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Is Dyslexia Necessarily Associated with Negative Feelings of Self-worth? A Review and Implications for Future Research

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This paper will provide an overview of research in the past 20 years into the relationship between dyslexia and various aspects of self-perception, including self-concept, self-esteem, self-efficacy and locus of control. Problems are identified relating to the measurement of some of the most widely used constructs, as is the need for more precise identification of key variables relating to them. Critical issues concerning the assumptions that can be drawn from largely correlational data are highlighted also. The conclusion is drawn that an alternative approach to research in this area is required to enhance our understanding of how those suffering from learning disabilities of a dyslexic nature develop a positive or negative sense of identity. Suggestions are made as to how this can be achieved by drawing upon attribution theory and other aspects of social psychology. Copyright © 2008 John Wiley & Sons, Ltd.

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INTRODUCTION

Socio-cultural theory suggests that a person's sense of identity will inevitably be affected by what is valued within their society and culture (Kozulin, 1998; Kozulin, Gindis, Ageyev, & Miller, 2003). In primitive societies this might well have been skill in hunting or fighting. In pre-literate societies, skill as a story-teller will have bestowed prestige. In a society such as ours, where literacy is a highly valued skill or commodity, a perceived inability to acquire that skill is highly likely to have a negative effect upon any individual's

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conception of themselves as competent. As a young person develops physically and intellectually, their feelings of competence and well-being will be shaped by the comparisons they make between themselves and others and by the ways in which they interpret others' perceptions of them. It seems a reasonable assumption to make, therefore, that children who struggle at school with learning difficulties of a dyslexic nature may well have their feelings of self-esteem affected by this.

Although considerable weight has been placed on the influence of measured intelligence in learning, most educationalists would agree that a far more important part is played by motivation (Dornyeii, 2001; Ford, 1992). One recent model of the motivational process suggests that in deciding whether to commit themselves to a task and stick with it, individuals are initially 'turned on' by external factors such as the interest shown by significant others, including parents, teachers and peers, and then make an ongoing series of choices about whether and how to act as they consider their options (Williams & Burden, 1997). The outcomes of this decision-making process are considered to be dependent upon a combination of internal factors, which can be conveniently considered under three headings, *attitudes, self-concept* and *agency. Attitude* refers to the interest that the individual has in the task and its perceived value. The latter may be *intrinsic* (as, for example, when an activity is enjoyed for its own sake) or *extrinsic* (when an activity is valued for the rewards that it may bring). *Self-concept* refers to the thoughts and feelings that people have about themselves in general, but more specifically with regard to the task or activity under consideration Bracken, 1996. *Agency* refers to feelings of personal competence and confidence linked to the necessary skills and strategies required to be successful at the task.

Although there are some influential researchers in the field of social psychology, such as Ajzen (1991) and his followers who argue that identifying a person's attitudes towards an activity is enough to determine their likelihood to act, it is more likely that this is only part of the story. At the other end of the spectrum, most intervention programmes are dedicated to skills and/or strategy-based teaching without necessarily placing much, if any, emphasis upon building up *feelings* of competence. At the same time, only a minimal amount of the literature on dyslexia has dwelt upon the importance of the self-concept. It is to this neglected area that this paper will be directed.

WHAT THE LITERATURE TELLS US

Most of the relevant research in this area has been carried out in the United States with children and adults identified as suffering from 'learning disabilities'. Despite the inherent dangers in adopting such an approach, the assumption will be made here that such populations are at least roughly equivalent to those identified in the UK and elsewhere as dyslexic. Unfortunately, the whole area is bedevilled by problems relating to the equivalence of meaning in the use of different terminologies; therefore, caution must be used in drawing any conclusions about the comparative replicability of any findings.

We are fortunate in having two meta-analytic reviews of the connection between learning disabilities and various aspects of self-concept. However, although the earlier review by Chapman (1988) came to mostly negative

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conclusions, the more recent study by Zeleke (2004) is somewhat more balanced. Thus, where Chapman found that the bulk of the studies carried out between 1974 and 1986 demonstrated that children with learning disabilities were significantly more likely to view themselves more negatively on all counts than their normally achieving peers, Zeleke took issue with the narrowness of much of this early work by pointing out a number of unresolved, underlying problems, which led him to take a more rigorous approach to the literature. As a consequence, Zeleke concluded that different aspects of the self-concept needed to be analysed separately rather than merely from a global perspective. This is in keeping with recent reviews on the contribution of people's views of themselves to educational success in general (Marsh, 2007).

