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Patterns of language impairment and behaviour in boys excluded from school

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Background. High levels of behaviour problems are found in children with language impairments, but less is known about the level and nature of language impairment in children with severe behavioural problems. In particular, previous data suggest that at primary age, receptive impairments are more closely related to behaviour problems, whereas expressive language has a closer link at a later age.

Aims. The study assessed expressive and receptive language problems in boys excluded from primary and secondary schools, to investigate the extent of impairment, the pattern of relations between age, receptive and expressive language, and relations with different aspects of behaviour.

Sample. Nineteen boys (8–16 years of age) who had been excluded from school and 19 non-excluded controls matched for age and school participated.

Method. The sample was given assessments of: receptive language from the British Picture Vocabulary Scale (BPVS), and Wechsler Objective Language Dimensions (WOLD); expressive-language evaluations from the Wechsler Intelligence Scale for Children (WISC); auditory working memory evaluations from the Clinical Evaluation of Language Fundamentals (CELF); verbal reasoning (from the WISC); and non-verbal IQ assessments Raven's matrices. Teachers completed behaviour ratings using the Strengths and Difficulties Questionnaire (SDQ).

Results. Excluded boys were significantly poorer than controls on expressive measures but similar on receptive language and non-verbal IQ. Boys excluded from primary school were poorer than controls on auditory working memory. Expressive problems were linked with high levels of emotional symptoms.

Conclusion. Many of the excluded boys had previously unidentified language problems, supporting the need for early recognition and assessment of language in boys with behaviour problems. Expressive problems in particular may be a risk factor.

The incidence of speech and language impairment (SLI) among children has been difficult to establish. Lindsay and Dockrell (2000) estimated that speech and language

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impairment affects 7% of children, while Law *et al.* (2000) arrived at a 10% estimate. The evidence suggests therefore that SLI is a significant category of educational need and is not confined to the early years of learning.

A recent study of children in National Curriculum Year 2 carried out by Botting and Conti-Ramsden (2000) indicated that of the 5% of the children they expected to experience SLI, only 1% appeared on registers of special educational need with SLI as their primary need. The children who are most likely to be identified as having SLI are those who experience phonological problems which affect speech intelligibility and who go on to struggle with the acquisition of literacy (Bishop & Adams, 1990). Children who have less obvious difficulties with receptive or expressive language may not be identified as having language problems (Beitchman, 1985), but may be referred to support services for other reasons such as slow educational progress, poor reading comprehension, or behavioural issues.

Some children may not be identified as having SLI until they are in the secondary phase of their education (Ripley, Barrett, & Fleming, 2001). If teachers are not aware that a child in their class has SLI, the student's behavioural response may give rise to perceptions of primary problems such as emotional and behavioural disorders (Gordon, 1991), stubbornness, and non-compliance (Freeman & Willig, 1995).

Baker and Cantwell (1987) attempted to explain how abnormal language development might disrupt the development of behavioural control. They asserted that children with SLI were frequently put under pressure to conform when they were unable to understand or respond as other children of their age did. The outcome was, all too often, tantrums, attention problems, and non-compliant behaviour that were then interpreted simply as bad behaviour. Significantly, they reported that the behaviours rather than the underlying SLI then became the focus for intervention.

For Vygotsky (1962), the key tool for the self-regulation of behaviour is language. In their second year, children are capable of some impulse control with the aid of emerging language, but it is not until between 3 and 4 years of age that true self-control develops (Kopp, 1982). At this stage most children are able to understand and obey external rules and restrictions and hold themselves back from prohibited acts. It is during these pre-school years that a child's own language starts to become a vehicle for the self-regulation of behaviour (Luria, 1961), a technique for controlling action and thought (Berk, 1992; Berk & Winsler, 1995).

As children get older, they become able to use 'self-speech' to understand situations, focus on problems, and overcome difficulties (Harris, 1990). Language can be used as verbal trial-and-error by making it possible to talk through possibilities instead of acting them out, and to plan ahead (Dollard & Miller, 1950). According to Vygotsky (1962), this self-talk or private speech is internalized as thought between the ages of 6 and 7 years.

