

**Dyslexic Students in Higher Education: a psychological study**

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Submitted in fulfilment of the Degree of Doctor of Philosophy  
The Department of Psychology

September 2004

## Acknowledgements

Sincere thanks go to Dr. Angela Fawcett, for her support, guidance and friendship throughout the production of my thesis, for offering valuable insights into the field of dyslexia and contributing sound suggestions throughout. Many thanks go to Professor Rod Nicolson for affording me the opportunity to carry out this research. To Professor Paula Nicolson for offering expert advice on qualitative research methodology and sensitive and constructive feedback throughout. To Michelle Smith for proof reading assistance; her endless attention to detail and her support throughout the generation of the write-up were invaluable. To Joseph Carter for being patient and enthusiastic about my work. To Marcus Fitzgibbon, for his continued support and friendship.

*"Almost immediately, there they were; heavy dark rocks all over my lap. Our host jumped to the light switch and the room went dark. "Now" he said, "watch this," and produced an ultraviolet light which he shone down on them. All of a sudden these plain brown stones were a glitter with sparkle and hue: heliotrope, azure, vermilion, olive green and jealous green, hot pink, yellows from topaz to lemon, amethyst.*

*Off went the ultraviolet, gone were the colors. On went the light, back came the dazzle.*

*"That's it!" I called out. "Those are my kids!"*

*These indeed are the students who sit in classrooms all across the country seemingly ordinary or even ugly, dull, uninteresting, and out of place with anything academically stylish or intellectually elegant. Yet in the proper light they glow with color and passion.*

*Our job is to find them, and shed that light" (Vail, 1990, p.7.)*

## ABSTRACT

*The experience of dyslexic students in higher education is examined in this thesis in four studies: two major and two minor. The first study focuses on autobiographical information and describes how the hypothesis and the general theme of the study emerged from personal experience. Study two presents a set of qualitative case studies, which employ Jonathan Smith's Interpretative Phenomenological Analysis (IPA) technique in order to generate a set of key themes (looking for a reason, social comparison, low self-esteem and need for appropriate support) which are then developed into the questionnaire which constitutes study three. The questionnaire comprised 54 items and was returned by 86 respondents, 38 male and 48 female. The high agree response rate; confirmed that the statements generated accurately reflected the views of respondents. Furthermore, a rich source of data was gathered from the free comment section. The information gathered from the three studies is then used to develop a preliminary model of dyslexia support, suggesting provision of support across the whole institution, rather than allocation of support on an individual basis. The model is evaluated in study four, via peer group review in the form of a questionnaire.*

The first chapter introduces the theoretical background to the thesis, reviewing the relevant psychological literature and highlighting the situation in practice and policy in the present system.

Chapter two presents the writer's own personal experience in the form of an autobiographical case study (study one), thus presenting the reasoning behind the generation of the hypothesis explored within the thesis.

Chapter three offers the rationale behind the employment of mixed methods within the thesis, a variety of qualitative methodological tools are discussed, including Interpretative phenomenological analysis (IPA); grounded theory and symbolic interactionism. Chapter four discusses the underlying theoretical/philosophical assumptions behind the utilisation of the particular qualitative method (IPA) employed in the analysis of the case studies presented in study two.

Chapters five to eight evaluate and discuss the findings from studies two and three and consider the implications that these have in relation to the restrictions of the present system; offering a preliminary model of support for dyslexic students in higher education. Chapter nine presents the findings from study four (peer review questionnaire), evaluating the preliminary model of dyslexia support put forward in the previous chapter.

The thesis concludes with a review of its findings (Chapter 10) and a discussion of its contribution to a wider understanding of the issues involved in supporting dyslexic students in higher education, together with implications for policy, practice and pedagogy.

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## PREVIEW

There has been increasing awareness of the number of dyslexic students coming forward for screening, assessment and support. The screening and assessment procedures involved in identifying dyslexic students are extremely complex. In addition, within the dyslexic population as a whole, a number of underlying processing difficulties present themselves as various sub-types of dyslexia. Consequently, dyslexic students will present with a varied number of differences in learning style, together with their own individual understanding of how dyslexia presents itself on a more personal level (i.e. how they identify with it, understand it and know it).

Whilst the Disability Discrimination Act (1995) and the Disabled Students Allowance endeavour to ensure that such students are not disadvantaged by their particular learning style, students coming forward for assessment (and those with existing assessment reports) can find themselves facing a variety of additional requirements from their respective Local Education Authorities (LEA)/Funding Bodies, in order to secure support.

Dyslexic students in the UK are categorised as 'disabled' under the administrative procedures associated with applying for entry onto a university programme. Disabled students are entitled to apply for extra financial support, i.e. Disabled Student Allowance (DSA), to help with additional costs which the students may incur in order to attend their course, as a direct result of disability. Dyslexic students are therefore required to provide evidence of their disability in order to receive DSA. The LEA (i.e. the authority governing the area of normal home residence of the student) requires evidence before they release funds to disabled students and subsequent learner support is provided. This can have wide-ranging implications regarding the student's experience within higher education and, on a more personal level, in recognising, accepting and managing dyslexia.

My main concern throughout this thesis is how dyslexic students in higher education 'manage' their courses, and any implications that being dyslexic has in relation to this. By 'manage their course' I refer to how dyslexic students actively manage those aspects of their learning style which causes them difficulties. By developing strategies

to overcome them. Such strategies might include the development/enhancement of literacy skills, time management, organisation and stress management.

### **Exploring the Experience of Dyslexic Students In Higher Education**

The first part of this thesis offers an in-depth and broad literature review, dealing with a wide and varied span of information from disparate genesis, in order to engage in a rich piece of applied work. The writer's own personal experience is then presented in the form of an autobiographical case study, thus presenting the reasoning behind the generation of the hypothesis explored within the thesis. Following which, four case studies are presented in order to gain an insight into the personal, practical and pedagogical implications of dyslexia in higher education and presenting the emergent themes from the students' transcripts in order to evaluate the students' interpretation of their own experience.

