

Teacher and pupil ratings of self-esteem in developmental dyslexia

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Neil Humphrey is a lecturer in psychology at Bolton Institute. In this article, based on the research he carried out for his PhD thesis, he explores the relationships between dyslexia and self-esteem in pupils. Neil Humphrey gathered data using both teacher rating scales and pupil self-reporting. He compares results from a group of pupils with dyslexia in mainstream settings; a group attending units for pupils with specific learning difficulties (SpLD); and a control group. In discussing his findings, Neil Humphrey presents practitioners working towards inclusion with a carefully considered challenge.

Introduction

The recent increase in research concerned with the effects of learning difficulties on the personal, social and emotional development of children (for example, Barrett & Jones, 1994; Margerison, 1996) has signified a new direction in educational research. Researchers have become more aware of the contribution that constructs such as self-concept and self-esteem make toward factors such as motivation, academic achievement and peer relations, and how the experience of having a learning difficulty can adversely affect these (Humphrey, 2001). Indeed, Lawrence (1996) states that 'one of the most exciting discoveries in educational psychology in recent times has been the finding that people's levels of achievement are influenced by how they feel about themselves (and vice-versa)' (p.xi). As a researcher with a background in psychology (and learning difficulties in particular), I too was fascinated by the notion that our perception of ourselves can influence how well we do in school (and life in general). Having worked with children with dyslexia as an undergraduate, I had seen, at first hand, the effects that having learning difficulties can have on feelings of worthiness, and felt that it was an area that merited investigation.

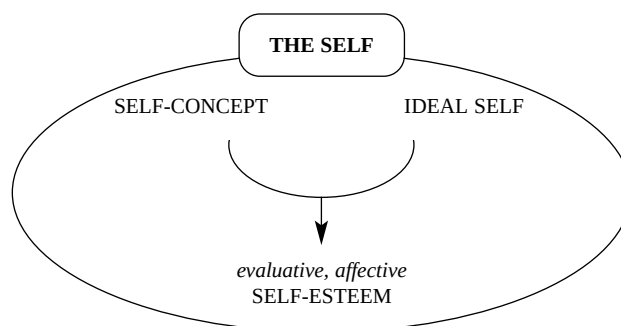
Self-concept and self-esteem in children with special educational needs

Research into this area of special educational needs has produced a broad and widely agreed consensus that children who experience problems in learning develop maladaptive self-referential styles (that is, they consistently refer to themselves in a negative way) and, consequently, low levels of self-concept and self-esteem (Gurney, 1988; Humphrey, 2001). However, the exact nature of the deficits in self-development experienced by such children are largely contingent on the type of difficulty experienced

by the child and their educational placement. For instance, research by Margerison (1996) found that children with emotional and behavioural difficulties tended to have low self-perceptions in the social selfdimension. Children with moderate learning difficulties, however, who experience difficulty in most academic areas, have been shown to have low levels of global self-esteem (Barrett & Jones, 1994). In terms of placement, early studies suggested that segregation enhanced the self-esteem of children with special needs (see Gurney, 1988, for a full review). It is suggested that these results may be attributable to such factors as increased attention and resources, specially trained teachers, and the opportunity for children to make more realistic comparisons between their own achievements and those of their peers. More powerfully, research on children integrated into mainstream schooling has pointed to lowered levels of self-esteem (Crozier, Rees, Morris-Beattie & Bellin, 1999).

The findings of such research are in line with modern conceptualisations of self-development. It is generally accepted that self-esteem and the self-concept form part of a larger, holistic sense of self. This notion is displayed in Figure 1.

Figure 1: A model of the self



For the purposes of clarity, the following terms are to be defined thus:

- 'Self-concept' can be broadly defined as 'an organised schema that contains episodic and semantic memories about the self and controls the processing of self-relevant information' (Campbell & Lavalley, 1993, p.4).
- 'Self-esteem' can be broadly defined as 'the evaluative component of the self-schema, particularly the degree to which one is satisfied with it, in whole or in part' (Beane & Lipka, 1986). Self-esteem is 'a personal judgement of worthiness that is expressed in the attitudes the individual holds toward himself' (Coopersmith, 1967, pp. 4–5).

- '*Ideal self*' can be broadly defined as 'a schema of ideal standards of behaviour and particular skills which are valued by the individual (Lawrence, 1996). The ideal self provides a point for comparison in an individual's evaluation of his/herself' (see 'self-esteem').
- '*The self*' or '*self-perception*' can be broadly defined as 'an umbrella term' used to describe the relationship between the above schemata (as displayed in Figure 1), but also to describe the combination of thoughts, feelings, attitudes and beliefs that make a person an *individual*. The whole is greater than the sum of its parts.

