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Bullying experiences among disabled children and young people in England: Evidence from two longitudinal studies

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Abstract

Bullying among school-aged children and adolescents is recognised as an important social problem, and the adverse consequences for victims are well-established. Despite growing interest in the profile of victims, there is limited evidence on the relationship with childhood disability. Existing quantitative studies tend to cover particular areas and ages, and lack extensive covariates that vary with disability. Additionally, disability definitions differ across studies. This paper enhances our understanding of the risk of bullying victimisation among disabled children in both early and later childhood, drawing on nationally representative longitudinal data from the Millennium Cohort Study and the Longitudinal Study of Young People in England. We model the association of different disability measures with the probability of being bullied at ages seven and 15, controlling for relevant risk factors. Our results reveal an independent association of disability with bullying, suggesting an overlooked mechanism contributing to negative long-term outcomes among disabled children.

JEL classification: I12, J13, Z13

Keywords: Bullying, children, disability, England, Special Educational Needs, Longitudinal Study of Young People in England , Millennium Cohort Study, young people

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1. Introduction

Conceptualised as a repetitive and intentionally harmful form of aggression that involves a power imbalance between the victim and the perpetrator(s) (Olweus, 2003), bullying is increasingly identified as a significant social problem across a large number of countries. A recent government survey in England has reported that one in two children aged 8-16 years old are worried about school bullying, and that 18 per cent admitted they had been bullied regularly at school in the last month (Chamberlain et al., 2010). Prevalence rates are also high in other countries although they vary considerably with the age of children examined and the measurement of bullying victimisation employed across different studies (Stassen Berger, 2007). The phenomenon has recently attracted considerable policy attention, and a combination of proactive and reactive strategies has been adopted by schools in England in order to lessen its occurrence (DCSF, 2008; DfE, 2011).

The psychological and behavioural consequences of bullying victimisation are detrimental. Aside from its immediate health and psychological impact (Nansel et al., 2001; Rigby, 2000), being a bully victim in school is a predictor of low self-esteem, anxiety, and depression during adulthood, and has a negative impact on subsequent socio-economic attainment (Arseneault et al., 2010; Bond et al., 2001; Takizawa et al., 2014; Wolke et al., 2013). Previous research has also established links with eating disorders, truancy, as well as suicidal ideations (Nansel et al., 2001; Rigby and Slee, 1993). These findings suggest that bullying may constitute an important pathway through which social inequalities across a range of domains are produced, underlining the importance of identifying those that experience a higher risk of being bullied in early childhood and adolescence.

Disabled children and adolescents have been largely neglected in the growing body of quantitative research focusing on the risk factors for bullying victimisation and the socio-economic profile of bullying victims. Moreover, research on disabled children's experience has tended to be embedded in medical rather than social models of disability. However, a substantial number of qualitative accounts suggest that bullying is a pervasive experience in the daily lives of disabled children and young people (Connors and Stalker, 2002; Norwich and Kelly, 2004; Watson et al., 1999). Indeed, bullying can be represented as one of the means by which children with impairments or particular needs become "disabled", and hence it is timely to develop a more sociological understanding of this issue. According to the social relational model of disability, bullying constitutes a "barrier to being" that affects individuals' sense of self and social well-being, playing an important role in the process that has been termed psycho-emotional disablism (Connors and Stalker, 2007; Thomas, 1999). At the same time, previous research has found that perceived peer social support constitutes an important coping mechanism for children and adolescents with disabilities, engendering better social and academic adjustment (Wallander and Varni, 1998). Consequently, it may be expected that bullying will undermine or inhibit coping mechanisms and compromise disabled children's social inclusion with ensuing impacts on their life trajectories. By these means, bullying can be expected to contribute to the adverse psychological and social outcomes commonly found among individuals who have experienced childhood disability (Janus 2009; Eiser, 1990; Pless et al., 1989), thereby reinforcing the structural and social inequalities which render disability a crucial social division.

In order to establish the extent to which bullying specifically does render disabled children liable to specific negative long-term consequences, it is necessary to provide representative evidence on the bullying victimisation of disabled children and young people, using a comprehensive, social understanding of disability. This study, therefore, aims to establish whether the relationship between childhood disability and the risk of being bullied suggested by qualitative research exists even when taking account of other relevant risk factors such as the greater socioeconomic disadvantage typically faced by both disabled children and victims of bullying (Blackburn et al., 2010; Bowes et al., 2009; Dowling and Dolan, 2001). Drawing on longitudinal large-scale data from the Millennium Cohort Study and the Longitudinal Study of Young People in England, we examine experiences of bullying at ages seven and 15 in contemporary England. These two datasets allow us to advance understanding of the bullying experiences of disabled children and young people and their potential long-term consequences in a number of ways. First, we distinguish two overarching measures of "disability", special educational needs and experience of long-term limiting illness. Unlike extant studies embedded in the medical model of disability which link specific conditions with bullying, our study adopts a social model of disability, locating disability in the ways in which physical and mental impairments become constructed as "disabling". Acknowledging that different constructions of disability may have different implications for the victimisation of children, we investigate whether enhanced risks are associated with either of these measures in order to determine whether there is a consistent or differentiated story of childhood experience of bullying and disability. Second, we provide a nationally representative picture for children in England at two age points, investigating the extent to which bullying risks associated with disability are consistent across childhood and adolescence. Third, our analysis moves beyond cross-sectional designs that do not establish a temporal order between factors that may put children at risk of bullying and the experience of being bullied. Fourth, we consider a wider range of factors that are known to be relevant to bullying risk than existing studies, providing a more robust test of the relationship of interest.