The thesis then draws upon the aforementioned themes, with the development, distribution and analysis of a questionnaire (study three), drawing from the findings of study two. Following this is the development of a preliminary model of dyslexia support, developed from the analysis of studies two and three. A peer review (study four) is then presented in the form of a questionnaire.

Therefore, the four studies comprise:

**Study 1: autobiographical case study**

**Study 2: a study of students' experience**

**Study 3: a questionnaire drawn from the analysis of study two**

**Study 4: peer review study-feedback on the preliminary model of dyslexia support**

Chapter One provides the theoretical background to the thesis, reviewing the relevant psychological, theoretical, pedagogical and policy literature and offering a framework within which to view the research question put forward. The chapter begins with a general introduction to dyslexia. Initially, a review of definitions is discussed, followed by a summary of identification<sup>1</sup> (diagnosis) issues. The current concerns within the dyslexia research field are then addressed, introducing a preliminary account of policy within higher education in relation to dyslexic students. The chapter concludes with a reflection on research generated in higher education, with specific focus on policy and practice.

Chapter two discusses the reasoning behind the generation of the research question within the thesis, namely the experience of dyslexic students in Higher Education (HE), by presenting an autobiographical account of my experience within HE as a dyslexic student and student advisor.

Chapter Three offers the rationale behind the employment of a mixed-method approach and provides an overview of the qualitative and quantitative methodologies employed; thereby presenting a framework in which to consider the research question put forward in the thesis.

Chapter Four sets the scene for the following chapter and offers a methodological/philosophical framework within which to view the case studies presented. A discussion of the theoretical and philosophical assumptions underlying the naturalistic, interactionist and interpretative methodologies employed within the first study, together with their ability to fit the particular research aims, is addressed.

Chapter Five offers a qualitative insight into the research question put forward and draws upon the themes generated in the analysis of study two, to provide a narrative account of the subjective experiences offered by the students.

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<sup>1</sup> Throughout this thesis the assessment of dyslexia is referred to as identification. This is based on the premise that dyslexia should be viewed as a difference in learning style rather than a deficiency.

Chapter Six provides a quantitative analysis of the themes put forward in the first study. The generation and distribution of an item-based questionnaire and an analysis of responses is presented.

Chapters Seven and Eight offer a platform to evaluate the findings of studies two and three, in order to gain an understanding into the responses generated. Chapter Seven presents a review of the findings and a discussion of their contribution to our understanding of dyslexia at the adult level, in relation to the undertaking and completion of undergraduate studies within higher education. Chapter Eight introduces the current system of support for dyslexic students studying in higher education in the UK and a preliminary model of good practice is suggested. Evaluating current policy offers an opportunity for further research centered on the evaluation of assessment and support for dyslexic students in higher education.

Chapter nine presents the findings from study four (peer review questionnaire), evaluating the preliminary model of dyslexia support put forward in the previous chapter.

Chapter ten reflects on the thesis, by providing a reflexive positioning of the research process; the rationale behind the generation of the research question being addressed. The thesis concludes with a review of its findings and a discussion of its contribution to our understanding of dyslexia at the adult level in relation to the undertaking and completion of undergraduate studies within UK higher education institutions.

# Chapter 1: Literature Review

## Dyslexia: Historical Background and Current Concerns

### Overview

This chapter begins with a general introduction to dyslexia. Initially, a review of definitions will be discussed, following this, a summary of identification<sup>3</sup> (diagnosis) will be presented. The current concerns within the dyslexia research field will then be addressed. Subsequently, a preliminary account of policy within higher education in relation to dyslexic students will be given. The thesis aims to evaluate the ways in which dyslexic students in higher education manage their courses, and any implications that being dyslexic has in relation to this, together with the students' appraisal of the support they have experienced. By 'manage their course' I refer to how dyslexic students actively manage those aspects of their learning style which causes them difficulties. By developing strategies to overcome them. Such strategies might include the development/enhancement of literacy skills, time management, organisation and stress management. Basically all those skills which any student requires in order to complete their studies. Hence, to actively manage those aspects of their weaknesses in learning style which cause difficulties. To conclude, the chapter will reflect upon research generated in higher education, with specific focus on policy and practice in relation to dyslexic students.

### Historical Perspectives on Dyslexia

Kusmaul, a medical practitioner, first introduced the concept of word-blindness over a century ago (1877). The emphasis, at this initial stage, was of text blindness, irrespective of sight, intellect and speech production (Kusmaul, 1877), thus marking the initial medical interest in the condition (for a review of case studies in congenital word blindness see Hinshelwood, 1917). The first use of the term 'dyslexia' came a decade later, referring to acquired reading difficulties in adults (see Pringle Morgan, 1896). Since this time, the word 'dyslexia' has generated much interest, due to the debates surrounding aetiology, definition, identification, pedagogy and practice.

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<sup>3</sup> Throughout this thesis the assessment of dyslexia is referred to as identification. This is based on the premise that dyslexia should be viewed as a difference in learning style rather than a deficiency.



As one might expect, in using the term 'congenital word blindness' the initial impetus for research on dyslexia was grounded in the visual-processing domain (see the following section: visual deficit hypothesis, p14). However, in 1937, Orton suggested that it was misleading to use the term, as indeed there was no blindness for words, coining the term 'strephosymbolia' (twisting of symbols). Furthermore, Orton (1937) introduced the notion of mixed-handedness, which is now established as a classic sign of dyslexia, together with letter reversals (for instance, confusing the letters b and d). Therefore, greater emphasis was placed on the difficulties of decoding text. (For a review of Orton's work, see Miles and Miles, 1990.)