Along with the modern model of the self, there are several theoretical assumptions that must be considered if we are to understand the results of the research on different learning difficulties. Firstly, concept of self is learned (James, 1890; Freud, 1923; Bandura, 1977), and self-perceptions arise mainly in a social context (Cooley, 1902; Coopersmith, 1967; Rosenberg, 1979). Further, self-perceptions are multidimensional and hierarchical, although at one level they blend into a general sense of self (James, 1890; Mead, 1934; Goffman, 1959). Finally, self-perceptions tend to seek stability, consistency and enhancement (Rogers, 1951; Maslow, 1954; Kelly, 1955).

Given that self-development is a social learning activity, it is not difficult to see how children with special educational needs might suffer deficits. Children with learning difficulties, whether specific or general, are at an increased risk for bullying and teasing, and are less likely to be accepted by their peer group (Eaude, 1999). This alone can be devastating for the developing self (Sharp, 1996; O'Moore, 2000). Further, from around the age of eight, children's self-referential statements (the statements they make about themselves) become increasingly comparative (Gurney, 1988), meaning that children with special needs may be making unrealistic comparisons with their peers. Again, this is a possible source of low self-esteem (Pope, McHale & Craighead, 1988), and may explain the finding that children with special needs in segregated units tend to have a more positive sense of self than those educated in mainstream schools (Crozier et al., 1999). It is also worth noting that academic achievement is a major factor in self-development (see Burns, 1982, for a full review). Finally, in terms of the multidimensional and hierarchical nature of the self, one can easily assimilate the differential effects of different learning difficulties into a model of the self that considers academic and social self-esteem, for instance, to be different but related constructs.

Dyslexia: effects on the self

Despite a barrage of anecdotal evidence from teachers and practitioners, there is a paucity of published research in self-concept and self-esteem in children with dyslexia. To date, only a handful of studies (for example, Rosenthal, 1973; Thomson & Hartley, 1980) have been published, as research has continued to concentrate on causation and treatment. The only recent work on the non-academic consequences of dyslexia has concentrated

on the broader social and emotional effects. Edwards (1994) has provided eight retrospective case studies demonstrating the emotional 'scars' which dyslexia can cause, especially when it is poorly understood by those who come into contact with the child. Riddick (1996) interviewed 22 children with dyslexia, along with their parents and teachers, and found that children with dyslexia felt 'disappointed, frustrated, ashamed, fed up, sad, depressed, angry and embarrassed by their difficulties' (Riddick, 1996, p.129). Moreover, around half the children had been teased about their difficulties, and many had had bad experiences in mainstream education involving teachers who were ignorant of, or did not acknowledge the existence of, dyslexia.

The rationale behind a study into self-esteem in children with dyslexia, other than the simple lack of any having been produced in the last 20 years, is clear. Firstly, as we have seen, empirical evidence has shown an effect on self-concept and self-esteem of other learning difficulties (Barrett & Jones, 1994). It would be naive to assume that dyslexia is unique in this context. Further, research has shown links between self-concept, self-esteem and academic performance, and it is already established that children with dyslexia, because of their difficulties with reading, spelling and written language, can experience problems in academic achievement (BDA, 1998). Finally, there is research linking peer acceptance and social relationships to academic performance (Wentzel & Caldwell, 1997). These aspects are crucial in the formation of the self-concept, and there is evidence that children with dyslexia experience problems in these areas (Riddick, 1996).

The current study

The research described in this article formed part of a larger study undertaken as part of my PhD degree (Humphrey, 2001), which is reported in a further two articles (Humphrey, manuscripts a and b). The research undertaken for the thesis included interviews with children with dyslexia, and completion of inventories and questionnaires relating to self-concept, self-esteem, attributional style (the causes we attribute to significant events) and personal constructs (the predictions and associations we make about the world based on our experiences). The aim of the study described in this article was to investigate teacher and pupil ratings of self-esteem in children with dyslexia, using two empirical measures.

Teacher ratings of self-esteem

Teachers' ratings of their dyslexic pupils' levels of self-esteem were assessed using Lawrence's (1996) self-esteem checklist. The checklist looks at *behavioural* manifestations of self-esteem, and was administered to teachers rather than to the pupils themselves, to add an important element of triangulation (that is, in the PhD research in its entirety, which focused mainly on the responses of the children themselves). However, the checklist itself had to be adapted for the purposes of the study. Lawrence's (1996) questionnaire relied very much on polarised responses about behaviour, manifest as a

'yes/no' checklist. For example, the teacher is asked, 'Does he/she make excuses to avoid situations which may be stressful?' and is required to respond by circling either 'yes' or 'no'. I felt that this technique was too 'blunt', and that such behaviours should be measured by degree. Thus, in the current study, a Likert scale was introduced, with teachers asked to respond by indicating the frequency of each behaviour on a four-point scale: 'Never', 'Sometimes', 'Most of the time' and 'Always'.