The behaviour problems of children with identified SLI have been investigated in many studies (Aram, Ekelman, & National, 1984; Beadle, 1979; Beitchman, 1985; Knoll, 1999; Silva, Justin, McGee, & Williams, 1984; Tallal, Dukette, & Curtiss, 1989). In their study of children with SLI in Year 2, Botting and Conti-Ramsden (2000) identified 40% of children as having antisocial or emotional problems in addition to their SLI. The majority of the studies that have established that children with SLI are at risk of developing behavioural problems have tracked children who have SLI identified in the early years. Stevenson, Richman, and Graham (1985) demonstrated that children who had language problems at 3 years of age were at risk of showing behaviour problems at 8 years of age. However, Stevenson *et al.* (1985) and Funk and Ruppert (1984) found

that as language skills improved, so the attendant behaviours were ameliorated. Paul (1991) hypothesized that the early maladaptive behaviour of toddlers was caused by frustration at being unable to communicate effectively.

Evidence from population studies indicates that the incidence of SLI is significantly underestimated in the school-age population, while studies of children who have been identified with SLI suggest that unresolved problems may precipitate challenging behaviour. Despite the evidence of a coincidence between SLI and behaviour problems, there have been relatively few studies that have focused on the language profiles of children who experience behaviour problems.

Camarata, Hughes, and Ruhl (1988) studied mild-to-moderately-behaviourally disordered students and found that 71% had language scores which were more than 2 standard deviations below the mean. Warr-Leeper, Wright, and Mack (1994) investigated a population of antisocial boys in a residential treatment centre and found that 80% of the children had undetected language impairments. Burgess and Bransby (1990) undertook a detailed study of the language profiles of children in a unit for moderate emotional and behavioural problems, and recommended intervention by a speech and language therapist for 16 of the 17 students.

Other investigations have focused upon children who had been referred to psychiatric services (Beitchman, 1995; Vallance, Im, & Cohen, 1999). Cohen (1998) reported that 40% of 7–14-year-olds referred to psychiatric services had undetected SLI. The incidence was 6% higher in an older age group of 7–14-year-olds than in the younger population of 4–12-year-olds who were investigated in the 1996 study. The children with undetected SLI were more likely to demonstrate 'aggressive, delinquent' behaviours, and receive a diagnosis of oppositional defiant or conduct disorder. Aram *et al.* (1984) used parent ratings of adolescent boys with SLI, and found that the boys were rated as significantly more aggressive and hyperactive than matched peers.

Studies of prison populations and residents of youth offender institutions have, likewise, been shown to have a higher than expected incidence of inmates with SLI. Bryan (2004) found high levels of speech and language problems in a UK young offenders' institution. A similar need for speech and language therapy services in prisons was identified by Pryor (1998) in a study of young offenders.

The first aim of the present study was to investigate the incidence of language impairment in a group of children identified as having behaviour problems, but with no reported language problems. We recruited children who had been excluded from mainstream schools because of behaviour problems. A detailed language profile was obtained for each child. Assessments of auditory working memory were also carried out because working memory has been implicated in executive function and the self-regulation of behaviour (Cohen, 1998).

The discussion thus far has addressed the broad issues of the links between SLI and challenging behaviour. However, in the literature there is some debate about whether receptive or expressive language difficulties are more closely linked to behaviour problems. Evidence from studies of preschool populations suggests that the type of behaviour problems experienced by children with receptive and expressive language problems may be different. Beadle (1979) found that preschool children with expressive language problems were at risk for poor attention, emotional liability, impulsivity, and high levels of arousal.