Part of the reason for the different conclusions reached by Chapman and Zeleke is undoubtedly the time at which their studies were carried out, as research techniques have undoubtedly become more sophisticated over the past 20 years, as also have attitudes and approaches to dyslexia and learning disabilities. There nevertheless remain a number of unresolved issues relating to the narrowness of the conceptualization of many key aspects. Although the self-concept is now considered by most theorists to be multi-faceted and hierarchical, and to be distinctly separable from self-esteem, even Zeleke claims that such terms as *general self-concept, global self-esteem, global self-worth* and *general self-esteem* can and have all been used synonymously in the literature. The reality is that each term has a distinctly different meaning, which needs to be taken into account if we are ever going to be able to unravel how people with dyslexia see themselves and how this affects their sense of identity. It is not the purpose of this paper to provide a glossary of the multitude of terms in use in relation to the conceptualization and measurement of various aspects of the sense of identity, (for further expansion of this point, see Burden, 2000, 2005) but a clear distinction needs to be drawn between *general self-concept, specific aspects of self-concept, general self esteem* and *other helpful terms* such as *self-efficacy, learned helplessness* and *locus of control*. As Durrant, Cunningham, and Voelker (1990, p. 662) point out, it is important that research in this area acknowledges the heterogeneity of the population and the multidimensionality of the self-concept in order to gain a fuller understanding of the self-perceptions of these children. Unfortunately, this appears to have been a cry in the dark as far as much of the research in this area is concerned.

As far as *general self-concept* is concerned, the vast majority of studies from Chapman's early review onwards have failed to find any significant differences between dyslexic or LD children and their normally attaining peers. Zeleke's (2004) meta-analysis of 28 comparative studies found this to be the case in 70% of them. This is not at all surprising if we bear in mind the large array of potential factors contributing to the development of a person's overall sense of self (Marsh, 2007). It does not mean that all individuals who struggle with difficulties of a dyslexic nature will not have aspects of their self-concept affected by those difficulties, only that the limitations of the techniques involved in assessing GSC and analysing the results make it extremely difficult, if not impossible, to provide such information. Partly for this reason, studies focussing on more specific aspects of self-concept are more likely to produce more interesting findings.

When the *academic self-concepts* of dyslexic and learning disabled children have been compared with those of their normally achieving peers, a clear difference has been found in almost all cases. Zeleke's (2004) meta-analysis, for example,

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found that 89% of studies, covering a wide range of ages and measurement techniques, revealed significantly lower ASC in the LD and dyslexic groups. In many cases this result appears to remain stable over time (Kistner & Osborne, 1987; Vaughn, Elbaum, Schumm, & Hughes, 1998) or even grow worse as children move through the school system (Popp, 1990; Resnick & Harter, 1989). However, as Burden (2005) discovered in his in-depth study of the learning careers of 50 dyslexic boys attending a specialist independent school, academic self-concept is not only open to change, but evidence of such change may be an important index of educational progress. This finding is in keeping with the conclusions drawn by Skaalvik and Hagvet (1990), as a result of their study of the relationship between academic self-concept and achievement in 600 Norwegian primary school children that ASC acts as a mediating variable between academic performance and global self-esteem, as well as having a causal influence on academic achievement.

There are several points worth noting here. Firstly, it is only to be expected that children demonstrating significant learning difficulties will have lower academic self-concepts than those who do not. If this were not the case, such children would have an unrealistic perception of how well they were doing. As they learn how to cope with and gradually overcome their difficulties, then their academic self-concept should also improve accordingly. If they continue to struggle without appropriate support, then their ASC is likely to stay the same or even decrease. Such movement may depend upon such factors as the nature and degree of the learning difficulties and the quality of the help and support provided. Once a child has come to recognize their limitations, as indicated by their ASC, this is likely to have a negative effect upon their confidence to succeed, thereby affecting their academic self-esteem or feelings of self-efficacy (Bandura, 1997), which in turn will provide an additional barrier to successful learning.