A second alteration to Lawrence's (1996) checklist came in the assessment of responses. The original checklist has a scoring guide, with points added or deducted on the basis of responses. A total score is compared with norms for a standardised population and a self-esteem rating can be acquired. However, I felt that, again, reducing self-esteem behaviours to a simple classification of 'low', 'medium' or 'high' was inappropriate (also, the initial adaptation meant that this scoring system was defunct anyway); therefore, the checklist was used to compare the frequency of each behaviour directly between groups.

Lawrence developed the original questionnaire in the early 1980s (Lawrence, 1982; 1983), and it is in this, his early work, that we are able to access information about the instruments' validity. The questionnaire has high content validity, being drawn from extensive research into the behavioural manifestations of self-esteem (Lawrence, 1982). Construct validity is also high – the checklist correlates with other established self-esteem measures (Lawrence, 1982; 1983; 1996). Reliability is more difficult to assess, as the author provides no relevant information.

Teacher ratings of self-esteem were measured for three groups of children: children with dyslexia attending mainstream schools (N=23); children with dyslexia attending units for pupils with specific learning difficulties (SpLD) (N=34); and a control group of children without learning difficulties (N=26). The same groups were also used for measuring pupil ratings of self-esteem.

Pupil ratings of self-esteem

Pupil ratings of self-esteem were measured with the 'semantic differential' method adopted by Richmond (1984). In this technique, participants are required to place themselves ('I am') on a seven-point scale between two opposite adjectives, for example:

Popular – – Unpopular

The scale consists of 10 items. Upon completion, participants are required to repeat the task, placing their ideal selves ('I would like to be') on the scales. Discrepancy scores were calculated by subtracting the 'I am' scores from the 'I would like to be scores' scores for each item. In the current research, the scale was adapted to focus specifically on academic self-esteem.

The semantic differential technique has a high coefficient of equivalence (0.82 and above) with comparable instruments (for example, Likert scales), and as such is considered to

be a reliable measure (Richmond, 1984). In terms of validity, I followed suggested procedure in developing the new paired adjectives, drawing them from the literature on academic self-concept and self-esteem (Thomson & Hartley, 1980; Burns, 1982; Byrne, 1998). I therefore believe that the scale has high content validity.

Pupil ratings of self-esteem were measured for three groups of children: children with dyslexia attending mainstream schools (N=23); children with dyslexia attending units for pupils with SpLD (N=28); and a control group of children without learning difficulties (N=29). The discrepancy in numbers between this and the teacher scale is accounted for by pupil absence.

All of the children participating in the study were between the ages of eight and 15. The mean age of the dyslexic-mainstream group was 10.86. The mean age of the SpLD unit group was 11.11. Finally, the mean age of the control group was 10.82.

Results

Teacher ratings of self-esteem

The descriptive statistics for the self-esteem checklist are shown in Table 1:

Table 1: Descriptive statistics for the self-esteem checklist

Group Behaviour	Dyslexic- Mainstream	Mean Frequency SpLD Unit	Control
Makes self-disparaging remarks	1.26	1.53	1.27
Is boastful	1.13	1.74	1.12
Timid in new situations	2.35	2.1	1.42
Avoids situations which may be stressful	1.7	1.76	1.23
Asks for help and reassurance constantly	1.83	2.18	1.35
Continually asks if he/she is liked/popular	1.22	1.21	1.08
Remains on the fringe of the group	1.83	1.82	1.38
Apathetic in learning situations	1.61	1.76	1.23
Daydreams a lot	1.91	1.62	1.23
Avoids work even when risking teacher displeasure	1.48	1.82	1.23
Blames others	1.26	1.68	1.12
Reluctant to assume new responsibilities	1.74	1.79	1.12

NB: The 'mean frequencies' of each behaviour represent the average rating for that group on a scale of 1 to 4, where 1 = Never, and 4 = Always.

A one-way ANOVA (analysis of variance) was performed to investigate possible significant differences between the groups. The ANOVA is a statistical test that is used to compare more than two groups on a given score.