Ironically, over a hundred years later there is still no agreed consensus on terminology. Dyslexia/SpLD (specific learning disability) is used in the UK, although by no means is the use of the term clear-cut, and discomfort regarding appropriate usage has occupied much practice and academic debate (see Siegel, 1999). The term LD (learning disability) is favoured in the USA, again with much controversy surrounding its usage. Hence, and perhaps not unsurprisingly, there is no widespread agreement regarding the definition of dyslexia, as is noted by Siegel:

*"...the definition of learning disabilities has been debated endlessly over the years with no apparent resolution. The question of who is learning disabled is, obviously, one of the most critical questions for the field."*

(Siegel, 1999, p.304.)

However, the definition put forward by the World Federation of Neurology is frequently cited:

*"A disorder in children who despite conventional classroom experience, fail to attain the language skills of reading, writing and spelling commensurate with their intellectual abilities."*

(World Federation of Neurology, 1968)

More recently, a number of definitions have been published and, when talking of the adult population, the following offer a more useful explanation:

*"Dyslexia is one of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterised by difficulties in single word decoding, usually reflecting insufficient phonological processing abilities. These difficulties in single word decoding are often unexpected in relation to age and other cognitive abilities; they are not the result of*

*generalised developmental disability or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to problems reading, a conspicuous problem with acquiring proficiency in writing and spelling."*

(Cited in Turner, 1997, p.3.)

*"An unexpected difficulty in learning to read, write and spell."*

(Riddick, 1996, p.1.)

The above definitions concern themselves with the unexpected performance of dyslexic individuals in relation to their aptitude for language skills, in contrast to other abilities. However, when referring to dyslexic students, emphasis on 'discrepancy' is less apparent, as, to reach the required level of study in higher education, dyslexic students have often compensated for their difficulties and are able to manage their dyslexia; albeit with perhaps more fragile literacy skills in place. Thus, the National Working Party Report on dyslexia in higher education, funded by the Higher Education Funding Councils for England (HEFCE) and the Scottish Higher Education Funding Council (SHEFC) maintain that:

*"...the deficit model of dyslexia is now steadily giving way to one in which dyslexia is increasingly recognised as a difference in cognition and learning."*

(National Working Party Report, 1999, p.27, my underlining.)

Indeed, this stance is mirrored in the British Psychological Society (BPS) Division of Educational and Child Psychology (DECP), Working Party Report 1999, which suggests that:

*"Within the educational context, dyslexia involves a continuum of assistance as determined, in the first instance, by the severity and persistence of word-reading and spelling difficulties. It is not a medical condition requiring diagnosis and treatment, but shorthand for a range of learning difficulties needing to be noticed and acknowledged so that suitable educational actions can take place."*

(Reason, 2001, p.301.)

Thus, the following definitions are perhaps more suited to the student population and reflect the researcher's position with regard to the need to move away from a discrepancy definition to a more holistic definition which focuses on a different style of processing rather than a deficiency in literacy skills:

*"Dyslexia may be caused by a combination of phonological, visual and auditory processing deficits. Word retrieval and speed of processing difficulties may also be present. A number of possible underlying biological causes of these cognitive deficits have been identified and it is probable that in any one individual there may be several causes. Whilst the dyslexic individual may experience difficulties in the acquisition of reading, writing and spelling they can be taught strategies and alternative learning methods to overcome most of these and other difficulties. Every dyslexic person is different and should be treated as an individual. Many show talents actively sought by employers and the same factors that cause literacy difficulties may also be responsible for highlighting positive attributes - such as problem solving which tap resources which lead to more originality and creativity."*

(Schloss, 1999, cited in Peer and Reid, 2001, p.11.)

*"Dyslexia is a language-based learning disorder that is biological in origin and primarily interferes with the acquisition of print literacy (reading, writing, and spelling). Dyslexia is characterised by poor decoding and spelling abilities as well as a deficit in phonological awareness and/or phonological manipulation. These primary characteristics may co-occur with spoken language difficulties and deficits in short-term memory. Secondary characteristics may include poor reading comprehension (due to the decoding and memory difficulties) and poor written expression, as well as difficulty organising information for study and retrieval."*

(Padget, Knight and Sawyer, 1996, p.55.)

This brings me to the next section of this chapter and the identification of dyslexic individuals. As one might imagine, identification is a complex issue; many students do find the production of written work arduous and experience difficulties organising and managing their studies, thus assessment of dyslexia requires sensitive, careful and thorough inquiry in order to get the 'correct' identification.

## **Identification: The Discrepancy Definition**

As noted earlier, dyslexia is predominantly perceived as a discrepancy between poor reading and writing skills in relation to intellectual ability; therefore, it is asserted that an individual's reading ability will be closely correlated with their intelligence. In order to measure intelligence, the application of psychometric tests are employed and, for the most part, in relation to children, the Weschler Intelligence Scale for Children (WISC III) or British Ability Scales are generally used to predict a child's reading ability. A discrepancy of not less than 18 months, within a full scale IQ of not less than 90, deems the child dyslexic. Once again, there is differentiation between practitioners in the UK and the USA about the criterion for assessing dyslexia/SpLD

and LD. A child or adult in the UK is excluded from the dyslexic range if her or his IQ falls below a full scale IQ of 90, whereas in the USA the criterion is a full scale IQ of 80 points. In addition, children are excluded if they have emotional problems, sensory deficits or socio-economic disadvantage. This causes concern at various levels. Firstly, for those children who have dyslexia in addition to social disadvantage, secondly, for those children who have socio-emotional difficulties as a result of dyslexia; a point that is succinctly raised by Siegel in the following quote:

*"There does not appear to be any longitudinal research that provides evidence on the causal direction of the relationship between learning disabilities and emotional problems; however, it seems unethical not to identify and treat the learning disability because there are concurrent emotional difficulties."*

(Siegel, 1999, p.311.)