Despite the concerns that are sometimes expressed about the possible effects of dyslexia and other forms of learning disability upon social interactions, leading to social isolation or behavioural disorders of one kind or another, there appears to be little strong evidence to this effect. Again, however, the issue is by no means straightforward. In focussing on the long-term social and psychological outcomes of developmental reading problems, Maughan (1995) concluded that early reading problems play little if any role in the persistence of psychiatric disorder after middle childhood. However, data from at least two British National Cohort studies indicated that developmental difficulties with literacy and numeracy were likely to be prognostic indicators of later feelings of depression, particularly in women, and employment difficulties in men (ALBSU, 1988; Bynner & Ekinsmith, 1994). By contrast, Bruck (1989) found that most of her sample of young adults with learning disabilities reported a marked drop in their social adjustment difficulties on reaching adulthood. Moreover, Zeleke's (2004) meta-analytic review found that 70% of 30 reported studies found no significant differences between the social self-concepts of children with learning disabilities and their normally achieving peers, with 20% finding the LD group less socially well adjusted and the remainder finding them socially more adept. Further light is thrown on these confusing messages by the work of Durrant *et al*. (1990), who examined the social and emotional outcomes for different LD subgroups and found that children with comorbid behaviour disorders showed signs of comparatively poor social self-concepts, whereas those without such associated

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difficulties did not. The important point to be made here is that we cannot assume that all samples of children or adults with dyslexia or learning disabilities share the same characteristics, apart from their specific difficulties. Moreover, unless the nature and degree of those specific difficulties is made apparent, we cannot even draw this simple conclusion.

Whereas a person's self-concept is generally assumed to be a measure of how they perceive themselves, their *self-esteem* can most usefully be considered as relating to their feelings about those perceptions. Thus, if I perceive myself to be a poor reader or speller, but am not concerned about this, then my academic self-concept may well be low without this necessarily having a negative effect on my academic self-esteem. It is only when the task or activity in question is perceived as particularly important or meaningful that success or failure in that activity will have a direct effect upon one's self-esteem. In contrast to the findings on general self-concept, but in line with those on academic self-concept, the research evidence here strongly suggests that adolescents and adults with longstanding literacy difficulties do appear to be at significant risk of poor self-esteem, at least in contemporary Western societies (Fairhurst & Pumfrey, 1992; Gerber, Schneiders, & Paradise, 1990; Gjessing & Karlsen, 1989; Lewandowski & Arcangelo, 1994). This appears to be the case no matter what research methodology is employed. The previously referenced, large-scale survey carried out by ALBSU (1988) revealed a vulnerability to depression among those with continuing literacy difficulties, Humphrey (2002) claimed that his study showed that dyslexia has clear and demonstrable negative effects on children's self-esteem, and Riddick, Sterling, Farmer, & Morgan's (1999) small-scale study of dyslexic students found that they displayed significantly lower self-esteem and a higher degree of anxiety than a matched control group. An interview study of 47 adult dyslexics carried out by Hughes and Dawson (1995) produced similar results, revealing a typical pattern of failure at school leading to long-lasting negative feelings of self-worth together with perceptions of low personal intelligence.

If we attempt to dig deeper into some possible reasons for these depressing findings, and even question their inevitability, some interesting and potentially helpful patterns begin to emerge. A number of studies appear to indicate that there may well be key periods at which dyslexic and learning disabled children may be at particular risk in the development of their learning identities. Studies by Palombo (2001) and McNulty (2003) have indicated that during their early and middle school years children later identified as dyslexic are likely to call into question their intellectual abilities and to lose motivation as a consequence of their unexplained difficulties. Interview studies by Burden (2005) and Ingesson (2007) confirm that this period of trying to make sense of what may seem to be inexplicable difficulties prior to diagnosis can be quite crucial in a dyslexic child's life, and it is often here that the support and understanding of parents can make all the difference as to whether the child begins to give up or continues to keep trying (Griffiths, Norwich, & Burden, 2004; McNulty, 2003).

This may help to account for the findings by some researchers that the incidence of social and emotional problems among dyslexics may begin to decrease as they grow older (Bruck, 1989; Burden, 2005; Ingesson, 2007; Spreen, 1987; Boetsh *et al*., 1996). As Davenport (1991) suggests, the time of diagnosis and how it is explained can be important factors in its acceptance by the young person concerned and what follows. Ingesson (2007) found in her study of 75

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Swedish dyslexic teenagers that the mean age of diagnosis was 12 years but that just under half of the respondents claimed not to remember when or how they had been informed that they were dyslexic, or by whom. Those who did remember were fairly evenly split between those who had not reacted in any particular way, those who felt devastated and those who felt relieved to find that they were not really stupid. Similar ambivalent feelings were revealed in a study by Zetterquist-Nelson (2003).

The responses of the young people in Ingesson's study showed a developmental trend whereby general feelings of low self-esteem at the elementary school level tended to become worse at middle school but then began to improve until by the time they reached upper school over 70% rated their feelings of self-worth as 'good' or 'very good'. However, in obtaining similar findings, Burden (2005) raises the issue of what exactly took place in the children's lives to bring about such positive change. In doing so, he questions also the ultimate value of taking such a global approach to self-esteem.