'Significant' differences are those that are likely to have happened by chance less than five times in 100 (this is the 'p' value, calculated by the ANOVA test, and displayed as a decimal, e.g. $p=.002$). This is the standard 'significance level', adopted by the majority of research disciplines. Significant main effects (that is, a difference between the groups) were found for frequency of boastful behaviour ($F(2, 82) = 11.656, p=.000$); timid behaviour ($F(2, 82) = 10.883, p=.000$); avoidance of possible stress ($F(2, 82) = 5.211, p=.007$); seeking reassurance/help ($F(2, 82) = 11.247, p=.000$); remaining on the fringe of a group ($F(2, 82) = 3.798, p=.027$); apathetic behaviour in learning situations ($F(2, 82) = 3.717, p=.029$); daydreaming ($F(2, 82) = 5.190, p=.008$); avoidance of work ($F(2, 82) = 4.903, p=.010$); blaming others for personal failure ($F(2, 82) = 6.725, p=.002$); and reluctance to assume responsibilities ($F(2, 82) = 8.934, p=.000$).

Post-hoc Tukey HSD analyses were conducted in light of the ANOVA results. These analyses compare each individual group with the other two, to determine the source(s) of the main effect found. The Tukey HSD analyses revealed that both the dyslexic-mainstream ($p=.000$) and the control groups ($p=.001$) were significantly less likely to display *boastful behaviour* than the SpLD unit group. There was no significant difference between the dyslexic-mainstream and control groups for this item ($p>.05$). The analyses also revealed that the control group were significantly less likely to display *timid behaviour* than the dyslexic-mainstream group ($p=.000$) and the SpLD unit group ($p=.002$). There was no significant difference between the dyslexic-mainstream and SpLD unit groups for this item. The control group were also significantly less likely to *avoid situations of possible stress* than the dyslexic-mainstream ($p=.045$) and SpLD unit groups ($p=.008$). Again, however, there was no significant difference between the SpLD unit and dyslexic-mainstream groups for this item ($p>.05$).

The control group were significantly less likely to *continually ask for help and reassurance* than the dyslexic-mainstream ($p=.039$) and SpLD unit groups ($p=.000$). There was no significant difference between the SpLD unit and dyslexic-mainstream groups for this item ($p>.05$). For the *remaining at the fringe of a group* item, the only significant difference was between the control group and the SpLD unit group ($p=.038$), with the control group significantly less likely to display this behaviour. This effect was mirrored in the *apathetic in learning situations* item, in which the control group were significantly less likely to display this behaviour than the SpLD unit group ($p=.023$). The control group were also significantly less likely to *daydream* than the dyslexic-mainstream ($p=.006$) group. There were no significant differences between the SpLD unit group and the dyslexic-mainstream group or the control group for this item ($p>.05$).

The Tukey HSD analyses also revealed that the control group were significantly less likely to *avoid work* than the SpLD unit group ($p=.008$). There were no significant differences between the control group and the dyslexic-mainstream (or the dyslexic-mainstream and

SpLD unit group) for this item ($p>.05$). For the *blaming others for personal failure* item, both the dyslexic-mainstream ($p=.039$) and control groups ($p=.002$) were significantly less likely to display this behaviour than the SpLD unit group. There was no significant difference between the dyslexic-mainstream and control groups for this item ($p>.05$). Finally, for the *reluctance to assume new responsibilities* item, the control group were significantly less likely to display this behaviour than the dyslexic-mainstream ($p=.004$) and SpLD unit groups ($p=.000$). There was no significant difference between the dyslexic-mainstream and SpLD unit groups for this item ($p>.05$).

Pupil ratings of self-esteem

The descriptive statistics for the semantic differential scale are shown in Table 2.

Table 2: Descriptive statistics for the semantic differential scale

Group Construct	Dyslexic- Mainstream	Mean Discrepancy SpLD Unit	Control
Reading Ability	2.52	1.25	0.83
Spelling Ability	2.96	2.21	1.28
Writing Ability	2.83	1.54	1
Hardworking	1.65	1.29	1.28
Intelligence	1.70	1.54	0.69
Maths Ability	1.83	1.39	1.17
English Ability	2.65	2.04	0.66
Neatness	2.04	0.93	1.34
Popularity	2.22	1.32	0.66
Importance	1.96	1.18	0.76

NB: The 'mean discrepancy' scores represent the average discrepancy score for each group on a particular item. 'Discrepancy scores' were calculated by subtracting the participant's 'I am...' score from his/her 'I would like to be...' score on the seven-point scale. Thus, a larger discrepancy score represents a lower level of self-esteem for that item.