Beitchman (1985) found similar behavioural characteristics for a group with expressive language problems but a different pattern for children with receptive problems. Mild receptive language difficulties were linked to temper tantrums and

negativism, while children with severe receptive problems were likely to show problems similar to those of children on the autistic spectrum. Among a population of 3-year-olds, Silva *et al.* (1984) found a higher incidence of behaviour problems for children with receptive language impairment. However, Silva *et al.* and Botting and Conti-Ramsden (2000) agree in their claim that children with combined receptive and expressive language problems are most likely to experience behaviour problems, particularly in relationships with peers. Botting and Conti-Ramsden reported that these difficulties increased with age.

There is some evidence for a shift in the significance between receptive and expressive language difficulties over time. Thus, Silva *et al.* identified a group of children with expressive language problems at 11 years of age that had not been apparent in that cohort at 9 years of age. Similarly, Ripley (1984) reported that 71% of a population of adolescents with SLI who were referred to a psychologist for aggressive behaviour towards peers, adults, and the physical environment, had expressive language problems. Pryor (1998) found that among young offenders, 64% had significantly lower scores for expressive language than for receptive language.

The second aim of this study, if SLI was shown to be high among excluded children, was to compare the roles of expressive and receptive language in behaviour problems, as assessed by teacher reports. We investigate two aspects of this issue: possible age differences in the relation of language and behaviour problems, and the types of behaviour problem associated with receptive and expressive problems.

Method

Participants

All children who had been permanently excluded from a school in a single local authority were identified ($N = 64$), and the children's new schools were contacted. Only six of the group were girls, so this study focused entirely on boys. Some schools were unwilling to participate, and some children could not be traced, for example, because of having moved away from the area. The final sample consisted of 19 excluded boys, 14 from secondary schools, and five from primary schools, and the same number of age-matched controls (see below). Reasons for exclusion included verbal and physical aggression, failure to follow rules, and other behaviour problems including possession of an offensive weapon, and for one child, absconding from school. These reasons are not analysed further, since several explanations were cited in some cases, and all involved behaviour problems of one type or another. The children were traced to their new placements, which were either different schools or tutorial units. In order to create a comparison group of non-excluded children, the class teacher was asked to specify another boy close in age to the excluded child, of average ability, and with no behaviour problems, yielding a sample of 19 controls. We gained written parental permission and oral permission from the child. The average ages for primary and secondary age children are shown in Table 1.

Assessments

Verbal measures

Receptive language The short form of the British Picture Vocabulary Scale (BPVS; Dunn, Dunn, Whetton, & Pintilie, 1982) was used as a measure of basic receptive

Table 1. Mean ages (in months, with standard deviations) for children by exclusion status and age

	Primary		Secondary		Total	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Group						
Excluded ($N = 19$)	114.60	9.37	173.79	13.31	158.21	29.40
Control ($N = 19$)	113.60	13.05	174.29	15.02	158.32	30.89
Total	114.10	10.72	174.04	13.92	158.26	29.75

vocabulary. It requires the child to indicate which one of four pictures best matches a spoken word, with vocabulary increasing in difficulty; for example, ball, inflated, apparition. The test has 32 items and testing is stopped when the child makes four errors in six consecutive items.

Wechsler Objective Language Dimensions (WOLD; Wechsler, 1991) was used as a more taxing measure of receptive language for connected text. In this measurement, the child hears a series of texts of increasing length, and answers questions after each one. The test has 36 items and testing stops when the child scores zero for five consecutive items.

Expressive language The Word Definitions (WD) task from the Wechsler Intelligence Scale for Children (WISC II UK; Wechsler, 1991) was used to tap the child's language expression. The child is given a series of words that he has to define. The words vary in difficulty, for example, clock, precise, imminent, and definitions are scored from 0 to 2. The test has 30 items and testing is discontinued after four consecutive failures.

Other language measures The Verbal Reasoning (VR) test from the WISC was used. Children are given two items that belong to a category, and have to supply a category name, for example, piano and guitar are instruments; mountain and lake are geographical features. The test has 19 items scored between 0 and 1, or 0 and 2, with a possible total score of 33. Testing stops after four consecutive failures.

