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Vulnerability to bullying in children with a history of
specific speech and language difficulties

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This study examined the susceptibility to problems with peer relationships and being bullied in a UK sample of 12 year old children with a history of specific speech and language difficulties. Data were derived from the children's self reports and the reports of parents and teachers using measures of victimization, emotional and behavioural difficulties, prosocial development and self-esteem, together with measures of the children's language development. Similar prevalence rates for victimization were found compared with matched groups of typically developing children and children with special educational needs related to general [learning language](#) difficulties. The importance of prosocial skills and their relationship with language development, particularly pragmatic impairment, are explored.

Keywords: specific language impairment, specific speech an language difficulties, bullying, victimization

Introduction

There has been a substantial interest in the prevalence and types of bullying in schools. However, there is a lack of studies examining whether groups of children with specific difficulties are more vulnerable than others. Studies of atypical populations provide an opportunity to explore the factors that underpin bullying and thereby contribute to models seeking to explain peer interactions. Difficulties with expressing views and feelings or problems in negotiating social situations, for example, may increase the risk of being bullied. Such problems are characteristic of children with specific speech and language difficulties (SSLD), also referred to as specific language impairment (SLI) (Dockrell, *et al.*, 2006) and may make them particularly vulnerable. These children have language difficulties in the absence of intellectual, sensory or neurological impairment and have a level of language functioning below that of their non-verbal cognitive ability (Leonard, 1998). The current study considers the problems of children with SSLD that may place them at risk of being bullied at the age of transfer to secondary schools in England, and compares their reported experiences with those of other children with special needs and typically developing age-matched peers.

According to Olweus (1991) “a person is being bullied when he or she is exposed repeatedly over time, to negative actions on the part of one or more persons” (p280). Bullying is viewed as a subtype of aggressive behaviour characterised by the intentional and repeated harm of a victim who is physically or psychologically weaker than the aggressor. Bullying behaviour constitutes a spectrum of actions including physical

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aggression (e.g. hitting, pushing over), verbal aggression (e.g. name calling, racist remarks) and relational harassment involving social manipulation and exclusion and the spreading of unpleasant rumours.

Studies have revealed bullying to be a significant problem across many countries (see Kyriakides *et al.* (2006) for a review). Prevalence rates have varied substantially between studies, because of different operational definitions or instruments, or age of sample but the general trend is that victimization decreases with age (Pellegrini & Long, 2002). It has been proposed that this decline results from young people developing a range of coping skills as they get older, including ignoring the bullying, retaliating and improving their negotiating skills to avoid conflicts or defuse potentially negative situations (Camodeca & Goossens, 2005). However, there is a need for more research at secondary school age. Furthermore, interacting with age is change of schooling from primary/elementary to secondary, typically from a smaller to a larger and more complex organisation.

Fear of being bullied is a major concern for young people on their transition from primary to secondary school. Negative effects have also been reported on the development of self-esteem in the victims (O'Moore & Kirkham, 2001) and on their concentration and learning (Sharp & Smith, 1994). Children who are bullied are at risk of mental health problems including depression and increased anxiety (Juvonen *et al.*, 2003) and have poorer social skills (Fox & Boulton, 2005) with fewer friends (Smith *et al.*, 1999). In the long term, some children continue to present low self-esteem and depression (Seals & Young, 2003) or even commit suicide (Slee, 1994).

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Gender effects in bullying behaviour have been demonstrated but with important interactions: boys are more likely to use physical bullying while girls tend to use non-physical forms including relational bullying (Coyne *et al.*, 2006; Smith *et al.*, 1999). However, the most common form for both is verbal bullying (Smith *et al.*, 1999).

Children with special educational needs (SEN) have been identified as a group particularly at risk of victimization and relationship difficulties. Being a victim of bullying or social rejection has been linked to lower intelligence and academic achievement (Norwich & Kelly, 2004; Perry *et al.*, 1998) and to stuttering (Davis *et al.* 2002). Within mainstream schools, children with SEN are more vulnerable to bullying and have more difficulties forming social relationships with peers than typically developing peers (Martlew & Hodson, 1991), characteristics that can lead to social rejection (Frederickson & Furnham, 2004).

A key question that arises [concerns](#) the causal mechanisms leading to increased victimization and whether these are the same for children/young people with SEN and, in particular, those with SSLD. There is evidence for the importance of two different but related domains: firstly, impaired communication skills related to poorer social cognition skills (e.g. the social information processing approach of Crick and Dodge 1994); and secondly, low self esteem (O'Moore & Kirkham, 2001). It is also important to consider factors that might reduce risk and enhance resilience, including compensatory resources where other competences (e.g. prosocial skills) moderate the risk posed by relative weaknesses (e.g. language impairment).

Mahady *et al.* (2000) argue for two styles of dealing with being bullied: problem-solving, associated with de-escalation and resolution, and aggression. Children with

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SSLD, however, have greater difficulties than typically developing children on a range of tasks requiring social interaction (Brinton *et al.*, 1998). Conflict resolution and negotiation have been found to pose specific difficulties for children with SSLD as they demonstrate fewer strategies. Hence, children with language problems may be at particular risk for social difficulties in peer relationships and hence susceptible to being bullied (Redmond & Rice, 1998). Furthermore, Children with SSLD may be at increased risk of being bullied as they are more likely to lack reciprocal friendships and are significantly lonelier at school than their typically developing age matched classmates (Fujiki *et al.*, 1996).

