b>1.45</b>
Girls	<b>0.54</b>	0.75	<b>0.55</b>
<b>First Language</b>			
English	1.00	1.00	1.00
Other	1.11	1.23	1.11
<b>Religion</b>			
None	1.00	1.00	1.00
Very important	1.03	1.08	1.32
Fairly important	0.92	0.94	1.00
Not very important	0.89	0.96	<b>0.80</b>
Not at all important	0.92	1.10	0.94

<b>Disability/long term illness or health problem</b>			
Disability	<b>1.47</b>	<b>1.20</b>	1.07
no disability	1.00	1.00	1.00
<b>Ever in Care</b>			
Yes	<b>1.72</b>	<b>2.05</b>	<b>1.91</b>
No	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>			
no qualification	1.00	1.00	1.00
level 1 below	<b>1.24</b>	<b>1.38</b>	1.31
GCSE A-C	1.13	<b>1.23</b>	<b>1.35</b>
GCE A Level	<b>1.13</b>	<b>1.34</b>	1.30
Higher ed below degree	<b>1.13</b>	<b>1.47</b>	<b>1.44</b>
Degree	<b>1.13</b>	<b>1.54</b>	1.35
<b>School change</b>			
different school	n/a	<b>1.83</b>	1.79
same school	n/a	1.00	1.00
% of pupils eligible for fsm	1.00	<b>1.00</b>	0.99
% of pupils white	1.00	1.00	<b>1.00</b>
% of pupils with special needs with or without statements	1.00	<b>1.01</b>	1.01
pupil teacher ratio	<b>1.03</b>	1.02	0.98

Figures in bold are significant at the 5% level, figures not in bold are non-significant

---

**Table 16.7 Complete list of relationships between longitudinal experiences of bullying over 3 years of study and other characteristics**

LSYPE

Characteristics	Odds Ratios			
	Continuing	Sporadic	Escaped	New
<b>Sex of young person</b>				
Male	1.00	1.00	1.00	1.00
Female	<b>1.23</b>	0.91	<b>1.18</b>	0.96
<b>SEN</b>				
Yes	<b>1.87</b>	0.96	1.09	1.35
No	1.00	1.00	1.00	1.00
<b>Tenure</b>				
owned/mortgage	1.00	1.00	1.00	1.00
rented from council/housing association	<b>1.30</b>	1.13	1.01	0.83
rented privately	1.02	1.02	1.09	1.26
Other	0.90	1.02	<b>1.40</b>	0.87
<b>Family Type</b>				
2 parents	1.00	1.00	1.00	1.00
step family	1.20	0.99	<b>1.44</b>	0.73
1 parent	1.07	1.14	1.14	1.10
<b>Caring responsibilities household</b>				
Yes	1.29	0.87	0.93	<b>1.62</b>
No	1.00	1.00	1.00	1.00
<b>Ethnicity</b>				
White			1.00	1.00
Mixed	0.84	0.81	1.11	1.04
Indian	<b>0.41</b>	0.90	0.66	<b>0.55</b>
Pakistani	<b>0.35</b>	0.65	1.04	0.88
Bangladeshi	<b>0.25</b>	1.07	0.96	0.81
black Caribbean	<b>0.60</b>	0.78	0.83	0.66
black African	<b>0.40</b>	1.13	1.04	0.92
Other	0.76	1.08	0.74	1.08
<b>School gender</b>				
Mixed	1.00	1.00	1.00	1.00
Boys	1.11	0.97	<b>1.43</b>	1.51
Girls	<b>0.46</b>	1.29	0.90	0.84
<b>Religion</b>				
None	1.00	1.00	1.00	1.00
Very important	<b>1.39</b>	1.06	0.83	0.91
Fairly important	0.86	1.06	1.12	0.87
Not very important	0.86	0.98	1.03	<b>0.72</b>
Not at all important	<b>0.72</b>	0.92	1.10	1.29
<b>Ever in Care</b>				
Yes	<b>2.41</b>	1.59	0.65	0.21
No	1.00	1.00	1.00	1.00
<b>Mother's Highest Qualification</b>				
no qualification	1.00	1.00	1.00	1.00
level 1 below	<b>1.38</b>	0.92	1.27	0.93
GCSE A-C	<b>1.45</b>	1.01	1.17	1.05
GCE A Level	<b>1.45</b>	1.09	1.00	0.89
Higher ed below degree	<b>1.50</b>	0.94	<b>1.28</b>	1.23
Degree	<b>1.65</b>	0.92	1.08	0.83