2. Literature review: Bullying experiences and childhood disability

Recent years have witnessed an increased inter-disciplinary interest in the study of bullying among children and adolescents, with the identification of the socio-economic and behavioural characteristics of bullying victims becoming a key research question (Griffin and Gross, 2004). A variety of different methods are employed to measure the occurrence of bullying experiences, ranging from observational studies and teacher reports to questionnaires that ask respondents how frequently they have been subjected to certain forms of aggression. The latter has become the most commonly used method of assessing bullying experiences (Olweus, 2003; Rigby and Slee, 1993; Solberg and Olweus 2003; Woods and Wolke, 2004), allowing researchers to distinguish between different types of bullying, namely physical and relational bullying. Physical bullying refers to direct forms of violence such as hitting, kicking, beating and so on, while relational bullying refers to less obvious forms of aggression aiming to harm relationships such as excluding a classmate from a group and spreading humiliating gossip (Smith et al., 2002). This analytical distinction is particularly important to maintain when examining the occurrence of bullying in adolescence, since this is a period that is characterised by a higher frequency of relational bullying compared to childhood when physical bullying is the predominant form of aggression (Griffin and Gross, 2004).

Despite substantial variation in study design and operationalisation of bullying behaviour across different studies, the consensus of accepted knowledge on the demographic and socio-economic profile of bullying victims has advanced significantly over the last decade. A number of studies have demonstrated that gender, age, appearance, school achievement, family circumstances, and parenting style all exert a significant influence on the risk of being bullied (for example, see Janssen et al 2008; Norwich and Kelly 2004; Wolke et al. 2001; Wolke and Skew 2012). Ethnicity and socio-economic status (SES) have also been the focus of research but findings are less conclusive regarding their effect, and the need for future research that systematically considers multiple SES dimensions and the influence of school settings with regard to these factors has been identified

(Vervoot et al., 2010; Wolke et al. 2001).

It is surprising, therefore, that the relationship of childhood disability with the risk of being bullied has been relatively under-researched. Moreover, existing studies do not show consistent findings. Although the term disability encompasses a broad array of chronic conditions that relate to long-term limitations in daily functioning, the most commonly studied group in bullying research is children with learning difficulties and specific learning needs (Baumeister et al., 2008; Thompson et al., 1994; Whitney et al., 1992). This is due to the fact that children and adolescents with special learning needs are believed to present a behavioural profile that makes them more vulnerable to peer victimisation (Mishna 2003; Finkelhor 2008). In addition, labelling of those with learning needs as Special Educational Needs (hereafter SEN) in the school context renders them more "visible" targets compared to children with less observable disabilities. A number of studies using different methodologies have reported an increased risk of being bullied among students with SEN (Rose et al. 2009; Mishna 2003; Nabuzoka and Smith 1993; Norwich and Kelly 2004). However, the majority of these studies have not used large-scale samples and were thus unable to establish whether this risk is due to confounding factors such as low SES (Parsons and Platt 2013) or the poorer educational performance that is common among this group.

Some small-scale studies have examined whether children and adolescents suffering from specific chronic physical and psychological conditions are more likely to be bullied, with most focusing on a single condition such as cerebral palsy or diabetes. While the majority of findings report a higher risk of victimisation, some do not find any differences between disabled and non-disabled children, even in cases of observable conditions (Rose et al. 2012). Aside from their small sample size and limited generalisability, an additional shortcoming of these studies is a medical understanding of disability that fails to acknowledge how impairments are socially constructed as "disabling" (Eiser 1993).

Clearer supporting evidence on the relationship between disability and bullying victimisation has been provided from school-based studies covering particular areas. For example, using cross-national data from the Health Behaviour in School-aged Children survey, Sentenac et al (2013) have reported a strong association between chronic disability and bullying victimisation among adolescents in 11 European countries. Similarly, Sweeting and West (2001) focused on bullying experiences among 11 year olds in West Scotland, and found an independent relationship of physical disability with the risk of being bullied, controlling for educational attainment, height, weight and socio-economic characteristics.

Overall, these studies present a *prima facie* case that there may be greater risks of bullying victimisation for disabled children. However, nationally representative analyses are limited to a few recent studies focusing on the USA (Son et al. 2012; Turner et al. 2011). For example, Turner et al. (2011) made comparisons across different types of disability using a representative sample of children aged 2-17 years old and only found an independent relationship with bullying for children with Attention Deficit Hyperactivity Disorder. Risks associated with physical disabilities and learning disorders were fully explained by socio-economic and family circumstances. These findings emphasise the need for further quantitative studies that consider different overarching types of disability and scrutinise a wide range of factors in order to better understand the risks faced by different groups of disabled children as well as the mechanisms leading to bullying victimisation.