In considering why children with SSLD often have difficulties interacting with peers, it is tempting to conclude that impaired language skills lead directly to social problems. Yet it is important to consider both the extent and the nature of the language problem. Severity of language impairment does not consistently predict levels of peer acceptance and there is evidence that receptive rather than expressive language is correlated with measures of peer acceptance (Craig & Washington, 1993). Communication may also be impaired because of pragmatic difficulties, using language inappropriately in a given context (Bishop, 1998; Bishop, *et al.*, 2000). Children with pragmatic difficulties are thought to have difficulties keeping friends because they cannot read social cues, and therefore do not know how to act or what to say in unstructured situations. These children may be at especially high risk of victimization, although this was not found by Conti-Ramsden and Botting (2004) in a study of 11 year old children with SSLD in their last year of primary school.

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Children with SSLD have increased levels of behaviour problems including difficulties with peer relations which might further predispose them to bullying (Lindsay & Dockrell, 2000). They are also at higher risk for impaired self esteem (Lindsay & Dockrell, 2000; Lindsay, *et al.*, 2002). Hence children with language problems may be vulnerable to bullying either as a specific result of their language impairment, or as a result of associated behaviour problems and reduced self-esteem. Each of these sets of explanatory variables would indicate that children with language difficulties would experience higher levels of victimization than typically developing peers. Given that children with other SEN are also at risk of difficulties with communication, peer relationships, lower self esteem, and victimization, it is important to distinguish those factors that are generic to children with additional learning needs from those specific to children with language impairments.

Purpose

The present study had three aims. Firstly, the study investigated the prevalence of victimization and its relationship with self esteem among children with SSLD at the age of transfer to secondary education and compared this with the prevalence for both typically developing children and children with special educational needs resulting from general learning difficulties. The second aim was to explore whether prosocial skills exercised a moderating effect on the likelihood of being victimized. Thirdly, the study explored whether the risk of victimization for the children with SSLD was associated with pragmatic language impairment.

Method

Participants

The present study was part of a longitudinal study conducted in two local authorities (LAs) and two regional special schools for children with specific language impairment in the United Kingdom. One LA is a large urban community in the north of England; the other covers both rural areas and a series of small towns. This project focused on a group of 69 children with SSLD whose first language was English, selected when they were in Year 3 (about 8 years of age). An initial survey of all educational (school) psychologists, speech and language therapists, and schools' special educational needs coordinators in the two LAs identified 133 children with SSLD, from whom a subsample of about 30 from each LA was derived. The 59 selected were supplemented by 10 children attending regional special schools for children with SSLD. There were 52 boys and 17 girls, a gender disparity typical of samples of children with SSLD (Leonard, 1998). At age 8 all children were on their school's special educational needs register thereby documented as requiring additional learning support to access the curriculum; 54% had a statement of special educational needs (SEN) under the Education Act 1996. The statement specifies the provision that must by law be made to meet the child's SEN, a status applied to about 3% of school pupils, over half of whom attend mainstream schools.

The present study comprised 67 of the same children with a history of SSLD (16 girls, 51 boys) in year 7, the first year of secondary education (mean age 12:1, range 11:5 to 12:7). Fifty were now attending mainstream schools, either included as individuals in their local schools or attending a Designated Special Provision within a mainstream school for part of their time, and 17 were attending special schools.

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The children had a history of substantially delayed development on a number of language and educational measures when originally tested, at mean chronological age 8 years 3 months: e.g. Bus Story Information (Renfrew, 1967) mean $Z = -1.54$ (Dockrell & Lindsay, 1998) – see Table 1. At mean age 10 years 8 months the children continued to have difficulties in language, e.g. British Picture Vocabulary Scale II (Dunn *et al.*, 1997) mean $Z = -1.2$ and literacy, e.g. Neale Analysis of Reading Ability: Revised (Neale, *et al.*, 1997) mean $Z = -1.46$ (Accuracy) and -1.73 (Comprehension), despite non-verbal cognitive ability within the normal range, mean $Z = -0.54$ (British Ability Scales II Matrices: Elliott, *et al.* 1997). Ninety-one per cent of the sample had a gap greater than $1SD$ between their non-verbal ability and one or more of the language measures ($N = 62$). Thus the sample at 10;8 years continued to have primary language difficulties and the large majority of the children fell within the category of SSLD as normally defined (Plante, 1998).