Thirdly, it is dependent on a required level of failure (two years behind chronological age peers) before help is made available. Nicolson (1996) provides an expressive account of why this is a wholly misguided and detrimental course of action:

*"I consider this morally unacceptable, in that failure for the first two school years (even if subsequently remediated) leaves lasting psychological scars. It is also stupid, because it is very much more cost-effective to give support at 5 years than at 8 years."*

(Nicolson, 1996, p.201.)

Finally, it does not take into account those dyslexic children and adults who perform in the average range, but, nonetheless, experience hurdles; seldom attaining their true potential. Needless to say, the inclusion of IQ scores and the requirement for a considerable reading age 'lag' in the definition of dyslexia, has been vociferously contested.

Hence, the rationale behind using IQ as a marker of dyslexic performance has been hotly debated (see Gustafason and Samuelsson 1999); with anti-discrepancy theorists questioning the validity of a) the fuzziness<sup>4</sup> of IQ and b) any causal relationship between measured IQ scores and performance on word decoding skills. Possibly the two most prominent researchers in this area are Stanovich (1986, 1991, 1994) and Siegel (1995, 1999). Stanovich argues that there is insufficient evidence to suggest that IQ scores and reading show a positive correlation; indeed his 1986 study demonstrates a correlation in the range of 0.3 - 0.5 in the early

years, rising to 0.6 - 0.75 in adulthood. Therefore, Stanovich proposes that people can either be good or poor at decoding text regardless of IQ level.

*"Thus, there is no indication that the nature of processing within the word recognition model differs at all for poor readers with and without IQ-discrepancy."*

(Stanovich, 1994, p.587.)

Moreover, he argues against the use of IQ scores in the definition of dyslexia, stating that IQ is not a real measure of the individual's potential and, as such, should not be used as a measure to predict reading ability. Siegel's 1992 meta-analysis of studies, comparing discrepancy-*diagnosed* dyslexics and poor readers, mirrored Stanovich's findings, i.e. that the cognitive skills necessary for reading in the two groups were similar. This is a point frequently raised by Siegel:

*"They do not measure reasoning or problem-solving skills. They measure for the most part, what a person has learned, not what he or she is capable of doing in the future."*

(Siegel, 1999, p.311.)

In addition, she argues that, irrespective of this underlying fundamental flaw, a certain irony exists when employing such methodology with this particular group of individuals, thus:

*"It is a paradox that IQ scores are required of individuals with learning disabilities because most of these people have deficiencies in one or more of the component skills that are part of these IQ tests, therefore, their scores on IQ tests will be an underestimate of their competence."*

(Siegel, 1999, p.311.)

Therefore, those students who are placed within some band on the intelligence quotient which deems them a) dyslexic and b) by analogy, within the average range, undoubtedly derive some reassurance from such information. However, those individuals who do not come out favourably on such tests inevitably do not derive such reassurance. And, in relation to self-esteem, these individuals understandably perceive a low score as fixed, when indeed we are aware that the differences

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<sup>4</sup> By fuzziness, I mean determining just what IQ is actually measuring.

displayed by some dyslexic individuals are exacerbated by particular sub-tests within intelligence batteries<sup>5</sup>.

Challengers to the anti-discrepancy theorists justify the use of IQ as a measure of aptitude, indeed many contest that IQ is predictive of reading skill (Ashton, 1996); although acknowledging that the relationship may be bi-directional. Nicolson (1996) asserts that anti-discrepancy theorists 'conflate' research on the definition of reading difficulties with that of the definition of dyslexia; the former focusing too heavily on phonological deficits as the cause of dyslexia as opposed to just one symptom. Furthermore, he argues that, whilst Seigal (1995) and Stanovich (1994) allege that phonological deficits are associated with poor reading in both dyslexic children and those children assessed with low IQ, this does not suggest that the initial cause of the phonological deficits is one and the same. Rather than seeing these findings as challenging the 'predominant' discrepancy-definition of dyslexia, Nicolson maintains that they provide new evidence on which to build a clearer picture with regard to the dyslexia research field, thus:

*"...rather than a depressing blow to the discrepancy-based concept of dyslexia, the evidence provided by Seigal and by Stanovich clears the way for a new dyslexia research programme, valuable to all the dyslexia community."*

(Nicolson, 1996, p.196.)

In adults, however, as mentioned earlier in this chapter, one cannot solely rely on a reading age discrepancy, as adults have often compensated for their earlier struggles through the acquisition of literacy; identification is therefore even more complex. The Wechsler Adult Intelligence Scale (WAIS III) together with the Wechsler Objective Reading Dimension (WORD) test of single word reading, are generally used in the identification of dyslexic adults<sup>6</sup>. A significant marker used within the WAIS-III is the **ACID** profile. The ACID profile provides a pattern of scores comprising the **A**rithmetic, **C**oding, **I**nformation and **D**igit Span sub-tests. Significantly lowered scores in relation to the other sub-tests have been found to occur in dyslexic individuals and the **ACID** scores are generally considered to reflect

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<sup>5</sup> Certainly, within this thesis this is an issue which has caused great concern for participants (see Chapter 4, Case Studies) and indeed is a topic which was often raised in my role of needs assessor at the ACCESS centre.

<sup>6</sup> This is not to say that this is the only method of identification possible. Indeed, there are a plethora of additional methods which could be employed to evaluate the processing style of individuals in the assessment arena, for example, Raven's Progressive Matrices (a measure of non-verbal abilities) and the Bangor Dyslexia Test. In addition the WRAT R is being increasingly used in the UK, as it generates a reading/spelling age above 17 years, however the test has US norms.

memory difficulties. However, recent research (Frederickson, 1999) questions the diagnostic value of the ACID profile, after finding only a 4-5% occurrence of the ACID profile reflected in her dyslexic sample. Hence caution needs to be taken when interpreting the results of the ACID profile, essentially, the onus should not solely be on the score that is generated but rather *how* the score was generated. By this I refer to the strategies which the individual may have developed which inevitably would mask their true ability and, hence would generate a false-negative in terms of the ACID profile and dependent on the overall diagnostic tools employed, the dyslexic range per se'.