This paper responds to this challenge and provides an analysis of the relationship of childhood disability with the risk of being bullied in contemporary England, moving beyond cross-sectional designs that characterised previous studies in this research area (Jones et al. 2011). Additionally, by focusing on bullying experiences in both early childhood and adolescence it is able to address the unanswered question of whether disability-related risks are linked to specific periods of life or developmental stages (Turner et al. 2011).

3. Data, methods, and measures

Datasets

We analyse nationally representative longitudinal data from the Millennium Cohort Study (MCS) and the Longitudinal Study of Young People in England (LSYPE). These large-scale datasets provide sufficiently large subsamples of disabled children and young people, allowing us to rectify the recognised lack of reliable quantitative analyses of childhood disability in the UK (Blackburn et al., 2010).

MCS is Britain's most recent birth cohort study, following the lives of approximately 19,000 children born in the UK in 2000-2001. Five MCS surveys have been carried out so far – at age nine months, three, five, seven, and eleven years. LSYPE is a panel survey of around 16,000 people born in 1989-1990 in England who were interviewed annually between 2004 (at age 13/14) and 2010 (at age 19/20). For comparison with the LSYPE, the MCS sample is restricted to those children living in England. As the bullying outcomes that we examine were measured at ages seven and 15, we focus on a four-wave longitudinal sample of 7,342 children (MCS) and a three-wave longitudinal sample of 12,144 young people (LSYPE).

Appropriate weights were used to account for non-response bias and for the complex sampling design of both surveys. We investigated patterns of attrition and found no evidence for an increased risk of dropping out among disabled children and young people, which would have potentially biased the estimates presented in this paper.

Bullying measures

MCS cohort members were asked to provide information on their bullying experiences with the question "how often do other children bully you" with three response options: never, some of the time, and all of time. We consider MCS members to be bullying victims if they responded "all of the time". Given the available response options in the questionnaire, children who experienced isolated bullying incidents are likely to be included in the "some of the time" category. We therefore decided to adopt a stringent threshold in order to capture repetition, which is a key element across different bullying definitions (Olweus 2003).

LSYPE respondents were asked five questions on whether and how often they were subjected to different forms of aggression in the last 12 months (i.e. since the last interview). Frequency was measured with a 7-item response scale: 1) Every day, 2) A few times a week, 3) Once or twice a week, 4) Once every two weeks, 5) Once a month, 6) Less often than this, and 7) It varies. We constructed a physical bullying category if the respondent had experienced one or more of the following three experiences “once every two weeks” or more: 1) being made to hand over money and possessions to others, 2) receiving threats of violence, and 3) being a victim of physical violence. The relational bullying category was constructed by combining responses to two questions referring to: 1) being excluded by a group of friends and 2) being called names, including by text or email, using the same frequency threshold of once every two weeks or more often. The frequency threshold is in line with previous research that has found that it provides a valid way of dividing school pupils into victims and non-victims. We should note that the LSYPE respondents were not asked directly about “bullying” but about specific acts. Hence, if there were other experiences that respondents regarded as bullying, but which they were not asked about, they would not be counted in our analysis.

LSYPE bullying items mentioned the word “students”, while the MCS bullying question was placed among other school-related items in the self-completion questionnaire. We are therefore confident that our measures refer to school bullying and not to other forms of victimisation – such as sibling bullying – that are also common among children (Wolke and Skew 2012). However, given the different measurement approaches adopted in the two surveys, our measures are not directly comparable and we are thus unable to assess any differences in prevalence of bullying in childhood and adolescence.

Disability measures

Our analysis examines whether different constructions of disability have distinctive implications for the experiences of children and young people. We thus distinguish between limiting long-standing physical and mental health conditions and learning difficulties or needs identified as SEN. Both MCS and LSYPE collected information on statement of SEN, which is a formal statement outlining what forms of teaching support the child should receive at school, over and above provision that might be supplied to children without a statement. SEN pupils with statements are likely to face multiple and more severe learning difficulties than those reported to have SEN but no statement in both surveys. We therefore consider SEN statement as an indicator of severity of learning needs that may also render pupils “different” and thus more vulnerable to peer harassment in the school context.

MCS collected information on cohort members’ long-standing limiting illness (LSLI) at ages three, five, and seven. LSLI approximates to the definition of disability in the Disability Discrimination Act, referring to a condition or impairment lasting over 12 months that limits day-to-day activities.

Eleven (11) per cent of the MCS sample was identified as having a long-standing limiting condition in one or more survey waves. SEN was measured at age seven, with approximately 17 per cent of children identified as SEN, of whom 4 per cent had a statement. In LSYPE, long-standing limiting conditions were covered in Wave one, while SEN-related questions were asked in both Waves one and two. Six per cent of young people in the longitudinal sample had a long-standing limiting condition, whereas 17 per cent were identified as currently having SEN, of whom five per cent had a statement. As there is little overlap between the two disability measures in both samples (Parsons and Platt 2013), we treat them as distinct measures.