<Table 1 here>

In addition, two comparison samples had been created in Year 6 for those children attending mainstream: a group of typically developing children (TD) and a group of children with other non-language based learning difficulties, referred to as general special educational needs (SEN). For each child in mainstream a typically developing child in the same class who was of the same gender, within the average range of ability with no SEN was selected by the teacher, ($N = 42$, mean age 11:4 years, range 10:5 to 11:6). This comparison group allows the results of the bullying measure to be compared with a direct sample of typically developing peers from the same educational context. The SEN comparison group were also selected by the teacher from children in the same class and

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matched by gender and level of SEN, as estimated by the stage on the 5-stage *Code of Practice for Identification and Assessment of Children with Special Educational Needs* (Department for Education, 1994), where the main area of concern was general learning difficulties ($N = 32$, mean age 11:2 years, range 10:5 to 11:8). The comparison groups were only possible for children attending mainstream in Year 6 and, in the case of the SEN group, where the teacher was able to identify a child on the comparable level of the 5-stage Code of Practice in the same class.

Confirmation that the two teacher-selected samples were appropriate was obtained by assessing the children's reading. In each case the mean Z scores indicated the TD group to be about average (Neale Accuracy $M = 0.28$, $SD = .60$; Neale Comprehension $M = 0.14$, $SD = .62$) whereas both the SSLD and SEN groups were functioning at a lower level – SSLD: Neale Accuracy $M = -1.34$, $SD = .98$; Neale Comprehension $M = -1.55$, $SD = .86$; SEN: Neale Accuracy $M = -1.54$, $SD = .72$, Neale Comprehension, $M = -1.69$, $SD = .67$. In each case one-way Anovas indicated statistically significant between group differences: Neale Accuracy $F(2,137) = 59.19$, $p < .0005$; Neale Comprehension $F(2, 137) = 75.29$, $p < .0005$. Bonferroni post hoc tests confirmed that in each case there was no significant difference between the SSLD and SEN groups ($p > .05$) while for each test both the SSLD and SEN groups were significantly different from the TD group ($p < .0005$).

Instruments

Life in School (LIS)

Bullying was measured with the *Life in School (LIS)*, secondary school version, completed individually by the children (Arora & Thompson, 1987) a 40 item

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questionnaire with a mix of statements describing bullying, friendly and aggressive behaviour. (NB The study by Conti-Ramsden and colleagues used the primary age version of this scale but referred to it as the *My Life in School* checklist: Conti-Ramsden, & Botting, 2004; Knox & Conti-Ramsden, 2003). Children are required to state for each item whether the behaviour happened ‘more than once’ (coded 2), ‘once’ (coded 1) or ‘not at all’ (coded 0) during the previous week. The checklist includes six items which describe bullying behaviour, namely: tried to kick me, threatened to hurt me, tried to make me give them money, tried to hurt me, tried to break something of mine, and tried to hit me. These six items produce a Bullying Index with a range of possible scores from 0 to 12.

A limitation of the Bullying Index is that it comprises physical bullying items. Consequently, a new scale was devised for the present study consisting of verbal items from the LIS, the Verbal Bullying Index, comprising 10 items (range of scores 0-20), namely: called me names, teased me about my family, teased me because I’m different, asked me a stupid question, teased me, told me a lie, was rude about the colour of my skin, shouted at me, laughed at me, and told a lie about me. For clarity, the Bullying Index will be retitled Physical Bullying Index for the present paper. There are also 15 items in the LIS describing positive behaviour towards the child (e.g. helped me with my class work). These were used to produce a Prosocial Index (range 0-30). The LIS has been found to have satisfactory split-half reliability, and to show a high level of agreement with the Olweus Questionnaire (Ahmad, 1997). Data are available from several studies on over 5000 children (Ahmad, 1997; Arora, 1999; Arora & Thompson, 1987), however, there has been no standardization study of the scale. Consequently, the

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present study used a typically developing group of children for comparison (see Participants).

Self Perception Profile of Children (SPPC)

The *Self Perception Profile of Children (SPPC)* (Harter, 1985) was used to measure the children's self-perception or self-esteem. It comprises six subscales, which address five specific domains, namely Scholastic Competence, Social Acceptance, Athletic Competence, Physical Appearance, and Behavioural Conduct, together with a measure of Global Self Worth. Each subscale comprises six items. Children are presented with two written statements and asked to select which one is most like themselves. They then choose whether this statement is either 'really true of me' or 'sort of true of me'. Hence there is a four point scale for each item and a possible range of 6-24 for each subscale.

Modifications were made to improve the user friendliness of the SPPC for children with speech and language difficulties. In each case changes were made to Anglicise or simplify language without altering the meaning, e.g. 'smart' was replaced by 'clever'; the negative pole item 'BUT Other kids don't feel that they are very good when it comes to sports' was replaced by 'BUT other kids *don't* feel they are very good at sports'. To aid focus on the positive-negative distinction, key words e.g. *don't* were italicised for emphasis and stressed when read by the researcher. A further modification was to colour code the child's answer sheet. The responses to the left hand statement were coded dark green for 'really true for me' and light green for 'sort of true for me'. By comparison, the right hand statements were coded dark and light purple (See Lindsay *et al.*, 2002 for fuller details).