<b>School change</b>				
different school	<b>3.03</b>	0.98	<b>1.42</b>	<b>1.42</b>
same school	1.00	1.00	1.00	1.00
% of pupils eligible for fsm	<b>0.01</b>	1.00	1.00	1.00
% of pupils white	<b>1.00</b>	1.00	1.00	1.00
% of pupils with special needs with or without statements	<b>1.01</b>	1.00	1.00	1.00
pupil teacher ratio	1.00	1.03	<b>1.03</b>	<b>1.02</b>
Figures in bold are significant at the 5% level, figures not in bold are non-significant				

---

## Appendix B Derived variables

A number of derived variables were used in the analyses for this study. A list of the variables derived by NatCen and how they were created can be found below in Table 16.8.

<b>Table 16.8 Derived Variables Used in Analyses</b>		
<b>Variable Description</b>	<b>Method of Derivation</b>	<b>Waves</b>
Binary indicator of reporting being bullied or not	Being bullied in at least one of the 5 types of bullying collected was coded as yes.	1-3
Binary indicator of parental report of bullying	If the parent had reported the child being bullied in one of the 5 types of bullying collected was coded as yes	1-3
Young person's ethnic group	Information on ethnic group taken from young person interview, and coded into one of 8 groups (White, Mixed, Indian, Pakistani, Bangladeshi, Black African, Black Caribbean and Other) – if no young person interview this information was taken from the household grid	1-3
Mother's highest qualification	List of 50 possible qualifications for main and second parent coded into 7 groups (degree or equivalent, higher education below degree level, GCE A-level or equivalent, GCSE grades A-C or equivalent, qualifications at Level 1 and below, other qualifications, and no qualification), with only highest qualification of mother recorded	1-3
Main parent's NS-SEC class	Fathers occupational category calculated from ONS lookup table and grouped into 8 classes (higher managerial and professional, lower managerial and professional, intermediate, small employers and own account workers, lower supervisory and technical, semi-routine, routine and never worked/unemployed). If father not present then mothers occupational category was used	1-3
Whether young person has a disability/long term illness or health problem	Calculated from two variables present in dataset which code whether the young person has a disability and, if so, whether this makes it hard for them to attend school regularly. These variables were combined into a single variable indicating whether the young person has a disability at all	1-3
Family type	Uses household grid relationships to identify whether none, one or two parents of the young person are present in the household or whether the child is in a stepfamily	1-3
Percentage of pupils in school with SEN	Percentages of pupils with and without Statements of Needs (taken from NPD) were combined into a single variable for relevant year (2004-2006)	1-3
Percentage of non-White British pupils in school /	Percentage of White pupils was removed from total (taken from NPD) for relevant year (2004 - 2006)	1-3
Z-scores for attainment at Key Stage 4	Calculated using raw points scores minus the population mean score, divided by the population standard deviation. These were included in models and than back-transformed to raw scores for report	1-3

# Appendix C Technical Methods

## Missing Data

Not all the variables selected for inclusion in the analyses had complete data, and this therefore reduced the number of cases present in the analyses. Given the length of time it would take to impute all the missing values taking all the characteristics into consideration in each imputation model, we decided to undertake a complete case analysis. This restricts the analyses to only those respondents who had answered all the questions to be included in the models and includes approximately 70% of respondents at each age.

## Fixed predictors and reference categories

The following table details the categories within each predictor included in the models. The reference categories for the odds ratios are shown in italics.

**Table 16.9 Fixed Predictors included all models**

		<i>LSYPE</i>
<u>Individual Level Characteristics</u>	<i>Reference category for Odds Ratios in italics</i>	<u>School Level Characteristics</u>
Sex of young person	<i>male</i> female	Proportion of pupils eligible for fsm Proportion of pupils white Proportion of pupils with SEN (with or without statements) pupil teacher ratio
SEN	Yes <i>No</i>	
Tenure	<i>owned/mortgage</i> rented from council/housing association rented privately other	
Family Type	<i>2 parents</i> step family 1 parent	
Caring responsibilities	Yes <i>No</i>	
NSSEC 4 categories	<i>Managerial and Professional</i> Intermediate Routine and manual Never worked and long term unemployed	
Ethnicity	<i>White</i> Mixed Indian Pakistani Bangladeshi	

	black Caribbean black African Other
School gender	<i>Mixed</i> Boys Girls
First Language	<i>English</i> Other
Religion	<i>None</i> Very important Fairly important Not very important Not at all important
Disability/long term illness	Disability <i>no disability</i>
Ever in Care	Yes <i>No</i>
Mother's Highest Qualification	<i>no qualification</i> level 1 below GCSE A-C GCE A Level Higher ed below degree Degree
School change	different school since last wave <i>same school</i>