Independent variables

In ascertaining whether disability has an association with being bullied it is important to take account of other factors that are likely to influence the risk of being bullied and that may also vary with disability status. Both surveys collected rich information on respondents’ individual, family, and socio-economic circumstances. Additionally, the longitudinal nature of the studies allows us to incorporate temporal ordering between the independent variables and the outcome of bullying victimisation.

We control for children’s demographic characteristics, namely gender, age for school year (season born), and ethnicity of the child. Previous research suggests that boys face an overall higher risk of being bullied, while girls are more likely to be subjected to relational forms of bullying during adolescence (Stassen Berger 2007). Children who are younger for their school year may also face a higher risk as a result of being or appearing physically weaker than their classmates or because of lower academic attainment (Crawford et al. 2013). Ethnicity is included in the analyses as there is some evidence that childhood disability is patterned by ethnic background (Blackburn et al. 2010), and a few studies have reported significant differences in bullying victimisation by ethnicity; however, it is difficult to hypothesise a specific association between the two as findings are not clear-cut (Tippett et al. 2013).

Disabled children in the UK are likely to come from disadvantaged backgrounds (Blackburn et al 2010; Parsons and Platt 2013). Socio-economic disadvantage has also been found to be a predictor of bullying victimisation in many studies although some have not found significant socio-economic influences (Wolke and Skew 2012). Our SES measures were collected in the first wave of both surveys and include housing tenure, parental educational attainment, parental worklessness, and whether the child lives in a lone parent family or not.

Additionally, we consider the effects of family size and maternal mental health/disability, which have been shown to be linked to childhood disability as well as behavioural and bullying outcomes and have been largely neglected in previous bullying research (Turner et al 2011).

Both surveys provide proxy measures for family environment and mother-child relations. Parenting has been shown to be an important mediator of bullying risk (Baldry and Farrington 2005; Wolke and Skew 2012). Additionally, it can moderate some of the behavioural outcomes linked to learning needs. In the MCS analysis, we control for closeness between mother and child, which was assessed by the mother at age 5. We also consider parenting style, focusing on the effect that frequent use of harsh discipline measures has on the probability of becoming a bullying victim. Although LSYPE does not provide the exact same measures, information on the frequency of arguments between main parent and cohort member was available in the first wave and is included in our analyses.

Cognitive ability is also taken into account as bullying may be focused on the lower intellectual/academic attainment of a child, rather than their disability or learning needs specifically. We use the Naming Vocabulary score from the British Ability Scales Second Edition (BAS II) (Elliott, 1996) that was administered at age 5 in MCS, and the Key Stage 2 (age 11) overall attainment score of LSYPE respondents. Even though disabled children tend to have lower cognitive/KS2 scores than other children, there is substantial overlap between them, rendering this a relevant control. MCS analyses additionally control for the effects of being short and/or overweight (Fox and Farrow 2009), by controlling for weight (Body Mass Index) and height. LSYPE did not collect information on these domains.

All independent variables were included in our full models. Variance inflation factors (VIFs) were calculated for both the MCS and LSYPE models in order to check that the large set of explanatory variables did not raise issues of collinearity. All of the VIFs were small. We therefore retained all variables, since they were theoretically expected to be important, even though in the event not all of them were found to be statistically significantly associated with bullying.

We also examined the influence of school-level variables such as ethnic composition and percentage of SEN students in order to better understand the mechanisms that lead to the victimisation of certain groups of pupils. However, we did not find significant school-level effects and these results are therefore not presented in this paper.

Analytical technique

We estimate logistic regression models in order to examine whether there is an independent relationship between disability and bullying victimisation at ages seven and 15, after taking into account the risk factors discussed in the previous section. In our analyses, the outcome variable is *being bullied* and the binary response is *yes/no*. Our models estimate the relative effect of disability status and other independent variables on the probability of being bullied at ages seven and 15. We report unadjusted and adjusted log odds from logistic models. We also present the predicted probabilities of being bullied by disability status at average levels of all other risk factors to better illustrate the magnitude of the impact of being disabled on the outcomes of interest.

4. Results

This section presents descriptive statistics on the independent variables by disability status, followed by the results of interest from multivariate analyses, concentrating on the association between disability and bullying victimisation. For reasons of space and focus we only briefly discuss the associations with bullying for the other predictors of bullying in the adjusted models. Full tables are available from authors upon request.

Tables 1 and 2 about here

Tables 1 and 2 provide information on family and child characteristics by disability status at ages seven and 15 respectively. Consistent with findings from previous research, both disabled children and young people are more disadvantaged than their non-disabled peers across all four socio-economic dimensions examined. Children with a SEN statement are the most deprived disabled group. Focusing on MCS (Table 1), we observe that all disabled groups appear more likely to be obese/overweight and to have lower levels of cognitive abilities compared to non-disabled children. In general, we find similar patterns for all disabled groups across the majority of independent variables, with the exception of maternal report about feeling "extremely" close to the child: ten per cent fewer mothers' of children with a SEN statement reported feeling "extremely" close to the child compared to mothers of non-disabled children. There are no differences between mothers of LSLI or SEN and non-disabled children. This could indicate communicative competence and social interaction difficulties that have been previously linked with children with special learning needs and with their victimisation in the school context (Mishna 2003).