Strengths and Difficulties Questionnaire

The parents and teachers of the children with a history of SSLD completed the *Strengths and Difficulties Questionnaire* (SDQ) (Goodman, 1994). The SDQ has five scales each comprising five items: Emotional Symptoms, Conduct Problems, Hyperactivity, Peer Problems, and Prosocial Behaviour. Items are marked 'not true' (0), 'somewhat true' (1) or 'certainly true' (2) – range 0-10 for each scale. The scores for the first four scales can be summed to produce a total difficulties score (range 0-40) with the prosocial scale providing a separate score relating to positive behaviour. Separate score ranges are specified as 'normal', 'borderline' and 'abnormal' representing 80%, 10% and 10% of children respectively for both parent and teacher reports..

Children's Communication Checklist

The *Children's Communication Checklist* (Bishop, 1998) was designed to assess aspects of communication that are clinically important but not well covered by traditional language assessments and was designed to be used with children who have an identified language difficulty. The CCC comprises nine scales:

1. Speech (output, intelligibility, fluency, e.g. people can understand virtually everything he says);
2. Syntax (complexity of spoken grammar, e.g. speech is mostly two- to three-word phrases such as 'me got ball' or 'give dolly');
- 3* Inappropriate Initiation (e.g. talks to anyone and everyone; talks too much);
- 4* Coherence (making sense in conversation, e.g. uses terms like 'he' and 'it' without making it clear what/who is being talked about);

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- 5* Stereotyped Conversation (using learned chunks or favourite topics of language, e.g. has favourite phrases, sentences or longer sequences which he will use a great deal, sometimes in inappropriate situations);
- 6* Context (use of context in understanding conversation, e.g. takes in just one or two words in a sentence and so often misinterprets what has been said);
- 7* Rapport (use of conversational cues, e.g. poor at using facial expressions or gestures to convey his feelings, may look blank when angry or smile when anxious);
- 8. Social (relationships, e.g. is popular with other children; may hurt or upset other children unintentionally);
- 9. Interests (restricted interests, e.g. has one or more overriding specific interests and will prefer doing activities involving this to anything else).

A composite 'Pragmatic Impairment' score can be derived from the five scales 3-7 (marked '*' above). (Bishop, 1998).

Other language measures

Four language measures, administered as part of the battery of assessment in Year 6 (mean age 10 years 8 months), will be used in analyses for the present paper to establish the extent of children's expressive and receptive language problems at this age. Receptive language was measured with the British Picture Vocabulary Scale II (BPVS II) (Dunn et al., 1997) and the Test of Reception of Grammar (TROG: Bishop, 1989). Expressive language was measured by the Recalling Sentences and Word Structure subtests of the UK version of the Clinical Evaluation of Language Functioning (Semel, *et al.*, 1997).

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Non-verbal ability

Non-verbal ability was assessed by the Matrices subtest of the British Ability Scales II (BAS II Matrices: Elliott *et al.*, 1996)

Procedure

The children were assessed individually on the LIS, SPPC and (for SSLD group only) the language measures by one of the authors (CM), an experienced researcher with a Masters degree in child development, or by a second researcher who was a qualified speech and language therapist, and assured that the information they provided would be confidential. The SPPC and the LIS were read to the child to ensure that completion of the questions was not compromised by poor literacy skills, which characterised the SSLD and SEN groups.

The teachers and parents each completed the SDQ independently on the SSLD group only. The form teacher was responsible for completing the SDQ for the children attending mainstream and special schools; the teacher who was the head of the Designated Special Provision (e.g. a language unit) completed the SDQ for children attending those settings. In some cases the class teacher consulted the child's Learning Support Assistant to aid completion of the SDQ; this was especially true for the children attending mainstream schools. A meeting was arranged to interview the teachers and explain the completion of the SDQ which was left with them to complete subsequently, along with a reply paid envelope.

Contact had been maintained with the parents since the beginning of this longitudinal project when the children were about 8 years of age. Previous assurances that all information given would be kept confidential were repeated. Completion of the

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SDQ was explained at the interview conducted at home; the SDQ was left with the parents along with a reply paid envelope. Responses were received from 58 teachers and 54 parents.

Results

The distributions of scores for the LIS Physical Bullying Index (PBI) and Verbal Bullying Index (VBI) revealed significant deviation from a normal distribution (Kolmogorov-Smirnoff one sample test). Consequently non-parametric analyses were carried out on these measures, using either the Mann-Whitney test or the Kruskal-Wallis one-way analysis of variance for independent groups for comparison of between group mean scores, and Spearman correlations for analysis of associations. As there were no statistically significant differences for gender on either the PBI ($U = 380.5, p = .648$) or the VBI ($U = 342, p = .330$) analyses were conducted on the total SSLD sample. Parametric tests were used for analyses not including these measures. Two-tailed tests were used throughout. As not all of the language and literacy tests produced standardised scores, z score transformations were used.

The results are presented in three sections. Section 1 presents the comparison of the SSLD, TD and SEN groups' results for prevalence of victimization and its relationship with self esteem; Section 2 examines the relationship between victimization and prosocial skills for the three groups; Section 3 explores the relationship for the SSLD group between victimization and these children's language abilities, in particular the degree of pragmatic impairment.