In terms of a discrepancy between reading age and IQ scores, there are no standard UK reading tests that go beyond approximately 17 years of age. Hence, the use of reading age when addressing the needs of adults has been rightly contested on a number of grounds. Firstly, there appears to be no rationale behind the inclusion of reading scores due to the ceiling on age limit and, secondly, the demoralising effects of quoting reading age scores in respect to adults' self esteem (see McLoughlin, et al., 1994; McLoughlin, Leather and Stringer, 2002). Hence, quoting a reading age offers a fixed score to dyslexic individuals. Unless it is explained as level of performance at that particular time, prior to intervention/appropriate teaching, it can be hugely misinterpreted as a ceiling (i.e. no possibility of improvement) on performance, by both students and tutors alike. Furthermore, in the assessment arena, dyslexic adults face the probability of generating a 'false negative' (being wrongly identified as not dyslexic because their reading is at ceiling on the tests used) when employing a discrepancy definition to the identification of dyslexia at the adult level. Thus, McLoughlin et al. contend:

*"...according to the discrepancy definition, such adults would no longer be dyslexic, but clearly they continue to experience difficulties which stem from the inefficiency that was responsible for their slow acquisition of literacy skills during childhood."*

(McLoughlin et al., 1994, p.5.)

Likewise, this is a point raised by Rack (1997), who poses the question:

*"Imagine, for example, a person who has been assessed as dyslexic and then received some excellent teaching and learns to read and spell quite well; do they cease to be dyslexic if they no longer show a 'discrepancy'?"*

(Rack, 1997, p.66.)

Similarly, Nicolson and Fawcett (1996) make the following point with regard to the identification of dyslexia in adults and the use of the discrepancy definition per se:

*"...it is probably more useful to develop a test which identifies positive indicators of dyslexia (Miles, 1983) rather than rely on the problematic discrepancy between IQ and reading performance."*

(Nicolson and Fawcett, 1996, p.3.)

Nicolson and Fawcett present complementary method for assessing dyslexia in adults and students. An initial screening measure, the DAST (Dyslexia Adult Screening Test) is first used to determine whether full assessment is required. The DAST is a 30-minute screening test that provides a quantitative 'at risk' score. The rationale behind using a two-stage procedure, means that initial screening can be carried out by teachers or support officers to identify need, followed by a full assessment for those 'at risk'. The second stage of the procedure is the ADI (Adult Dyslexia Index).

The ADI comprises four positive indicators for adult dyslexia: the full WAIS-R (Wechsler, 1986a), WORD spelling (Wechsler Objective Reading Dimensions; Wechsler, 1986b), speed and accuracy of reading a nonsense passage, which is known to identify deficits even in compensated dyslexics (Finucci *et al.*, 1985; Brachacki, Fawcett and Nicolson, 1995), together with previous 'diagnosis' of dyslexia. Performance on each of the four indicators provides a score of 0, 0.5 or 1. For more detailed information regarding cut-off scores see Nicolson and Fawcett (1997). Composite scores on the tests are then used to provide an ADI score ranging between 0 (non-dyslexic) to 4 (dyslexic). Scores of 3 or more provide strong evidence for dyslexia, 2.5 represents good evidence, scores of 1.5 to 2 are termed 'borderline' and, in the case of scores of 1 and below, there is no evidence that dyslexia is present.

Likewise, Mcloughlin, Fitzgibbon and Young (1994), question the discrepancy definition per se in the identification of dyslexia in adults and present alternative criteria, offering insights into characteristic signs of dyslexia in adulthood, which may be more informative, namely:

1. A discrepancy between academic achievement and performance in practical problem-solving and/or verbal skills.



2. Excessive misspelling in written work, including errors such as confusions of letter order.
3. Difficulties with sequencing tasks that are usually automatic, such as reciting the months of the year and arithmetic tables in order.
4. Problems with organising work.
5. An aversion to writing notes or excessive note taking.
6. Reluctance to write anything at all.
7. Evidence of difficulties in working memory tasks such as taking telephone numbers or messages.
8. Forgetting series of instructions or carrying them out in the wrong order.
9. Persistent illiteracy in spite of remedial help or attendance at adult literacy classes.
10. A tendency to talk rather than listen as a strategy for restricting the input of information.

(McLoughlin, Fitzgibbon and Young, 1994, p.20.)

However, they make the following cautionary claim:

*“Dyslexics do not have the monopoly on any of the above and, taken individually, any one of the behaviours described would give little cause for concern. However, when several occur together with no obvious explanation, such as neurological injury or disorder, there is justification for assuming that the individual might be dyslexic.”*

(McLoughlin, Fitzgibbon and Young, 1994, p.21.)

Essentially, much of the research based on students in higher education centres, on slow processing speed (Fawcett and Nicolson (2001); Fitzgibbon et al. (2002)). Indeed, the feedback from those students involved in this particular study (and, likewise, the students I come into contact with in my role as a DSA assessor at a regional access centre) often concerns the extended amount of time taken to complete written assignments and course work. With slowness in processing speed apparent on several levels: reading, writing, note-taking, researching, etc. Moreover, students talk of the need to over learn when performing procedural tasks. Whilst one would not dispute that this is fundamental in any learning scenario, it is the time-scale which is most interesting in the case of many dyslexic students.

The dilemma surrounding identification of dyslexia is mirrored in the disparate domain of the dyslexia research field and should be borne in mind when reading the following section.

## **Research into the Causes of Dyslexia**

This thesis is concerned with the 'lived experience' (Denzin and Lincoln, 1994) of dyslexic students in higher education and their appraisal of the support systems in place in their institution. By 'lived experience' I mean the day-to-day routine of dyslexic students and the management of their learning in higher education. Clearly, this encompasses many activities, from managing workload and communicating with peers and tutors, to organising support needs.