Table 2 reveals similar differences in cognitive ability for young people in LSYPE at age 15. Additionally, we observe that all disabled groups are more likely to frequently engage in arguments with their mother and to have a mother who also has a disability. Overall, Tables 1 and 2 show that family circumstances, socio-economic disadvantage, cognitive ability as well as weight (measured in MCS only) vary by disability status. We now examine the extent to which these factors are implicated in the victimisation of disabled children and adolescents.

*** Table 3 about here***

Table 3 presents unadjusted and adjusted coefficients from logistic regressions predicting the probability of being bullied at ages seven and 15. For parsimony we simply illustrate the coefficients relating to our variables of interest: disability status. Other independent variables had coefficients largely in the expected direction, although family structure, child height and number of siblings were not associated with bullying risks net of other factors at age seven, and mother's malaise score (Rutter, 1970) was in the opposite direction to that expected. At age 15, SES measures were not significantly associated with bullying, but all other covariates were in the expected directions.

The top panel of Table 3 shows that for the younger children, disability is significantly associated with bullying. Focusing on the unadjusted differences we see that there are substantially higher risks of being bullied "all the time" for disabled children compared to non-disabled children. These reflect raw bullying victimisation rates of seven-eight percent for non-disabled children, 14 percent for LSLI, 17 percent for SEN and 20 percent for children with a statement. Turning to the fully-adjusted models, we see that the increased risk of being bullied is partly accounted for by other bullying risk factors also associated with disability (such as being younger, being a boy, having lower cognitive scores, and being obese). Nevertheless, the association remains significant for all disability groups. The strongest association is found for SEN status.

*** Figure 1 about here ***

This can be more clearly illustrated in Figure 1, which shows the estimated chances of being bullied for a child with average characteristics. It shows how the factors associated both with disability and with bullying substantially reduce the probabilities of being bullied for disabled children, whereas for non-disabled children the probabilities of being bullied varied little between the adjusted and unadjusted models. Figure 1 shows the increased probability, notwithstanding, of a disabled child being bullied even when all other characteristics and circumstances have been taken into account. For example, although the probability of being bullied "all the time" decreases for a child who has a statement (from 20 percent to 11 percent) or SEN (from 17 percent to 12 percent) after all controls are included, their probability of being bullied is still twice that of an "average" child with no SEN (six percent).

At age 15, we were able to separate out more complex measures of bullying that are also highly sex-specific: girls are less likely to be subject to physical bullying but more likely to experience relational bullying than boys. The bottom panel of Table 3 clearly shows that at age 15 both SEN and LSLI are associated with frequent physical as well as relational bullying. For physical bullying, the raw rates were three-four percent (non-disabled children), eight percent (LSLI), seven percent

(SEN) and nine percent (statement). Comparable figures for relational bullying were five-six percent (non-disabled children), 13 percent (LSLI), 10 percent (SEN) and 16 percent (statement). However, much of the enhanced likelihood of physical bullying can be accounted for by factors associated with disability status that also increase the chances of being physically bullied (such as being a boy, having lower educational attainment and having a disabled mother). The introduction of controls reduces the coefficient for disability status on physical bullying by half or more, and, in the case of LSLI renders it non-statistically significant, and barely significant for SEN at conventional levels. However, children with a SEN statement retain a significantly and substantially higher risk of bullying victimisation when compared with otherwise similar non-disabled children.

Figure 2 about here

The introduction of controls reduces the coefficients for disability on relational bullying somewhat less. Table 3 shows that both children with a statement or with LSLI have a significantly increased risk of relational bullying victimisation when compared with observationally similar non-disabled children. This emphasises the way in which children may use forms of exclusion and verbal rather than physical intimidation to isolate those who are regarded as “different”, at an age when peer conformity is becoming ever more important (Abrams 2010). The increased risk of relational bullying victimisation by disability status is illustrated in Figure 2.

While consistent with the results at age seven, the age 15 findings are perhaps even more striking. At age 15, when children are older and victimisation rates are generally lower than for younger children, we might expect some of the specific risk associated with “otherness” of disability to have dissipated. However, the fact that these findings are robust to the inclusion of a wide range of covariates that have been linked to bullying suggests that there is something distinctive about children with disability that specifically influences their vulnerability to victimisation. Second, if, as the literature shows, early bullying impacts on social relations and educational attainment, we might have expected some of the impact of the earlier bullying that these children are likely to have experienced to have been reflected in our controls for family conflict and educational attainment. Yet the association between bullying and disability are net of these impacts and remain large and significant. Third, although we found clearer associations for relational rather than physical bullying, there is also evidence for some increased risks for physical bullying for children with

SEN. This suggests that the apparent “difference” of this group is not marked only by forms of exclusion but also by direct aggression.