---

# Appendix D Sample Design and Weighting

## Sampling from Maintained Schools

In the maintained sector, the sample was drawn using the Pupil Level Annual Schools Census (PLASC), and there was a two-stage probability proportional to size (PPS) sampling design, with disproportionate stratification. The primary sampling unit (PSU) was the school, and maintained schools were stratified into deprived/non-deprived, with deprived schools (defined by schools in the top quintile according to the proportion of pupils receiving free school meals) being over-sampled by a factor of 1.5. Within each deprivation stratum, school selection probabilities were calculated based on the number of pupils in Year 9 from major minority ethnic groups (Indian, Pakistani, Bangladeshi, Black African, Black Caribbean and Mixed). Within each stratum, maintained schools were ordered and thus implicitly stratified by region then by school admissions policy before selection. 838 schools were selected in the maintained sector.

The second stage sampled the pupils within schools. Pupils from the six major minority ethnic groups identified above were over-sampled at pupil level in order to achieve target sample numbers of 1000 in each group. The school sampling stage took into account the number of pupils from each of these minority groups. Taken together, the school selection probabilities and the pupil selection probabilities ensured that, within each stratum of deprivation, all pupils had an equal chance of selection. The average number of pupils sampled per school was 33.25, although this varied according to the ethnic group composition of the school.

## Sampling from Independent Schools and PRUs

A two-stage sampling design was also used for independent schools and PRUs, but these were sampled using the School Level Annual Schools Census (SLASC). Independent schools were stratified by percentage of pupils achieving five or more A\*-C GCSE grades in 2003 within boarding status (i.e. whether or not they had any boarding pupils), within gender of pupils (i.e. boys, girls and mixed). PRUs formed a stratum of their own. Both independent schools and PRUs were sampled with probability proportional to the number of pupils aged 13 at that institution. 52 independent schools and 2 PRUs were sampled in this way.

Pupils in independent schools and PRUs were sampled directly from school rolls by LSYPE interviewers using a sampling program. An average of 33.25 pupils was randomly

selected at each school/PRU containing 34 or more Year 9 pupils. All Year 9 pupils were selected in schools/PRUs containing fewer than 34 but more than five Year 9 pupils.

## **Sample Exclusions**

Excluded from the original sample were young people educated solely at home (and therefore not present on a school roll), pupils in schools with fewer than ten (maintained sector) or six (independent sector) Year 9 pupils, boarders (including weekly boarders) and young people residing in the UK solely for educational purposes.

## **Longitudinal Sampling**

At each subsequent wave, the survey attempted to follow all the households who took part in the previous wave where the young person was still alive and living in the UK. Movers were traced using the stable contact address collected at Wave 1, and where this failed, DCSF sent a letter to the head teacher of the school from which the young person was sampled to locate up-to-date address details for them.

## **Response Rates**

Of the 21,000 young people sampled at Wave 1, the survey reached 15,770 households (74%) in England. This comprises 13,914 full interviews (66%) and 1,856 partial interviews (9%), most of which were cases where the second adult in the household was not interviewed. At Wave 2, the survey reached 86% of the total households, and at Wave 3 it reached 92% of the total households.

## **Weighting**

The LSYPE data were weighted to account for the survey design for each wave of the study, and pupils from maintained and non-maintained schools were weighted separately at Wave 1. For pupils from independent schools and PRUs, responses were found to vary according to the sex of the pupil and the size of the school, so these pupils were weighted accordingly and the weights combined with design weights which were taken from the reciprocal of the pupil's selection probability. Calibration weights were also applied, so that the achieved sample size matched the population breakdown by type of school and by region. Pupils from maintained schools were first weighted according to school non-response (found to be linked to the school's deprivation status and its region), and then according to pupil non-response (found to be linked to region, ethnicity and qualifications). These were again combined with the design weights, and the two sets of weights for

maintained and non-maintained schools were then combined and weighted so that the maintained/non-maintained split matched the population proportions.