Prevalence of victimization and relationship with self esteem

Prevalence of victimization

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A child who records any item on the LIS Bullying Index as occurring 'more than once' during the past week is considered to be at risk of bullying (Smith & Sharp, 1994). This criterion was used for both the PBI and the VBI. Of the children with SSLD in mainstream schools, 28% were in this category (14/50) on the PBI, with 16% recording at least two instances and 10% recording at least four (Table 2). These are high rates but are not statistically significantly different from those found for the two comparison groups: 25% of the SEN group reported at least one bullying incident (19% at least two instances, 6% at least four), and 22% of the TD group (6% recording at least two instances, 6% at least four): $X^2(2, N = 123) = 0.48, ns$.

<Table 2 here>

The results for the VBI were comparable (Table 2) with no statistically significant difference between the three groups: $\chi^2(2, N = 123) = 0.06, ns$. Furthermore, although the number of SSLD children reporting being bullied verbally was greater than those that reported being physically bullied (54% v 28%), this was also the case for both the SEN group (44% v 25%) and TD group (46% v 22%): $\chi^2(2, N = 123) = 0.09, ns$.

There was no significant difference between the SSLD group in mainstream ($n = 50$) compared with those SSLD children attending special schools for children with language difficulties or moderate learning difficulties ($n = 17$) for either the PBI: Mainstream ($M = 1.98, SD = 3.37$), Special ($M = 1.0, SD = 2.24$), $U = 378.5, p = .449$; or for the VBI: Mainstream ($M = 4.4, SD = 4.87$) Special ($M = 3.59, SD = 3.72$), $U = 397, p = .683$. Within the mainstream sample, eight children were attending designated special provision: half of these reported physical victimization.

Self-esteem

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Table 3 presents the correlations of the PBI, VBI and Prosocial Index (PI) compared with the SPPC scales. Given the large number of correlations there is a risk of Type 1 error and so any correlation where p is not $< .001$ should be treated with caution. Consequently it is concluded that there were no statistically significant correlations between the SPPC and either Bullying Index. However, the negative correlations for the SEN group between physical appearance and PBI ($r_s(32) = -.48, p = .005$) and VBI ($r_s(32) = -.42, p = .015$), and between global self worth and PBI ($r_s(32) = -.41, p = .019$) and VBI ($r_s(32) = -.38, p = .033$) are worthy of note as there were common trends.

Furthermore, the VBI correlated significantly ($p < .005$) ~~for all three groups~~ with the PBI ~~for all three groups~~ (SSLD: $r_s(67) = .42, p < .0005$; SEN: $r_s(32) = .74, p < .0005$; TD: $r_s(41) = .59, p < .0005$).

<Table 3 here>

One way Anovas followed by Bonferroni post hoc tests were conducted to examine differences between SPPC mean scores by group (Table 4). Both the SSLD group ($p = .001$) and SEN group ($p = .02$) had lower scores on social acceptance than the TD group. There was a similar pattern for perceptions of scholastic competence, but this difference was statistically significant only for the SEN group ($p < .001$). Finally, the SSLD group had positive perceptions of their behavioural conduct comparable to those of the TD group and significantly higher scores than those of the SEN group ($p = .018$).

<Table 4 here>

Prosocial skills

[This section examines the relationship between victimization and prosocial skills for the three groups.](#) There was a statistically significant difference on the LIS Prosocial Index

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between the SSLD, ($M = 13.24$, $SD = 5.6$) TD ($M = 16.37$, $SD = 5.66$) and SEN ($M = 11.94$, $SD = 6.83$) groups in mainstream schools ($F(2,120) = 5.54$, $p = .005$). Bonferroni post hoc tests revealed that both the SSLD group ($p = .043$, $d = 0.56$) and the SEN group ($p = .006$, $d = 0.71$) had significantly lower scores on the Prosocial Index than the TD group [with moderate to large effect sizes](#), indicating fewer positive behaviours received; there was no significant difference between the SSLD and SEN groups.

The Prosocial Index was not correlated with either victimization index for the total sample: PBI $r_s(123) = .01$ *ns*; VBI $r_s(123) = .14$ *ns* nor when each group was analysed separately, e.g. mainstream SSLD group PBI $r_s(50) = .11$ *ns*; VBI $r_s(50) = .03$ *ns*. However, the Prosocial Index was significantly correlated with the SPPC Social acceptance scale for both the SSLD mainstream sample ($r(50) = .60$ $p < .0005$) and the total SSLD group ($r(64) = .51$ $p < .0005$), indicating that children with SSLD who perceived themselves as socially accepted also perceived higher levels of positive behaviour directed to them. This relationship was also found for the TD group ($r(41) = .39$, $p = .012$) but not for the SEN group ($r(32) = .27$ $p = .138$).

The LIS Prosocial Index correlated positively for the SSLD group with the SDQ Prosocial scale. This was statistically significant for the teachers scale ($r(57) = .39$, $p = .003$) but not the parents scale ($r(52) = .22$, $p = .113$). The LIS Prosocial Index was negatively correlated with the SDQ Peer problems scale; indicating that receiving prosocial interactions was less likely when a child had problems with peers. However, this relationship was statistically significant for parents $r(52) = -.33$, $p = .017$, but not for teachers $r(57) = -.17$, $p = .212$). The Prosocial Index did not correlate significantly for the SSLD group with any of the language measures (Table 5).