5. Conclusions

Recent longitudinal research has established that bullying victimisation during early childhood and adolescence has a strong negative impact on social and psychological later life outcomes, over and above the influence of other risk factors such as parental socio-economic background (Arseneault et al., 2010; Bond et al., 2001; Takizawa et al., 2014; Wolke et al., 2013). It is therefore pertinent to identify the groups that face a higher risk of being bullied and to subsequently consider the role of early peer victimisation in their life trajectories and outcomes. This study focused on disabled children, a group that has been largely neglected both in bullying as well as life-course research. Taking into account that earlier qualitative research has suggested that bullying is a common experience among disabled children (Connors and Stalker, 2002; Watson et al., 1999), we sought to document the prevalence of bullying among disabled children and adolescents in England and to examine whether this victimisation stems from other characteristics rather than disability *per se*.

Our analysis of two longitudinal, nationally representative social surveys confirmed that disabled children and young people in England are facing the “double disadvantage”, both of limiting contexts and consequences linked to disability as well as of bullying, during critical periods in their school careers and development. We found that the higher bullying rates found among disabled groups are indeed partly explained by other bullying risk factors such as age within school year, sex and cognitive ability/educational attainment. However, our analysis showed that disabled children and adolescents still remain at higher risk of being bullied even after we consider the influence of a wide range of demographic, socio-economic and family factors, corroborating findings of earlier qualitative and school-based studies (Connors and Stalker, 2002; Sentenac et al 2013; Watson et al., 1999). Unlike previous studies that suggested a differentiated story of bullying experiences among groups with different broad types of disabilities (Turner et al. 2011), our analysis found that both SEN and LSLI groups have a higher risk of bullying, net of other characteristics. This suggests that disabled children in England are generally vulnerable to peer victimisation, and that it is not only conditions that are identified as limiting in the school context (SEN) that are associated with bullying. However, it should also be noted that our prior expectation that effects would be stronger for children with a statement was confirmed. Future research needs to systematically examine the mechanisms leading to the severe victimisation of this group and to assess whether there is a particular effect of being “labelled” as SEN in the school context (Mishna 2003).

Life-course research focusing on childhood disability remains scarce (Powell 2003). However, the few existing studies suggest that individuals who experience childhood disability are likely to lag behind across a number of psycho-social dimensions in adulthood (Janus 2009; Eiser, 1990; Pless et al., 1989). Our study provides large-scale evidence for a process that disability scholars have previously referred to as “psycho-emotional disablism” (Connors and Stalker, 2007; Thomas, 1999) which may be one of the mechanisms leading to adverse outcomes among disabled children and adolescents. By demonstrating that there are specific disability-related bullying risks, we provide additional support to earlier suggestions that disability should be considered as a factor contributing to the production and reproduction of stratification *in its own right*, independently of factors such as socio-economic status (Jenkins 1991). Overall, our study emphasises the importance of incorporating the role of bullying into future studies focusing on the outcomes of childhood disability and within theoretical accounts on the ways disabilities are constructed. By providing representative evidence on the victimisation of disabled children and young people, we therefore underline the importance of furthering understanding of the victimisation of this group and draw attention to the school context as a site of reproduction of social inequalities.