A one-way ANOVA was performed to investigate possible differences between the groups. Significant main effects were found for the self-esteem of reading ability ($F(2, 79) = 9.874, p=.000$); spelling ability ($F(2, 79) = 6.987, p=.002$); writing ability ($F(2, 79) = 8.078, p=.001$); intelligence ($F(2, 79) = 3.689, p=.030$); English ability ($F(2, 79) = 13.671, p=.000$); neatness ($F(2, 79) = 3.643, p=.031$); popularity ($F(2, 79) = 6.677, p=.002$); and importance ($F(2, 79) = 4.310, p=.017$) scales.

Post-hoc Tukey HSD analyses were performed to investigate the between-group differences. The analyses revealed that the dyslexic-mainstream group had significantly lower levels of self-esteem related to reading ability than both the SpLD unit ($p=.005$) and the control ($p=.000$) groups. There was no significant difference between the SpLD unit and control groups for this scale. For spelling ability, the dyslexic-mainstream group had significantly lower levels of self-esteem than the control group ($p=.001$), but there were no significant differences between the SpLD

unit group and either the control or dyslexic-mainstream groups ($p > .05$). For writing ability, the dyslexic-mainstream group had significantly lower levels of self-esteem than both the SpLD unit group ($p = .019$) and the control group ($p = .000$). There was no significant difference between the SpLD unit group and the control group for this scale ($p > .05$).

For self-esteem related to level of intelligence, the only significant between-group difference was between the dyslexic-mainstream group and the control group ($p = .043$) (with the dyslexic-mainstream group showing lower self-esteem). For ability in English, both the dyslexic-mainstream ($p = .000$) and SpLD unit ($p = .001$) groups showed significantly lower levels of self-esteem than the control group. There was no difference between the SpLD unit group and the dyslexic-mainstream group for this scale ($p > .05$). For self-esteem related to neatness, the only significant between-group difference was between the dyslexic-mainstream and SpLD unit groups ($p = .024$), with the dyslexic-mainstream group displaying lower self-esteem. For popularity, the only significant between-groups difference was between the dyslexic-mainstream and the control groups ($p = .001$), with the dyslexic-mainstream group displaying lower levels of self-esteem. This difference between the dyslexic-mainstream and control groups was mirrored in the final scale, importance, with the dyslexic-mainstream group showing significantly lower levels of self-esteem ($p = .013$). There were no other significant differences for this scale ($p > .05$).

In the interests of clarity, the results for both scales are summarised in Tables 3 and 4.

Table 3: Summary of significant results for teacher ratings of self-esteem-related behaviours (as measured by checklist adapted from Lawrence (1996))

Item	Significant Results
Frequency of boastful behaviour	SpLD unit group rated as higher frequency than both dyslexic mainstream and control group
Frequency of timid behaviour	Dyslexic-mainstream and SpLD unit group rated as higher frequency than control group
Frequency of avoiding situations which may be stressful	SpLD unit group rated as higher frequency than both dyslexic mainstream and control group
Frequency of seeking reassurance	SpLD unit group rated as higher frequency than both dyslexic mainstream and control group
Frequency of remaining on the fringe of a group	SpLD unit group rated as higher frequency than control group
Frequency of being apathetic in learning situations	SpLD unit group rated as higher frequency than control group
Frequency of daydreaming	Dyslexic-mainstream group rated as higher frequency than control group
Frequency of avoiding work	SpLD unit group rated as higher frequency than control group
Frequency of blaming others	SpLD unit group rated as higher frequency than both dyslexic mainstream and control group
Frequency of reluctance to assume responsibility	Dyslexic-mainstream and SpLD unit group rated as higher frequency than control group

Table 4: Summary of results for pupil ratings of academic self-esteem (as measured by the semantic differential scale)

Item	Significant Results
Self-esteem for reading ability	Both control group and SpLD unit group showed higher levels of self-esteem than dyslexic-mainstream group
Self-esteem for writing ability	Both control group and SpLD unit group showed higher levels of self-esteem than dyslexic-mainstream group
Self-esteem for intelligence	Control group showed higher levels of self-esteem than dyslexic-mainstream group
Self-esteem for English ability	Both control group and SpLD unit group showed higher levels of self-esteem than dyslexic-mainstream group
Self-esteem for neatness	SpLD unit group showed higher levels of self-esteem than dyslexic-mainstream group
Self-esteem for popularity	Control group showed higher levels of self-esteem than dyslexic-mainstream group
Self-esteem for importance	Control group showed higher levels of self-esteem than dyslexic-mainstream group

Discussion

The semantic differential scale provided a 'stand-alone' self-esteem measurement. The instrument is considered to measure self-esteem because it investigates the *discrepancy* between individuals' concepts of themselves (self-concept) and their ideal selves. In this way, the semantic differential is as close to the definition of self-esteem provided earlier as one might hope to get with a quantitative instrument.