The recall of sentences task from the Clinical Evaluation of Language Fundamentals (CELF; Semel, Wiig, & Secord, 1980) was used as an assessment of auditory working memory for text. The child hears a sentence that he then repeats. The 26 sentences vary in length and complexity, for example, 'Did the boy kick the ball?', and 'The boy who didn't turn up for practice wasn't allowed to play in the team until a week later'. Perfect recall is scored 3, one error scores 2, two to three errors score 1, and four or more errors score 0, so the maximum score is 78. Testing stops after four consecutive zero scores.

Non-verbal assessment

Raven's Standard Progressive Matrices test (SPM; Raven, 1998) was used to assess non-verbal reasoning. The test consists of patterns made up of separate tiles, with one tile missing. The child has to choose one of six to eight tiles that makes the pattern complete. There are 60 items and children work through the test at their own pace.

Behaviour assessment

Each child's teacher completed the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). This consists of five sets of five questions about the target child, and the teacher indicates on a 3-point scale the extent to which the item is true for that child; for example, often lies or cheats: *not true*, *somewhat true*, *certainly true*. Scales cover conduct problems, prosocial behaviour, hyperactivity/attention problems, emotional symptoms, and peer relations. Data were unavailable for one excluded child.

Procedure

Children were tested individually in a quiet room by one of three female experimenters, who had been trained together on test administration. Tests were administered in a fixed order, with the amount of language required of the child increasing over the session, to allow children time to become as confident and relaxed as possible: Raven's, BPVS,

WISC similarities, WISC vocabulary, WOLD, and CELF. Each test was preceded by practice items. The atmosphere was kept informal and friendly. Teachers were given SDQs on the day of testing, and completed them within 4 weeks of the testing session.

Results

For the main analyses, *z*-scores were computed using the standard deviation of the control group. This allows us to make comparisons between different tests and ties the standardization to the performance of the control group, which we take to be average. Except where stated, in all analyses, age in months was used as a covariate.

Non-verbal versus verbal reasoning

The raw means for excluded and control children for the Raven's matrices and the verbal reasoning tests are shown in Fig. 1. An analysis of variance using *z*-scores, with modality (verbal vs. non-verbal) as the within-subjects variable, and exclusion status (excluded or control) between subjects, with age in months as a covariate, showed no significant main effect of modality ($F < 1$), a significant effect of age $F(1, 35) = 50.71$, with younger children performing more poorly, no significant interactions with age ($F < 1$), and a significant main effect of status $F(1, 35) = 6.64, p < .01$. This was moderated by a significant interaction between modality and exclusion status $F(1, 35) = 12.41$, $p < .001$. Planned comparisons showed that, as predicted, the excluded children were similar to the controls in non-verbal skill, but poorer on the measure of verbal reasoning.

Receptive and expressive language

The mean scores on the two receptive measures (BPVS and WD), both between the excluded and control and between the two tests, were very similar. All mean scores were between 21.5 and 23.75, and standard deviations were all between 4 and 5. Rather than produce a combined measure, we use the more complex receptive test, WD, as a closer comparison with the WOLD, but results are not materially different from using the BPVS, given the similarity of WD to BPVS scores. Raw means for excluded and

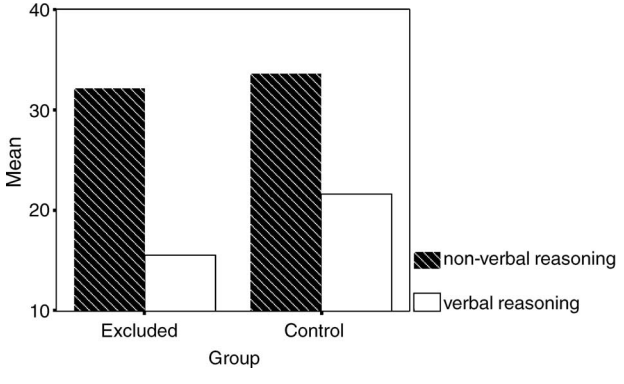

Figure 1. Mean raw scores for non-verbal (Raven's matrices) and verbal (similarities) measures in excluded and control boys