As such, one might question the need to include, within this section, an appraisal of causal explanations of dyslexia. However, in the management of dyslexia in higher education, information relating to its origins may illuminate the whys and wherefores of particular behavioural and processing patterns and offer an explanation to dyslexic students of their particular learning style, which will hopefully encourage independence in learning. Therefore, offering dyslexic individuals alternative and more effective styles of study. To this end, an overview, albeit brief, of the dyslexia research field will be presented.

Different levels of analysis occupy the dyslexia research field, not least because of the various facets of dyslexia which are observed and experienced in the performance of dyslexic individuals. Morton and Frith (1995) and Frith (1997) examine the various causal theories at the biological, cognitive and behavioural levels, thus offering a framework within which to evaluate possible causal explanations of dyslexia. Indeed, Frith (1997) argues that a truly causal explanation of dyslexia has to connect behavioural patterns to cognitive characteristics and, in turn, underlying neurology. Likewise, Fawcett and Nicolson (2001), pose the following key questions:

"What is the underlying cause of dyslexia?"

"Why does it appear to be specific to reading?"

"Why do weaknesses appear to be limited to reading?"

"Given the wide range of difficulties outlined above, why are there so many high-achieving people with dyslexia?"

(Fawcett and Nicolson, 2001, p.91.)

The following sections reflect the need to evaluate the presence of dyslexia, its symptoms and possible cause/s, by introducing research, first at the biological level, secondly, the cognitive level and finally the behavioural level, following Frith (1997). Nicolson (2001) makes the following comment with regard for the need to address dyslexia within this framework; acknowledging the importance of all three levels:

*"It is not that any one level of explanation is intrinsically 'better' than another. A complete explanation would involve all three."*

(Nicolson, 2002, p.4.)

In preparing this section I have drawn on a review of the data by Fawcett (2001).

### **Neurological Evidence**

The neurological evidence presented proposes wider implications with regard to the underlying neurological anomalies identified in dyslexic brains and thus suggests that dyslexia is perhaps not confined to phonological deficits alone. Those dyslexic students who do not display deficits in phonological skills but continue to experience difficulties in other areas may find such research enables them to identify with their particular learning style, more so than the phonological deficit per se. Thus, information relating to underlying neurology may provide information that some students feel they can identify with more readily.

Earlier studies (Geschwind and Galaburda, 1985) demonstrated evidence of a range of differences between dyslexic and control brains. Specifically, neuroanatomical irregularities throughout the cerebral cortex, affecting both language and non-language areas of the brain, together with evidence of decreased asymmetry of the planum temporale<sup>7</sup>. Later research identified smaller magnocells in both the visual and auditory magnocellular pathways (Galaburda and Christen 1997). In terms of implications for reading, Bakker (1990) puts forward a 'balanced model' proposing different types of readers with regard to hemispheric preference, termed 'perceptual' and 'linguistic'. Essentially, perceptual denotes a right-hemispheric processing style; one which may have good comprehension but poor reading skill and accuracy. Linguistic readers are therefore reliant on the left hemisphere, whereby reading is

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<sup>7</sup> Ordinarily, simple brain scans demonstrate asymmetry of the planum temporale (in right handers); the left (language) side being larger than the right. An increase in the right planum temporale may suggest that dyslexic individuals compensate for weak language skills by

accurate but comprehension is poor. Neurological evidence, therefore, suggests different patterns of processing with regard to reading ability. A detailed review of neurological evidence is clearly beyond the scope of this thesis (for a more in depth account see Geshwin and Galaburda (1987); Nicolson (1996); Finch, Nicolson and Fawcett (2000); Fawcett and Nicolson (2001)).

### **The Cerebella Deficit Hypothesis**

Problems in motor skill and automatised tasks have been linked to the cerebellum; an area at the base of the brain known to be associated with motor skill. However, there is now evidence to suggest that the cerebellum is involved in language and cognitive skills, including reading (Fulbright et al., 1999).

The Cerebella Deficit Hypothesis (Nicolson, Fawcett and Dean, 1995) offers a biological basis for the symptoms proposed by the DAD (see following section); the cerebellum is typically thought to be a motor area closely related to skill acquisition. Results from a battery of skills tests involving memory, motor, information and phonological processing speed tests were presented, showing deficits for dyslexic children on most of the skills and worse performance on phonological, naming speed, balance tasks and bead threading than reading age controls.

Nicolson, Fawcett and Dean (1995) presented evidence to suggest that dyslexic children showed a pattern of poor performance on time estimation and normal performance on loudness estimation found only in cerebellar patients (Ivry and Keele, 1989). It was found that children with dyslexia showed a range of classic cerebellar signs (Fawcett and Nicolson, 1999; Fawcett, Nicolson and Dean, 1996).

Furthermore, evidence of cerebellar deficit was demonstrated in a Positron Emission Tomography (PET) scan study which found that dyslexic adults did not show the normal pattern of activation in a motor sequence learning task, showing only 10-20% of the expected level of activation compared with controls (Fawcett, 2001).

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enhanced right-brain activity, indeed folk psychology is often suggestive of this, many researchers commenting on dyslexic individuals' increased visual skills (see West, 1991).

### **The Visual Deficit Hypothesis**

As noted earlier in this chapter, dyslexia was originally described as 'word blindness' and, to this end, there has been a rich research interest in this area. Earlier theories of visual dysfunction were first noted by Hinshelwood (1895), who suggested that such dysfunction could result in dyslexia. Some researchers suggest poor hand/eye preference (laterality) as a causal factor. The underlying principle here is that both hemispheres are involved in the reading process; the right is involved due to the initial task involved and the left then takes up the automatic nature of the decoding process. Thus, whilst the decoding of text is clearly possible in dyslexic adults (albeit with differing levels of accuracy), the fluidity of reading is hampered and more fragile. Both Lovegrove (1994) and Stein (1994) have indicated deficits within the transient visual system in relation to dyslexia. The two major visual systems are the transient system, which processes rapidly-moving information, and the sustained system which, as the name implies, is responsible for processing slow-moving information; both systems prohibit each other. Together with the processing of slow-moving information, the sustained system is also sensitive to black and white detail and is concerned with central vision. Lovegrove (1994) proposes that the findings of his research confirm that dyslexics show no impairment of the sustained system, however, they do show impairment of the transient system. This has a detrimental effect on reading, as it is reliant on both the transient and sustained system.