The ANOVA performed on the semantic differential scale results mirrors those found in other research in this area (Humphrey, 2001). Firstly, several main effects were found, for self-esteem of reading ability, writing ability, spelling ability, intelligence, English ability, neatness, popularity and importance. Secondly, as with previous research, the significant differences were mostly between the dyslexic-mainstream group and the control group, and the dyslexic-mainstream group and the SpLD unit group. This was true for the self-esteem of reading ability and writing ability. For other scales, the differences found were between the dyslexic-mainstream group and one (but not both) of the other two groups. On only one scale (self-esteem related to ability in English) did the SpLD unit group show significantly lower levels of self-esteem than the control group. Importantly, the significance of items such as the popularity scale provide support for evidence of feelings of exclusion and teasing and bullying which have been found in other research (Edwards, 1994; Riddick, 1996; Humphrey, 2001). However, this support only applies to the dyslexic-mainstream group, since they displayed significantly lower levels of self-esteem for this item.

The results of the self-esteem checklist present something of an anomaly in terms of the direction of the research, but are intriguing nonetheless. Of the ten main effects found by the ANOVA, six were related to significant

group differences in which both the SpLd unit group and the dyslexic-mainstream group exhibited 'lower' (in terms of self-esteem) scores than the control group. Of the remaining four main effects, three were related to significant group differences in which the SpLd unit group alone exhibited lower scores than the control group. While all these results support the notion that dyslexia has an effect on the self-esteem of children, it is in direct contradiction to the results of the other quantitative methods, where the SpLd unit group tended to exhibit scores that were the same as the control group. This statement is also true of the other instruments used in my PhD research.

What, then, are we to make of these anomalous results? One possibility is to dismiss the self-esteem checklist as lacking concurrent validity, since it does not produce results comparable with other measures (in this and other research), whose validity is already known. However, this produces a problem, since it might be argued that the instruments used in the current and other research are not equivalent measures. However, the creator of the checklist, Denis Lawrence (1996), based his items on extensive experience in the field, as well as extracts from the literature on self-esteem. It is therefore assumed to have high content validity. The dichotomy between the Lawrence checklist and the other instruments is more likely to be attributable to the fact that the checklist measures *behavioural manifestations* of self-esteem (the others do not), and the fact that the checklist was completed by teachers rather than the children themselves.

If the Lawrence checklist is to be included in the discussion of the results of the current research, then we must be able to account for what was found. I suggest that the reason why the SpLd unit group were generally rated as having the lowest self-esteem of the three groups is related to the training and perceptiveness of the teachers at the units for pupils with specific learning difficulties. Teachers at the units, with their specialist training and smaller class sizes, are more able and likely to recognise behavioural manifestations of low self-esteem in their pupils, since they spend more time with their pupils and are more knowledgeable about self-esteem. Whether this explanation is satisfactory or not is open to debate, especially since there is at present a paucity of research related to this relationship.

It is difficult to provide a satisfactory discussion of these results in isolation. As already mentioned, they formed part of a larger research study which I conducted as part of my PhD degree. In general, the results of this study are consistent with the others that I found (and those in the literature) – there are differences in the self-concept and self-esteem levels between children with dyslexia and those without learning difficulties. However, such differences tend only to exhibit themselves in a measurable way in children with dyslexia who are placed in mainstream classes, suggesting that there is some kind of interaction between learning difficulty and service provision in relation to the self. The reasons for these differences are not clear-cut, but interviews I conducted with the same groups

of children (Humphrey, manuscript b) suggested that the children with dyslexia in mainstream education were making unfair comparisons between themselves and their mainstream peers. Further, the children with dyslexia in the SpLD units revealed that they felt more valued and cared for than they had when they were in mainstream schooling. In contrast, the children with dyslexia in mainstream schools reported that they felt isolated and excluded.

Implications

The results of the current study add to a growing body of evidence that suggests that the problems that children with dyslexia encounter have negative consequences for their self-development. I have presented a series of suggestions for changes in practice to remedy this worrying trend (Humphrey, manuscript a). In the interests of clarity, these are summarised briefly below:

- changing the role of teachers, peers and the school environment to provide a more accepting and 'dyslexia-friendly' educational climate for children with dyslexia;
- self-concept and self-esteem enhancement programmes, to be carried out with children with dyslexia as part of circle time (primary) and personal, social and health education lessons (secondary);
- early identification of and better provision (for example, multi-sensory teaching programmes) for children with dyslexia in mainstream schools.