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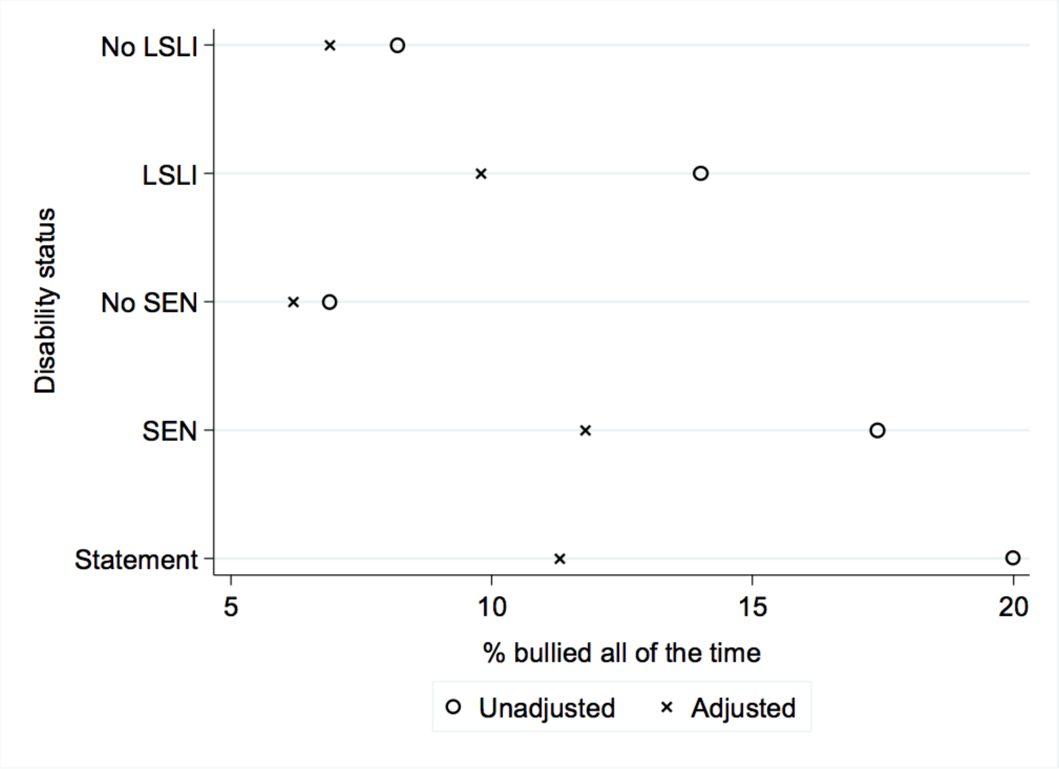
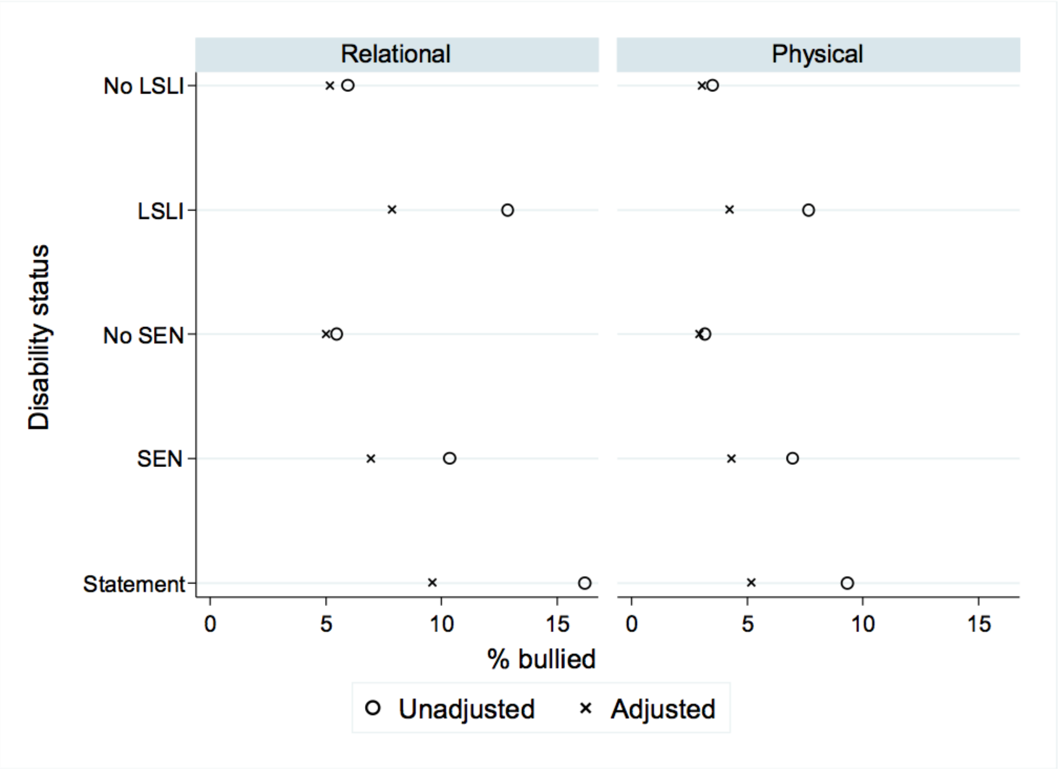
Figures and Tables

Figure 1: Unadjusted and adjusted estimates of being bullied "all the time" at age 7 by disability status



Source: Millennium Cohort Study

Figure 2: Unadjusted and adjusted estimates of relational and physical bullying at age 15 by disability status



Source: LSYPE

Table 1: Descriptive statistics of family and child characteristics by disability status (MCS), column % / mean values

	All	No SEN	SEN	Statement	No LSLI	LSLI
Family characteristics						
Housing						
Home owner	63.1	66.1	51.4	41.3	64.3	51.6
Social housing	23.3	21.0	31.9	40.8	22.4	32.2
Private rented	8.2	7.8	10.3	10.0	7.9	10.7
Education						
Degree or higher	43.1	45.5	33.5	26.4	43.8	37.1
NVQ3 (A Levels)	15.6	15.7	15.1	16.2	15.9	13.3
NVQ2 (O Levels)	25.2	24.3	30.6	27.2	24.9	27.8
NVQ1 (Level 1/CSE)	5.9	5.3	8.1	10.7	5.8	7.3
No qualifications	10.1	9.2	12.7	19.5	9.6	14.5
Household type						
Single parent	13.1	12.2	16.8	18.7	12.4	19.3
Workless household	16.2	14.3	23.7	29.8	15.2	25.5
Mean no of children (standard error)	2.5 (.02)	2.5 (.02)	2.6 (.04)	2.6 (.07)	2.5 (.02)	2.5 (.04)
Mean mother Malaise score (standard error)	1.6 (.03)	1.5 (.03)	1.9 (.06)	2.1 (.11)	1.6 (.03)	2.1 (.07)
Mean discipline score (standard error)	17.9 (.06)	17.7 (.06)	18.4 (.14)	18.8 (.30)	17.8 (.07)	18.3 (.16)
“Extremely” close with child	69.3	69.9	68.0	62.4	68.9	71.4
Child characteristics						
Male	50.8	48.0	61.2	71.9	49.9	58.2
Minority ethnic group	15.4	16.0	11.6	17.1	15.4	16.6
Mean height (cms) (standard error)	123.7 (.09)	123.9 (.09)	123.1 (.19)	122.8 (.38)	123.8 (.09)	123.3 (.27)
BMI overweight	14.2	14.3	13.3	15.9	14.2	13.9