### **Magnocellular Deficit**

More recently, Stein (1999) points to abnormalities of the magnocellular system. However, it is recognised that whilst playing a part in the difficulties experienced by dyslexics, visual processing difficulties are but one facet of underlying cause. Therefore, rather than stipulating either a visual or phonic cause, there is a need to address the probability that some underlying processing basis is responsible.

Many researchers (Lovegrove, 1991; Livingstone et al., 1991; Stein, 1994) have implied that the underlying processing deficits relate to the magnocellular system of the nervous system. The magnocellular system is involved in rapid signal processing. Lovegrove et al. (1991) suggest that the magnocellular system is slightly deficient in dyslexics compared to 'good readers'. It has been suggested that differences in the visual magnocellular pathway (Stein and Walsh, 1997) may give

rise to 'visual persistence'. For example, when reading, letters in a word move and blur, as when the reader looks at the next letter an 'after image' from the previous letter appears (Fawcett, 2002). This offers a justifiable account of the symptoms of blurred vision and movement of text which some dyslexic individuals report. A magnocellular deficit would affect most types of rapid processing and would, therefore, present difficulties for dyslexic individuals who would find it more demanding to process material quickly.

### **Rapid Temporal Processing Deficit**

The auditory 'rapid processing deficit' was introduced by Tallal (1993) and can account for both visual and auditory deficits in dyslexia. It suggests that dyslexic individuals have difficulty processing information at speed. Tallal, Miller and Fitch (1993) reported that language-impaired children found it more difficult to discriminate between two speech sounds presented in rapid succession. Therefore, Tallal and her colleagues (1993) claim that children with dyslexia take longer to process rapidly changing sounds.

The study tested children's discrimination of high and low tones, or the sounds 'ba' and 'da', which are only different in the first few milliseconds. Children with dyslexia could not distinguish between the sounds if they were presented close together, suggesting they are likely to have problems with phonological awareness. (See Fawcett, 2001.)

Miles (1993) offers a causal chain to demonstrate the effects of such weaknesses and the impact that they may have in relation to dyslexic individuals:

*"The most likely causal chain...seems to me to be this: for genetic or other reasons certain individuals have weaknesses in the magnocellular pathways of the visual and auditory systems, with the result that it is difficult for them adequately to synthesise sequences of sounds - including speech sounds - if they are presented at too fast a rate. This in turn leads to a weakness at the 'phonological' level: dyslexics have more difficulty than non-dyslexics in associating things and events in the environment with their spoken equivalents. The consequence is the whole range of weaknesses..."*

(Miles, 1993, pp.236-237.)

## Cognitive Evidence

The cognitive evidence presented demonstrates how differences in neurology may lead to differences in behaviour, thus researchers have considered their effects on cognitive processes. In generating hypothetical constructs to test the validity of cognitive processes, researchers have generated probable explanations for the differences between dyslexic and non-dyslexic individuals. Certainly, this has led to the variety of deficit models which follow.

### The Phonological Processing Deficit Hypotheses

The phonological hypothesis has undoubtedly dominated research into the cause of dyslexia. The following account offers only a brief introduction, however, for the purposes of this thesis an overview should suffice. The underlying rationale behind this hypothesis is a difficulty with phonological processing; having an awareness of the relationship between letters and sounds (e.g. Vellutino, 1979; Stanovich, 1988; Siegel, 1993; Rack, Snowling & Olson, 1992). It is essential that readers have the capacity to reproduce explicitly the sound structure of spoken words if they are to become proficient at decoding alphabetic systems (Snowling, 1987). A sound awareness, and application, of this process enables individuals to perform specific tasks which are highly correlated with reading development. Indeed, Wagner and Torgesen (1987) consider that the segmentation of words into 'onset' and 'rime', enabling storage of sounds in short-term memory, and in turn the blending of those sounds in order to produce words, is fundamental to reading development. For example, first knowing that 'hat' is made up of the onset and rime h-at, and then recognising the individual sounds (phonemes) are h-a-t.

Difficulties mastering the above tasks produce problems in rhyme, alliteration (use of the same consonant at the beginning of each stressed syllable in a line of verse, e.g. *she sells seashells ...etc.*) and grapheme-phoneme correspondences (Bradley and Bryant, 1985). Both dyslexic children and adults regularly display such difficulties. Whilst dyslexic adults (and for that matter dyslexic children) are able to acquire spoken language, albeit in some cases having pronounced difficulties with the production of multi-syllabic and unfamiliar words, in order to acquire adequate reading skills, the ability to reflect on sound structure within words is crucial. Studies such as Bradley and Bryant (1983) tested this causal connection and demonstrated that those children experiencing early reading difficulties, who were given instruction in phonic training, began to make 'normal' progress in their reading

skills. In addition, Fawcett and Nicolson (1995a) suggest that weakness in phonological processing persists in dyslexic children, following a cohort of dyslexic children aged up to 17 years of age who performed poorly in relation to their chronological age, and reading age controls on tests of sound categorisation and phoneme deletion. Indeed Snowling (2000) proposes that phonological difficulties may be due to weak connections in the anterior and posterior language areas in the (left hemisphere) of the brain, suggesting training in both phonological awareness and structured reading to be the optimum learning intervention for dyslexic children. Whilst reading intervention can enhance reading skills in dyslexic individuals, it is acknowledged that subtle problems with phonological awareness may persist in adulthood (Fawcett and Nicolson 1995a; Snowling, 2000).