Before these implications are related to the results found in this study, it is important to clarify a point. Given the direction of the results, it might seem that I would be predisposed to argue from a segregationist perspective. After all, much of what was found in this study, my other PhD research, and the literature, suggests that children with dyslexia in SpLD units develop more positive self-concepts and levels of self-esteem than those left in mainstream education. However, I would like to argue that these results simply set a challenge for those mainstream educators who work with children with dyslexia. The challenge is to create an environment where the children can feel valued and secure. This relates to the first of the implications outlined above and is generally referred to in the notion of 'dyslexia-friendliness'. Examples of some features of dyslexia-friendly schools are those in which multi-sensory teaching techniques are standard practice and where achievement, effort and good behaviour are acknowledged across a range of learning activities. Such features, among others (see Humphrey, 2001, for a full review), have been demonstrated to be crucial to the successful education of children with dyslexia, and as such are relevant in this context.

Given the focus of the current study, it seems especially apt to address the issue of changing the role of teachers in more detail. Teachers form an important part of the child with dyslexia's environment in the current study, both in providing and facilitating the educational climate for the children, and in identifying and addressing their personal, social and emotional needs. The evidence suggests that

teachers in SpLD units provide a more welcoming and facilitative environment for children with dyslexia (as argued in Humphrey, manuscript a) and are also more able to identify indicators of self-esteem levels (as seen in this study). Further, they are more likely to have had specialist training in teaching and learning with dyslexia. It is therefore imperative that teachers in mainstream schools actively follow the example set in the SpLD units, so that children with dyslexia are given a better chance to achieve excellence.

In considering the results of this study, I have proposed that there may be a need for self-concept and self-esteem enhancement programmes for children with dyslexia. I suggest that this is particularly important in considering the needs of those with dyslexia who are already exhibiting low levels of self-esteem. After all, however much we would like to make our schools 'dyslexia-friendly', such change takes time, and there are children who need our care and support immediately. It is in this vein that I suggest that self-esteem enhancement programmes are relevant and necessary. One only has to refer back to the literature on the self to see the links between, for example, self-concept and academic achievement (see Burns, 1982), to understand how important such programmes (or a lack of them) could prove. Encouragingly, a meta-analysis of school-based interventions to enhance the self-concept of students with learning disabilities in the United States of America has yielded extremely positive results (Elbaum & Vaughn, 2001). In their review, the authors suggest that classroom-based interventions could provide significant positive effects on the self-concept. This effect is independent of the type of intervention (an example of

which was 'counselling-based'), although a counselling approach was considered more effective with older students. However, the authors also point to the importance of academic interventions, as well as the influence of other factors (such as parental behaviours), emphasising the need for an approach that considers the child as a whole.

The final implication of this research that I raised at the beginning of this section relates to the early identification of children with dyslexia. Although early identification in relation to dyslexia and other learning difficulties has already been demonstrated to be of crucial importance (Miles & Miles, 1999), I would argue that the results of this study suggest that there is a need now more than ever, for identifying those at risk for dyslexia as early as possible. In addition to the increased likelihood of a good educational prognosis for a child identified early in life (and, therefore, a more positive sense of self), we could also spare children with dyslexia some of the humiliation and trauma that they experience prior to identification. In the interviews I conducted with children with dyslexia (Humphrey, manuscript b), I found that the vast majority had had extremely negative experiences at school before they had been properly identified. Most worryingly, many of these experiences involved their class teachers calling them stupid, lazy or slow. As Pollock and Walker (1994) suggest, 'If teachers tell him [the child with dyslexia] that he's either lazy or stupid... he will come to believe just that' (p.6). In conclusion, I firmly believe that a combination of early identification, a more appropriate educational environment and, where necessary, intervention to enhance the developing self, can provide a grounding for children with dyslexia to feel valued and achieve excellence.