For subsequent waves of the study, statistical models were used to model the differences between those who responded at each wave and those who did not. These non-response weights were again calculated separately for pupils from maintained and non-maintained schools and then combined.

## LSYPE Wave schedule and related activities

LSYPE Wave	1	2	3	4 <sup>15</sup>	5	6
Respondents interviewed	Young Person Main parent Second parent	Young Person Main parent Second parent	Young Person Main parent	Young Person Main parent	Young Person	Young Person
Interview method	Face to face	Face to face	Face to face	Face to face	Online Telephone Face to face	Online Telephone Face to face
Age of Young person respondent	13/14	14/15	15/16	16/17	17/18	18/19
Academic Year	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
School Year- as reflected in questionnaires	Year 9	Year 10	Year 11	Year 12	Year 13	First year in Higher Education
Interviewed in Spring/Summer of	2004	2005	2006	2007	2008	2009
Key Stage/Exams	Key Stage 3- SATs		Key Stage 4 - GCSE's taken in Summer 2006	First year of GCE/VCE Applied A Levels, etc	Key Stage 5 - final year of GCE/VCE Applied A levels etc, exams taken in summer 2008	
Possible activities of young person- as reflected in questionnaires	School-selecting options for GCSE	First year of GCSEs	Second year (and exams) for GCSEs	Remain in full time education (school, college, training, apprenticeships)/ start work	Complete Further Education and look to move into Higher Education (university)/ continue in training/start work/ Apprenticeships/ gap year	Complete first year of Higher Education/start HE/ working/training
Data Availability	Via UK Data Archive	Via UK Data Archive	Via UK Data Archive	Via UK Data Archive	Via DCSF- due to be on UK Data Archive early 2010	Due to DCSF early 2010

<sup>15</sup> Wave 4 included an Ethnic Minority boost to ensure the sample remained as representative as possible

# Appendix E Analysis Strategy

## Multilevel Modelling

For the analysis of bullying victims we used a technique known as multilevel modelling. In the LSYPE dataset, pupils are clustered within schools because of shared factors such as teaching methods, pupil demographics and education policies. This means that any two pupils who attend the same school may be more likely to have a similar risk of being bullied than if they attended different schools. Using multilevel models enables us to test for, and if necessary take account of, this clustering. It also allows us to estimate how much of the variance in bullying is due to differences between pupils and how much is to do with differences between schools. These models reflect the real structure of the data much better than single-level regression models, and can help to prevent an overestimation of the differences in the risks of being bullied between individual pupils.

## Logistic Regression

Logistic regression was used as the main analysis method for this study, all within a multilevel framework as explained above. The output statistic for logistic regression is an odds ratio (OR). ORs describe the odds of a young person being bullied which are associated with each factor in the model. For categorical measures these represent a ratio of the odds of being bullied for the category in the figure or table to the odds of being bullied for the 'reference category' of that same measure. For example, for gender, this would represent a ratio of the odds of girls being bullied to the odds of boys being bullied. For continuous factors, ORs represent a ratio of the odds of being bullied associated with a 1-unit increase in the factor (e.g., a 1% increase in the percentage of white pupils in a school).

Reference categories are usually chosen on the basis of being the most numerous or suitable category to compare everything against. See Appendix C Technical Methods for a full list of all reference categories for each variable. An OR greater than 1 means that the factor, or a 1-unit increase in the factor (if the factor is continuous), is associated with increased odds of being bullied compared to the reference category. A value below 1 means the factor (or a 1-unit increase in the factor if continuous) is associated with decreased odds of being bullied compared to the reference category. For example, an odds ratio of 2 would signify that the odds of being bullied are twice as great for girls as they are for boys.

## A simple example

The figure 1.22 in Appendix A, Table 16.1 for 14 year old girls who were bullied represents a ratio of the odds of 14 year old girls being bullied to the odds of 14 year old boys being bullied. The figure of 1.22 indicates that the odds of a 14 year old girl being bullied were 1.2 times the odds of a 14 year old boy being bullied.

**Ref: DFE-RR001**

**ISBN: 978-1-84775-753-1**

**© National Centre for Social Research**

July 2010