BMI obese	5.7	5.2	7.3	9.4	5.2	9.6
Season born						
Autumn	28.6	29.6	23.9	24.1	28.7	28.1
Winter	26.4	26.5	25.5	26.9	26.1	28.2
Spring	18.5	18.5	16.7	22.5	18.5	18.2
Summer	26.5	25.3	34.0	26.4	26.7	25.6
Mean BAS naming vocabulary score (standard error)	108.1 (.42)	109.9 (.42)	101.7 (.71)	92.7 (1.54)	108.6 (.40)	103.7 (.90)

Note: All values are group percentages except where indicated as mean and standard error. All statistics are adjusted to take account of sample design and attrition.

Table 2: Descriptive statistics of family and child characteristics by disability status (LSYPE), column % / mean values

	All	**No SEN**	**SEN**	**Statement**	**No LSLI**	**LSLI**
Family characteristics						
Housing						
Home owner	72.2	74.2	63.2	53.9	73.1	59.4
Social housing	22.1	20.1	31.4	39.2	21.2	34.5
Private rented	5.7	5.7	5.5	6.9	5.7	6.1
Education						
Degree or higher	17.3	18.1	15.9	17.9	17.7	11.8
Below degree	15.4	15.9	14.2	10.8	15.3	16.8
A Level	17.7	17.9	17.1	16.0	17.7	17.6
GCSE A-C	27.1	27.2	25.6	28.2	27.3	24.6
Level 1 (and below)	6.7	6.2	9.1	10.6	6.4	10.7
Other quals	1.3	1.2	2.1	1.8	1.3	1.7
No qualifications	14.4	13.5	18.0	23.0	14.3	16.9
Household type						
Single parent	23.7	22.6	29.6	33.0	23.3	30.4
Workless household	14.4	12.7	21.0	30.6	13.4	28.3
Mean no of children (standard error)	2.2 (.01)	2.2 (.01)	2.3 (.04)	2.3 (.06)	2.2 (.01)	2.3 (.05)
Mother disabled	13.0	12.0	19.7	19.0	12.1	24.5
Arguments most days/most of the time	37.5	35.9	46.1	49.8	36.9	47.9
Child characteristics						
Male	50.7	48.6	61.1	68.2	50.3	55.6
Minority ethnic group	13.4	14.3	7.1	8.3	13.8	8.8
Season born						
Autumn	24.4	24.7	21.7	22.7	24.4	23.7
Winter	23.8	24.0	21.6	22.7	24.1	20.0
Spring	25.4	25.2	27.4	25.7	25.2	27.5
Summer	26.5	26.1	29.4	28.9	26.3	28.7
Mean Key Stage 2 score (standard error)	27.1 (.08)	27.8 (.06)	23.6 (.17)	20.8 (.42)	27.3 (.07)	23.7 (.33)

Note: All values are group percentages except where indicated as mean and standard error. All statistics are adjusted to take account of sample design and attrition.

Table 3: Probability of experiencing bullying at age 7 and age 15 by disability status, estimates from logistic regression models

MCS (age 7)	Bullied “all” of the time	
	Unadjusted: Coeff (SE)	With controls+: Coeff (SE)
SEN Status (Ref.=no SEN)		
Has SEN	1.04 (0.13)***	0.69 (0.14)***
Has Statement of Needs	1.21 (0.21)***	0.65 (0.24)**
LSLI Status (Ref.= no LSLI)		
Has LSLI	0.60 (0.13)***	0.39 (0.15)**

LSYPE (age 15)	Physical Bullying		Relational Bullying	
	Unadjusted: Coeff (SE)	With controls+: Coeff (SE)	Unadjusted: Coeff (SE)	With controls+: Coeff (SE)
SEN Status (Ref.=no SEN)				
Has SEN	0.83 (0.183)***	0.40 (0.218) †	0.69 (0.144)***	0.35 (0.180)†
Has Statement of Needs	1.14 (0.176)***	0.59 (0.233)*	1.21 (0.160)***	0.70 (0.189)***
LSLI Status (Ref.= no LSLI)				
Has LSLI	0.82 (0.190)***	0.34 (0.214)	0.85 (0.146)***	0.44 (0.162)**

Notes: †P<0.1;*P<0.05; **P<0.01; ***P<0.001

Controls included: sex, birth season, ethnic group, housing tenure, parental education, family structure, household employment status (MCS and LSYPE) and parental closeness to child, discipline measures used, child height and weight, maternal depression, prior cognitive ability (MCS) and arguments with parents, parental disability and prior educational attainment (LSYPE). All models adjusted for complex survey design and non-response.