control children for the WOLD and WD are shown in Fig. 2. An analysis of variance of *z*-scores with language mode (receptive vs. expressive) as the within-subjects variable, and exclusion status (excluded or control) between subjects, with age in months as a covariate, showed no significant main effect of language mode $F < 1$, a significant effect of age $F(1, 35) = 43.31, p < .001$, with younger children performing more poorly, and a significant main effect of exclusion status $F(1, 35) = 18.45$, $p < .001$, with excluded children scoring lower than non-excluded. This was moderated by a significant interaction between language mode and exclusion status $F(1, 35) = 9.43$, $p < .005$. Planned comparisons showed that, as predicted for older children, the excluded children were similar to the controls in receptive skill, but poorer on the expressive measure. There was no interaction of language mode, exclusion status and age $F < 1$.

Auditory working memory

We compared raw scores on the CELF test between the two groups, using age as a covariate. The mean scores are shown in Table 2. There was a main effect of exclusion status $F(1, 35) = 6.04$, $p < .02$, and of age $F(1, 35) = 46.48$, $p < .001$. To assess the potential interaction of age and status on this variable, we performed a univariate ANOVA with exclusion status and age group (primary or secondary) as between-subjects variables. There were main effects of exclusion status $F(1, 34) = 11.53, p < .002$, of age group $F(1, 34) = 46.73$, $p < .001$, and a significant interaction between them $F(1, 34) = 5.92$, $p < .02$. *Post hoc* comparisons showed that the difference between excluded and control children on this measure was significant for primary, but not for secondary children, as shown in Table 2. However, this appears to be due in part at least to a ceiling effect for the CELF scores; most secondary school children scored 70 or above, close to the maximum of 78.

Nature of the relation between language and behaviour problems

As might be expected, scores on the SDQ for hyperactivity, emotional, peer, and conduct problems were all significantly higher for excluded than for control children, and lower for prosocial behaviour, as shown in the last two rows of Table 3. An analysis of variance for the five SDQ scores with exclusion status between subjects, and age as a

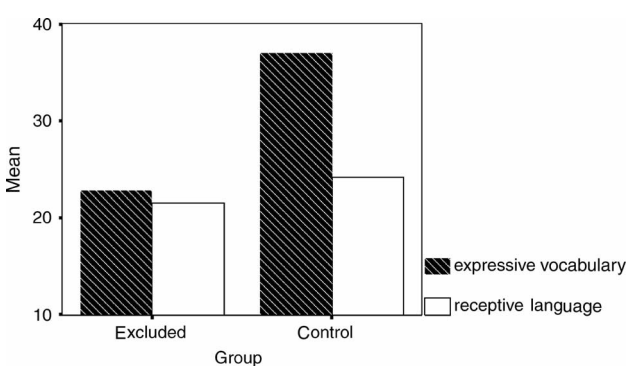

Figure 2. Mean raw scores for expressive (WD) and receptive (WOLD) language in excluded and control boys

Table 2. Mean (and standard deviations) for working memory score in excluded and control boys in two age groups

	Excluded $N = 19$		Control $N = 19$	
	Mean	Std deviation	Mean	Std deviation
Primary	43.20	14.57	59.20	5.36
Secondary	68.64	7.30	71.29	4.21

covariate, showed main effects of exclusion status for each of the five SDQ variables, all Fs$(1, 34) > 9.0$, $p < .005$.

We then performed a more fine-grained exploratory analysis by creating subgroupings of children according to the pattern of their receptive and expressive language skills, by making a 2 × 2 classification of performance on WD and WOLD tests, in each case using a z-score of 0 as the cut-off point. This effectively produced three subgroups:

(a) *high-language*: receptive and expressive skills both average or above. This subgroup contained 13 control and six excluded boys, all of secondary school age
(b) *low-language*: receptive and expressive skills both below average. This subgroup contained four control and eight excluded boys, all of primary age, except for three excluded boys
(c) *poor expression*: average or above for reception, but below average for expression. This subgroup contained five excluded boys, all of secondary school age.