Although general measures of self-esteem, such as that devised by Rosenberg (1979), are still widely used in correlational studies, they can actually tell us very little about why any particular individual or group feels the way that they do about a particular field of endeavour. They can also be misleading to the extent that statistical relationships can be misinterpreted as causal without any further evidence; for example, that having learning difficulties of a dyslexic nature leads to low self-esteem. We need to find ways of investigating more deeply before we are in a position to draw such conclusions. It is partly for this reason that an increasing number of researchers are turning towards more theory-based approaches such as Bandura's (1997) theory of *self-efficacy*, Abramson, Seligman, and Teasdale's (1978) notion of *learned helplessness*, and Weiner's (1974) *attribution theory*. Full summaries of these theoretical perspectives are provided elsewhere (for a full explication of their use with and implications for the study of dyslexic populations, see, for example, Burden, 2005), but only a brief description will be given here.

Basically, instead of focussing on global measures of self-esteem, approaches such as these enable us to consider how confidently people feel that they can be successful when faced with any particular task or activity (their feelings of self-efficacy), whether their sense of failure is so pronounced that they have simply given up trying (a sense of learned helplessness) and the reasons that they give themselves for their successes and failures (their learning attributions). Within attribution theory it is assumed that people will not only draw upon a limited number of reasons (such as ability or effort), but that they will see these reasons as within their control or not (their locus of control), as well as being fixed or open to change. Thus, we can begin to investigate whether those suffering from dyslexia feel confident in their ability to overcome their learning difficulties or whether they have given up trying. We can also investigate why they think they are failing (Am I stupid? Am I trying hard enough? Do I have appropriate strategies? Is everyone against me?), whether they think that anything can be done about it and whether they see their future success as being within their own hands or dependent upon other forces.

As yet there appears to have been only a few studies that have taken one or another of these alternative perspectives. Humphrey and Mullins (2002) noted that 'the parallels between learned helplessness and children with reading

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difficulties are striking', but seem not to have equated the two, nor to have examined this relationship further. A small-scale comparative study by Frederickson and Jacobs (2001) found that their dyslexic sample ($n = 20$) displayed lower academic self-concepts but no lower self-esteem than their control group. Of particular interest here is their further finding that children with a strong internal locus of control tended to have higher academic self-concepts than those who saw success and failure as outside their control, even when actual levels of reading attainment were taken into account. Self-efficacy theory would suggest that this particular dyslexic subgroup of 'internalisers' should have a greater likelihood of subsequent academic success than those who were 'externalisers'. Unfortunately, no evidence was forthcoming as to this outcome, but the implications for further research here are obvious, particularly as a previous 2-year longitudinal study by Kistner, Osbourne, and Le Verrier (1988) claimed that the academic progress of children with learning disabilities in their sample was greatest in those with an internal locus of control.

Burden's (2005) in-depth study of 50 adolescent boys attending an independent specialist school for dyslexics is one of the few to focus specifically on dyslexics' feelings of learned helplessness, self-efficacy and locus of control. Somewhat contrary to original expectations, he found that although the boys' initial academic self-concept was significantly lower than that found in the mainstream standardization sample, this increased as the boys moved up the school. Even more significantly, however, he also found very little evidence of learned helplessness and a high degree of self-efficacy and internal locus of control. This raises the further issue of the context in which the dyslexic boys were being educated. It was clear that the ethos of the whole school in this particular case was one that was success orientated, and that attribution retraining, albeit at an implicit level, which focussed on effort and agency rather than entity notions of ability (Dweck, 1999) underpinned all aspects of the pedagogy. There are important lessons that can be learned here from social psychology, particularly Tajfel's notion of social identity (for a summary and wider implications of this theory, see Haslam & Reicher, 2006).

CONCLUSION

There is an urgent need for further research into the connection between developmental learning difficulties of a dyslexic nature and the ways in which these can and do affect a person's sense of identity, possibly throughout their lives. Although the bulk of evidence gathered so far is strongly indicative of a clear relationship between being dyslexic and having a low academic self-concept, there are also signs that this relationship is by no means immutable. A reciprocal relationship may well exist between the development of a dyslexic person's literacy skills and an increasingly positive ASC. Further longitudinal investigations are warranted here. At the same time, there is a need for reconceptualization of the notion of self-esteem. To state, and even to 'prove' that dyslexics have low measured self-esteem takes us nowhere. We need to know in exactly what ways such negative feelings are made manifest. Theoretical approaches from social psychology such as attribution theory and social identity theory would seem to offer promising ways forward.

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