Relationship between victimization and pragmatic impairment for children with SSLD

In this section the relationship between victimization and the language abilities of children with SSLD will be examined. The main focus will be on pragmatic impairment. As there were no statistically significant differences between the boys and girls on any language test ($p > .05$), the SSLD sample were taken as a whole for these analyses. Correlations between both the PBI and VBI and all language measures and nonverbal cognitive ability (BAS matrices) were nonsignificant (Table 5), indicating no linear relationship between increasing levels of language difficulties and increased risk of victimization.

<Table 5 here>

Children within the SSLD group scoring <132 on the CCC Composite score (those with pragmatic impairment) were compared on both the PBI and VBI with those without pragmatic impairment (>132). The cut-off on the PBI was selected at 0 (no victimization) v 1-12 (experience of victimization); the VBI had too few children at 0 so a cut off of 0-1 v 2-20 was used. In each case the cut-off was the best estimate for a 50% split. Pragmatic impairment was not related to physical victimization ($\chi^2 (1, N = 61) = 1.01, ns$) but was related to verbal victimization ($\chi^2 (1, N = 61) = 4.55, p < .05$) indicating that children within the SSLD group with pragmatic impairment were less likely to report having experienced verbal bullying.

Neither the PBI ($r_s (61) = .05, ns$) nor the VBI ($r_s (61) = .12, ns$) was correlated with the CCC Composite scale. However, comparison of the CCC Composite scores with the SDQ Peer Problem scale indicated that peer problems, whether rated by parents

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or teachers, were correlated with level of pragmatic impairment: parents $r_s(48) = -.42, p = .003$; teachers $r_s(52) = -.43, p = .001$.

The proportion of children with peer problems on the SDQ (those rated abnormal or borderline) in the SSLD sample was substantial: 77% pragmatic impairment, 52% non-pragmatic impairment according to parents; 57%:36% according to teachers, compared with the expectation within a community of 20% (Goodman, 1994). The pragmatic impairment group were rated as having higher levels of peer problems (parents $M = 3.47, SD = 1.7$; teachers $M = 3.67, SD = 2.31$) than the non-pragmatic impairment group (parents $M = 2.52, SD = 1.67$; teachers $M = 2.45, SD = 2.16$); in each case the difference just failed to reach significance: parents $t(46) = 1.88, p = .066$; teachers $t(50) = 1.94, p = .058$.

Discussion

The purpose of this study was to investigate the extent of bullying experienced by children with a history of specific speech and language difficulties (SSLD) compared with their typically developing (TD) peers and children with special educational needs (SEN) related to general learning difficulties, and to examine the relationship between bullying, the children's language abilities, prosocial behaviour, their self-esteem and educational provision (mainstream v special school). Selection of comparison children from within the same classes as the SSLD children in mainstream allowed experiences specific to children with SSLD to be distinguished from those common also to children with general learning difficulties and to typically developing children at this point of transition to secondary education.

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The prevalence of physical bullying reported by the mainstream SSLD group was high (28% reported experiencing at least one type of physical bullying more than once in the previous week) but comparable to that reported by SSLD children in the last year of primary school in Year 6 (Knox & Conti-Ramsden, 2003). The proportion of the mainstream SSLD group in the present study reporting victimization as a result of verbal bullying was about twice as high (54%) As this scale was devised for the present study no comparative data are available.

These are high rates of victimization. However, comparison with TD children and those with SEN indicates comparable levels for being the victim of physical bullying (22% TD, 25% SEN). This is almost twice the level reported by Knox and Conti-Ramsden (2003) for their typically developing children (12%) but that study used a non-matched sample of typically developing children from three primary schools and so the difference in prevalence may reflect a methodological confound. The prevalence of verbal bullying experienced by the comparison groups in the present study was also comparable to the SSLD sample (54% SSLD, 46% TD, 44% SEN). Other studies have reported high rates for typically developing children. Johnson et al (2002), for example, in a study of 7-11 year olds in England also using the LIS reported 33%. Transfer to secondary school is often associated with concerns by pupils and anxiety concerning entry to a much larger school. However, evidence on age trends for bullying [does](#) not indicate an increase in reported victimization between primary and secondary (Seals & Young, 2003).

The current data suggest that at secondary school age children with a history of SSLD are not specifically vulnerable to being bullied. However, whether they are able to

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moderate the high level of victimization over time will depend on other social factors. As will be considered below, these social factors may place these children at continued risk which they are unable to resolve. For example, socially competent children may deal with new challenges of victimization by drawing upon their social skills and forming new friendship groups, so enhancing protective factors (Smith *et al.*, 2004). Children with SSLD, however, may not be able to do this and may be more at risk of later adverse outcomes to similar levels of victimization. Also, similar rates may not represent equal impact because of different social linkages and peer group support, as suggested by the current data on the importance of peer acceptance.