The remaining two control children, one primary, and one secondary school age, scored slightly below average on reception, and above average on expression.

Of particular interest are the excluded boys in (a) versus (c), who are similar in receptive skills, but differ in expression (six 'high-language' vs. five 'poor expressers'). These subgroups, all members of which were at secondary school, did not differ in receptive skill or age, both Fs < 1. The poor expressers were specifically poor on the expression measure: comparisons using t tests of their raw scores on the other verbal and non-verbal measures showed no significant differences from the high-language excluded children, all ts$(9) < 2$, $p > .10$, and a significant difference on the WD $t(9) = 6.49$, $p < .001$, with mean scores of 36.5 for high-language, and 18.6 for poor-expresser excluded children.

By comparing SDQ scores in these subgroups, we can gain some indication of whether receptive or expressive language problems are differently associated with different types of reported behaviour problem. Sample sizes are small, so differences should be interpreted with caution. Furthermore, excluded boys with low language skills were generally younger than the other two groups, and any differences involving this subgroup will be confounded with age, which has a clear relation to SDQ ratings. The comparison of excluded children with high language and poor expression may be more informative because these subgroups are more closely matched, being similar in age, receptive skill, and non-verbal IQ.

We performed comparisons between the three subgroups of excluded children, as defined above, and the control children, whose scores were more homogeneous, as a single group. The SDQ scores for these subgroups are shown in Table 3. As expected, all subgroups of excluded children had high ratings for conduct problems and

Table 3. Mean (and standard deviations) for SDQ behaviour ratings in excluded and control boys, and subgroups of excluded boys

	N	Emotion symptoms	Prosocial behaviour	Peer problems	Conduct problems	Hyperactivity
Excluded						
Low language	8	3.62 (2.82)	5.62 (2.39)	2.25 (2.05)	4.75 (2.19)	6.25 (2.71)
High language	6	1.17 (1.60)	2.67 (2.34)	4.00 (3.16)	4.17 (2.93)	5.33 (3.39)
Poor expressers	4	5.75 (2.63)	2.75 (1.71)	5.50 (3.87)	5.25 (1.26)	6.25 (3.20)
Mean (excluded)	18	3.28 (2.89)	4.00 (2.59)	3.56 (3.01)	4.67 (2.22)	5.94 (2.90)
Control	19	0.89 (1.59)	7.84 (1.98)	0.95 (1.13)	0.58 (1.43)	2.10 (2.31)

Notes. Maximum score = 10. High scores indicate higher level of difficulty, except for 'prosocial'. For definitions of subgroups, see text.

hyperactivity, supporting their characterization as a group with externalizing behaviour problems. The most intriguing difference between the subgroups was that poor expressers were higher on emotional symptoms, scoring 5.49 compared with 0.71 for excluded boys with good language skills, two-tailed $t(9) = 3.47$, $p < .01$. These scores compare to an average of 0.89 for control boys on this measure and 4.09 for the younger, low-language excluded group. Emotion symptom ratings were also significantly correlated with expressive language (word definitions) for the excluded group as a whole $r(16) = -.50$, $p < .05$, and this relation was also apparent in the control group, where variability in both measures is substantially reduced $r(17) = -.45$, $p = .05$. The poor-expresser and high-language excluded children differed markedly on emotion symptoms, despite being fairly similar in their high levels of peer problems and low prosocial behaviour. This contrasts with the younger low-language excluded children, who, despite having some apparent difficulty in these areas, have scores closer to the controls than to the other excluded subgroups on peer and prosocial ratings, though it may be that this result could be explained by the lower age of the low-language excluded children. The finding of an association between emotion symptoms and expressive language raises the question of the causal priority of these factors in behavioural problems.

Discussion

The results support our first hypothesis that verbal skills were significantly impaired in excluded boys when compared to those of matched-age non-excluded peers. The difference is not explained by general low ability in excluded boys: they were not significantly different from the control boys in non-verbal abilities, suggesting that verbal skill specifically might play a role in their behaviour problems. Furthermore, their good performance on some of the verbal tests does not support the possibility that the excluded group may have been generally uncooperative with the assessments.