References

- Bandura, A. (1977) 'Self-efficacy: towards a unifying theory of behavioural change'. *Psychological Review*, 84, 191–215.
- Barrett, H. & Jones, D. (1994) 'The inner life of children with moderate learning difficulties', in V. P. Varma et al. (eds) *The Inner Life of Children with Special Needs*. London: Whurr.
- Beane, J. A. & Lipka, R. P. (1986) *Self-Concept, Self-Esteem and the Curriculum*. New York: Teachers College Press.
- British Dyslexia Association (BDA) (1998) *The Dyslexia Handbook 1998*. Reading: BDA.
- Burns, R. (1982) *Self-Concept Development and Education*. London: Holt Education.
- Byrne, B. M. (1998) 'Testing for causal predominance between academic self-concept and academic achievement: a developmental perspective'. Paper presented at the *Annual Meeting of the American Educational Research Association* (San Diego, CA, 13–17 April, 1998).
- Campbell, J. D. & Lavalley, L. F. (1993) 'Who am I? The role of self-concept confusion in understanding the behaviour of people with low self-esteem', in Baumeister, R. F. (ed.) *Self-Esteem: the puzzle of low self-regard*. New York: Plenum Press.
- Cooley, C. (1902) *Human Nature and the Social Order*. New York: Charles Scribner's and Sons.
- Coopersmith, S. A. (1967) *The Antecedents of Self-Esteem*. San Francisco: W. H. Freeman.
- Crozier, W. R., Rees, V., Morris-Beattie, A. & Bellin, W. (1999) 'Streaming, self-esteem and friendships within a comprehensive school'. *Educational Psychology in Practice*, 15 (2), 128–134.
- Eaude, T. (1999) *Learning Difficulties: dyslexia, bullying and other issues*. London: Letts Educational.
- Edwards, J. (1994) *The Scars of Dyslexia*. London: Continuum Publishing Group.
- Elbaum, B. & Vaughn, S. (2001) 'School-based interventions to enhance the self-concept of students with learning disabilities: a meta-analysis', *Elementary School Journal*, 101 (3), 303–329.
- Freud, S. (1923) *The Ego and the Id*. New York: Norton.
- Goffman, E. (1959) *The Presentation of Self in Everyday Life*. London: Penguin.
- Gurney, P. (1988) *Self-Esteem in Children with Special Educational Needs*. London: Routledge.
- Humphrey, N. (2001) *Self-Concept and Self-Esteem in Developmental Dyslexia: implications for teaching and learning*. Liverpool John Moores University, Unpublished PhD thesis.

- Humphrey, N. (manuscript submitted for publication: a) 'Self-concept and self-esteem in developmental dyslexia'. *Journal of Research in Special Educational Needs*.
- Humphrey, N. (manuscript submitted for publication: b) 'Personal constructs and attributional style in developmental dyslexia'. *British Journal of Special Education*.
- James, W. (1890) *Principles of Psychology*, Vol. 1. New York: Henry Holt.
- Kelly, G. A. (1955) *The Psychology of Personal Constructs*. New York: Norton.
- Lawrence, D. (1982) 'Development of a self-esteem questionnaire'. *British Journal of Educational Psychology*, 51, 48–54.
- Lawrence, D. (1983) *Improving Reading and Self-Esteem*. University of Western Australia, Unpublished PhD thesis.
- Lawrence, D. (1996) *Enhancing Self-Esteem in the Classroom*. London: Paul Chapman.
- Margerison, A. (1996) 'Self-esteem: its effect on the development and learning of children with EBD'. *Support for Learning*, 11 (4), 176–180.
- Maslow, A. (1954) *Motivation and Personality*. New York: Harper.
- Mead, G. H. (1934) *Mind, Self and Society*. Chicago: University of Chicago Press.
- Miles, T. R. & Miles, E. (1999) *Dyslexia: a hundred years on*. London: Whurr.
- O'Moore, M. (2000) 'Critical issues for teacher training to counter bullying and victimisation in Ireland'. *Aggressive Behaviour*, 26 (1), 99–111.
- Pollock, J. & Walker, E. (1994) *Day to Day Dyslexia in the Classroom*. London: Taylor Francis.
- Pope, A., McHale, S. & Craighead, E. (1988) *Self-Esteem Enhancement with Children and Adolescents*. New York: Pergamon.
- Richmond, M. J. (1984) 'The self-concept of academically able and less-able children in a comprehensive school – a comparative study'. *Remedial Education*, 19 (2), 57–58.
- Riddick, B. (1996) *Living with Dyslexia*. London: Routledge.
- Rogers, C. R. (1951) *Client-centred Therapy*. Boston: Houghton Mifflin.
- Rosenberg, M. (1979) *Conceiving the Self*. New York: Basic Books.
- Rosenthal, J. (1973) 'Self-esteem in children with dyslexia'. *Academic Therapy*, 9, 27–39.
- Sharp, S. (1996) 'Self-esteem, response style and victimisation: possible ways of preventing victimisation through parenting and school-based training programmes'. *School Psychology International*, 17 (4), 347–357.
- Thomson, M. E. & Hartley, G. M. (1980) 'Self-concept in children with dyslexia'. *Academic Therapy*, 26, 19–36.
- Wentzel, K. & Caldwell, K. (1997) 'Friendships, peer acceptance and group membership: relationships to academic performance'. *Child Development*, 68 (6), 1198–1209.

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