Previous studies have reported that children with SSLD have a range of behavioural, emotional and social difficulties including peer problems and aspects of self esteem (Conti-Ramsden & Botting, 2004; Lindsay & Dockrell, 2000; Lindsay *et al.*, 2002). The present study found that both the SSLD and SEN groups had poorer self perceptions of social acceptance and scholastic competence than typically developing children but neither was correlated with likelihood of being bullied. Lower self esteem is typically related to victimization (O'Moore & Kirkham, 2001), but although global sense of self worth was associated with level of victimization for both the SEN and typically developing children there was no association for the SSLD group. In common with previous research (O'Moore & Kirkham, 2001), concern about physical appearance was not associated with victimization for either the SSLD or typically developing children. However, lower self perception of physical appearance was associated with higher levels of victimization for children with SEN. This is an intriguing finding and would benefit from closer scrutiny to explore the nature of this association. It is not possible from the

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present study to identify whether the reasons concern bodily appearance (e.g. facial features), behavioural manifestations of appearance (i.e. presentation of self) or other aspects of appearance such as clothing where style, for example, is important.

The SSLD sample had a history of language difficulties which were confirmed to be continuing ~~when they were reassessed at 10 years~~. However, there was no correlation between physical or verbal victimization and any measure of expressive or receptive language ability (see also Conti-Ramsden & Botting, 2004). This lack of relationship is apparently counter-intuitive as other studies have indicated that the ability of children with SSLD to understand language is related to their own behavioural difficulties (Lindsay & Dockrell, 2000) although a lack of relationship between language ability and victimization is consistent with Fujiki *et al.* (1996). However, the finding that pragmatic impairment among the SSLD children was related to self reports of lower levels of verbal bullying may reflect lack of awareness of the salience of the interactions rather than lower prevalence. As victims generally display more deficits in processing social information than other children, this finding could suggest children with pragmatic impairments are at greater risk of actual victimization even if they did not recognise all the negative interactions appropriately.

Studies of victims of bullying have reported increased risk for children with SEN and those with poorer peer relations and prosocial skills (Champion, *et al.*, 2003; Frederickson & Furnham, 2004; Mishna, 2003). For the SSLD children, a higher level of receiving positive interactions from peers was associated with a higher level of perceived social acceptance and teachers' ratings of having good prosocial skills. Children with higher levels of prosocial skills show greater empathic awareness, are more likely to

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achieve popular status and are less likely to be rejected (Warden & Mackinnon, 2004).

However, strengths in this domain did not provide protection against being bullied.

Contrary to the central trend in the literature that typically developing boys report more direct victimization than girls (Hunter *et al.*, 2004; Olweus, 1991; but see Norwich & Kelly, 2004), there was no gender difference in self reports of being bullied by the children in the SSLD group. Neither were there significant differences in prevalence of bullying for the SSLD group by type of educational provision. The previous research evidence on this is not consistent. Children with SEN attending mainstream schools have been found to experience more bullying than their typically developing peers (O'Moore & Hillary, 1989). Martlew and Hodson (1989) and Thompson *et al.* (1994) have reported that children with SEN in mainstream schools and Designated Special Provision (DSP) experience more bullying than those attending special schools. However, Norwich and Kelly (2004) found no difference for a sample of children with moderate learning difficulties and Knox and Conti-Ramsden (2003) also found this for children with SSLD, a finding consistent with the present study. These differences may reflect the greater awareness of bullying and the development of school policies and anti-bullying training programmes over the past ten years, and the development of positive approaches to support inclusive education. The higher levels of perceptions of scholastic competence by those attending special schools were also found when the children were 8 years (Lindsay & Dockrell, 2000). This may reflect the 'big fish little pond' phenomenon (Marsh & Hau, 2003) where children compare their academic achievements with those of their peers. Lower achieving pupils in mainstream are faced daily with unfavourable comparisons with higher achieving pupils in their class.

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The study has raised a number of methodological questions about research in this field. The Life in School checklist has not been fully standardised and the original LIS Bullying Index is limited to six items that are essentially concerned with physical victimization. To improve the range of types of victimization examined, a new scale from items within the LIS, the Verbal Bullying Index, was created for the study. Similarly, a Prosocial Index (also using LIS items) was created to explore the children's perceptions of positive behaviours they experienced. These scales have proven useful but require further research to explore their qualities. Data from the Strengths and Difficulties Questionnaire were only available for the SSLD group, thereby limiting comparisons across the different cohorts. Finally, the study drew on self reports of victimization rather than behavioural observations. On the other hand, the study benefited from reports from both teachers and parents; from the inclusion of comparison groups matched by school class; and from being part of a longitudinal study of a group of children identified as having SSLD at age 8 and followed up over the next four years, including their transfer to secondary school.