The results do not support the hypothesis that behaviour problems were linked to receptive language in younger children and expressive language in older children. Instead, excluded children were lower at both ages on expressive skills. However, it would be useful to assess receptive skills in a younger group of children with behaviour problems. Assessment of excluded children meant that our youngest participant was already 8 years old, since it is unusual for younger children to be permanently excluded from a school. There was some indication that younger excluded children had a different profile from older ones. The younger children performed more poorly than their control peers on the assessment of auditory working memory, and we speculate that this might reflect a poorer use of language for self-regulation. However, it would be useful to assess self-regulation in children with behaviour problems more extensively, particularly since the measure we used showed ceiling effects for the older children.

As we might expect, excluded boys showed more behaviour problems compared with controls on all scales of the SDQ. However, it is important to note that a subgroup of six excluded boys had language skills that were average or above, compared to the control boys. Thus, while we argue that language problems are an important and often unrecognized factor in behaviour problems, there do exist behaviour problems that are not accounted for by language difficulty in a substantial part of the excluded group.

An unexpected finding, which deserves further investigation, is the apparent relation between verbal expression and emotion symptoms. A subgroup of excluded

boys with above average language skills showed no indication of emotion symptoms, whereas excluded boys with poor expressive skill were markedly high on such symptoms. The relation between expressive language and emotion symptoms was also supported in a correlational analysis. This suggests that it might not be poor expressive language *per se* that accounts for the behaviour problems, but its association with emotional problems. We know that learning about expression of feelings is highly dependent upon early language competence. Thus, Denham (1992) studied how mothers talk to toddlers using the language of feelings, and relating the language to the emotions attendant upon events (see also Dunn & Brown, 1991). This literature has been used to suggest that early learning of the language of emotions helps children to recognize the emotions of others, and to manage social encounters more successfully. However, our data suggest a different path: the development of expressive language may help children in regulating their own emotions, while other aspects of language may play more of a role in encounters with others. The relationship between language and emotional self-regulation is supported by Strauss (2001), who showed that 6–10-year-old children's understanding of successful cognitive strategies for regulating negative emotions, and their reported self-efficacy in using such strategies, was in part predictable from their level of expressive language, but not by their receptive language skill. Further investigation with larger samples is needed first to replicate the pattern we found here and, if replicated, to develop a more detailed account of the role of expressive language in emotional competence.

Difficult relationships with peers were reported for all three subgroups of excluded boys. For children with SLI, the early warning signs of difficulties with social interactions may become apparent during the preschool years. Hadley and Rice (1991) described children in a preschool setting with weak grammatical structures whose speech was difficult to understand. These children were found to engage in fewer social interactions than their peers and therefore had reduced opportunities to practice their social communication and social skills. The group of children identified here as poor expressers were rated particularly highly for problems with peer relationships, as would be expected from previous literature. However, the difficulties experienced by the high-language group were not predicted, and explanations other than those related to language proficiency need to be investigated here.

It has been suggested that children who miss out on early learning experiences because of delayed or disordered language may show long-term effects in terms of their social and emotional development. Language competence would appear to be a key factor in the development of emotional literacy, which supports successful self-regulation, and relationships and social encounters with both peers and adults in a school community.

A study of the language profiles of excluded boys is particularly pertinent at a time when the reduction of exclusions, social inclusion, and emotional literacy are high priorities for schools and local and national education authorities. The results indicate that many children excluded from school had language difficulties, particularly expressive language. None of the excluded boys had been identified as having language problems. There is also an indication that expressive language may be a marker for emotional problems that need to be recognized and addressed. The early recognition of language and emotion difficulties, followed by appropriate intervention to enable such children to have access to the curriculum, to develop appropriate social skills, and emotional literacy, may be a first step towards reducing the rates of exclusion from school, and promoting social inclusion.

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