Conclusions

Children with SSLD have an increased risk of comorbid educational and social-behavioural difficulties but although prevalence of victimization at age of transition to secondary school was high, a worrying finding, it was comparable to the prevalence for matched typically developing peers and to that reported for children with a history of SSLD in their last year of primary education. However, as the study used self report it is possible that those children with pragmatic impairment were misreading situations. In association with lower levels of social acceptance and higher levels of peer problems,

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these children's prognosis in terms of subsequent susceptibility to victimization may be less positive. Furthermore, interventions addressing victimization need to take account of these children's impaired communication skills as many programmes put emphasis on methods that engage the children themselves in tackling bullying either informally during day to day interactions or as peer counsellors. Hence further research will need to include long term follow up, with direct evidence of victimization rather than, or in addition to, self report, as well as comparative data on other children, in order to investigate whether reducing prevalence of victimization from these very high levels will require different methods for children with communication difficulties or other SEN.

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Table 1: Mean Z scores (*SDs*) for language and nonverbal ability of the SSLD group at 8 and 10 years.

	8 years ¹		10 years ²	
	Mean Z	SD	Mean Z	SD
<i>Language Measures</i>				
Test of Reception of Grammar (TROG)	-1.45	.94	-1.22	1.02
British Picture Vocabulary Scale (BPVS)	-1.12	.62	-1.20	.71
Bus Story Information	-1.54	1.17	-	-
Naming Vocabulary (BAS)	-1.03	.93	-	-
Recalling Sentences (CELF)	-	-	-1.76	.73
<i>Nonverbal ability</i>				
Matrices (BAS)	-0.76	.88	-0.54	.95

¹ N = 68

² N = 67

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Table 2: Number (%) of SSLD, SEN and TD children in mainstream and special schools reporting victimization

	SSLD mainstream (n = 50)		SEN (n = 32)		TD (n = 41)		SSLD Special school (n = 17)	
	n	%	n	%	n	%	N	%
<i>Physical victimization</i>								
No bullying item	36	72	24	75	32	78	14	82
1	6	12	2	6	6	15	2	12
2	1	2	4	13	1	2	0	0
3	2	4	0	0	0	0	0	0
4	3	6	1	3	0	0	1	6
5	1	2	1	3	0	0	0	0
6	1	2	0	0	2	5	0	0
<i>Verbal victimization</i>								
No bullying item	23	46	18	56	22	54	7	41
1	13	26	2	6	5	12	6	35
2	4	8	1	3	2	5	0	0
3	3	6	7	22	7	17	2	12
4	1	2	0	0	2	5	1	6
5	1	2	3	9	1	2	1	6
6	2	4	1	3	1	2	0	0
7	1	2	0	0	1	2	0	0
8	1	2	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0
10	1	2	0	0	0	0	0	0

Note: SSLD: specific speech and language difficulties; SEN: special educational needs; TD: typically developing

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Table 3: Correlations between the Self Perception Profile for Children and the Life in School Physical and Verbal Bullying Indexes and Prosocial Index.

	Physical Bullying Index			Verbal Bullying Index			Prosocial Index		
	SSLD	TD	SEN	SSLD	TD	SEN	SSLD	TD	SEN
Scholastic achievement	.40	-.29	-.08	-.20	.05	-.21	-.01	.13	.06
Social acceptance	-.09	.04	-.28	-.15	.11	-.13	.45***	.33*	.21
Athletic competence	.05	.20	-.25	-.10	.02	-.13	-.02	-.10	-.10
Physical appearance	-.01	.01	-.48*	-.23	-.05	-.42*	-.20	-.16	-.07
Behavioural conduct	.30*	-.31*	-.21	-.01	-.16	-.27	.06	.16	.12
Global self worth	-.11	-.33*	-.41*	-.22	-.10	-.38*	.20	.26	-.01

Note: SSLD: $n = 64$; TD: $n = 41$; SEN: $n = 32$

* $p < .05$, ** $p = .01$, *** $p = .001$

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Table 4 Comparison of means (*SDs*) of the Self Perception Profile for Children for SSLD, SEN and TD groups.

	SSLD	TD	SEN	<i>F</i>
Scholastic competence	2.57 (.73)	2.85 (.55)	2.25 (.60)	7.65***
Social acceptance	2.79 (.64)	3.25 (.48)	2.85 (.75)	7.50***
Athletic competence	2.84 (.71)	2.98 (.63)	2.84 (.71)	1.22
Physical appearance	2.98 (.67)	2.97 (.67)	2.83 (.80)	0.39
Behavioural conduct	3.04 (.64)	2.90 (.63)	2.66 (.66)	3.90*
Global self worth	3.11 (.54)	3.22 (.56)	3.08 (.68)	0.66
<i>N</i>	64	41	32	

* $p < .05$, ** $p < .01$, *** $p < .001$

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Table 5: Correlations between the Life in School Physical Bullying Index, Verbal Bullying Index and Prosocial Index , and the language measures for the SSLD group ($n = 66$)

Language measures	PBI	VBI	PI
Receptive vocabulary (BPVS)	-.06	-.14	.02
Receptive grammar (TROG)	.10	-.17	-.04
Expressive language (CELF Recalling sentences)	.03	-.02	-.01
Expressive syntax (CELF Word structure)	.08	-.05	-.04
Pragmatic difficulties (CCC composite)	.05	.12	.17
Non-verbal cognitive ability (BAS Matrices)	.07	.06	.33**

* $p < .05$ ** $p < .01$