### **The Dyslexia Automatisation Deficit Hypothesis**

The automatization deficit hypothesis (Nicolson and Fawcett, 1990) suggests that dyslexic children have problems in fluency for any skill that should become automatic with extensive practice. Therefore offering an explanation of dyslexic symptoms in phonological, reading and other skills.

The Dyslexia Automatisation Deficit Hypothesis (DAD) (Nicolson and Fawcett, 1990) suggests that dyslexic children demonstrate a more generalised weakness in the automatization of skills. The most crucial concept to grasp here is that of 'automaticity', i.e. highly efficient behaviour – the final stages of skill acquisition (Anderson, 1983). Therefore the DAD suggests that dyslexic children display deficits in their ability to become highly efficient in the final stages of skills mastery, i.e. skill is never fully autonomous. Nicolson and Fawcett (1992) discovered that dyslexic children performed equally well on a balance task (e.g. walking along a beam) as non-dyslexic children, however when required to perform an additional task of counting backwards, the dyslexic children's performance deteriorated more so than the non-dyslexic children. In addition to the DAD is the Conscious Compensation Hypothesis (CC). The CC is presumed to explain dyslexic children's 'normal' performance on many tasks, excluding reading. The CC hypothesis proffers that if spare resources are available, dyslexic children will utilise such reserves, allowing them to complete the tasks using 'controlled' rather than 'automatic' processing. The research suggests, therefore, that, although dyslexic children can compensate by putting in greater effort when required to perform dual tasks, the ability to consciously compensate is weakened and performance suffers as a result. Thus, those dyslexics who manage their learning do so as a result of consciously compensating (Nicolson



and Fawcett, 1992). Hence, the traditional deficits manifested in phonological and working memory (Baddely et al., 1998), can be accounted for using the DAD in that the link between the two domains may account for the difficulties displayed by dyslexic individuals. The hypothesis explained dyslexic symptoms in phonological, reading and other skills, but did not attempt to distinguish which brain structure was involved; this led to the proposal of the cerebella deficit hypothesis mentioned earlier in this section.

### **The Square Root Rule**

Fawcett (2001) (rightly so, in my opinion), notes a surprising lack of research in the area of learning with regard to dyslexic individuals. One consequence of dyslexia, which was encountered in the studies within this thesis and which I also encounter on a daily basis in my role at the Access centre, is students' frustration acquiring information. For example, textual (acquiring and absorbing information from written material), procedural (learning new software applications) or in lectures and tutorials when emphasis is placed on learning verbally- and visually-presented information. As Fawcett (2001) states:

*"This is a surprisingly neglected area, considering that dyslexia was originally known as 'specific learning disability', and that this seems to be the crux of the difficulty."*

(Fawcett, 2001, p.10.)

As mentioned throughout this literature review, many dyslexic individuals do learn to read and develop their phonological skills, however, those skills tend to be more fragile. Therefore, the Square Root Rule (Nicolson et al., 2001) demonstrates:

*"...that a simple skill that normally takes 4 sessions to master, would take a dyslexic child 8 sessions, whereas if it normally took 400 sessions, it would take the dyslexic child 8000 sessions!"*

(Fawcett, 2001, p.10.)

The Square Root Rule (Nicolson et al., 2001) thus demonstrates the extended amount of time employed by dyslexic individuals to complete a given task.

## Memory

Much research has focused on the premise that dyslexic individuals experience problems with short-term memory (Miles, 1982, 1983; Velluntino, 1979; Chasty, 1985; McLoughlin, et al., 1994). Indeed, McLoughlin et al. assert that:

*"...an adult dyslexic generally yields a pattern of test scores entirely consistent with what would be expected from someone who had a short-term memory deficit."*

(McLoughlin et al., 1994, p. 5.)

Furthermore, this is a pattern that is consistent across both dyslexic children and adults (McLoughlin et al., 1994). More recently, research suggests that dyslexic students experience increased susceptibility to distraction. Smith-Spark et al. (in press), carried out empirical investigations into the anecdotal reports of poor memory/organisation (Augur, 1985; Gilroy and Miles, 1996). Indeed, within this thesis, and in my work with dyslexic students, this is an issue that I have encountered many times. Smith-Spark et al., employed the Cognitive Failures Questionnaire (CFQ) to a group of dyslexic students and non-dyslexic students and found that:

*"...the dyslexic group reported a higher frequency of everyday lapses in cognition, scoring significantly higher on a number of CFQ items. Representative problems include distractibility, over-focusing (so that relevant peripheral information is missed), and word-finding difficulties."*

(Smith-Spark et al., 2004, p4.)

Weakness in short-term memory has been specifically related to an inefficiency in phonological coding (Baddeley, 1999). Baddeley's working memory model (1986) comprises a master system known as the central executive and two slave systems: the sketchpad and articulatory loop. The central executive focuses on what we attend to and 'filters' out which information is to be selected for further processing, i.e. deciding into which of the two subsystems information should be directed. The sketchpad is involved in the construction and handling of visual spatial images. It is acknowledged that this system could possibly only operate in short-term memory, gaining no access to long-term memory (Baddeley, 1986).

Two ways in which the visual 'spatial' sketchpad might be used are suggested. Firstly, the system would be fed directly through visual perception and secondly, the system would be fed indirectly through the generation of visual imagery. A further system, the articulatory loop, is concerned with speech-related production. It deals with those tasks where sequencing of steps or item lists is required for immediate recall (Baddeley, 1986). In addition, the articulatory loop comprises two interrelated sub-systems: the phonological store, which is related to speech perception and the articulatory control process, which monitors speech production (McLoughlin et al., 1994). As a result of difficulty in either store, one would expect difficulties of a phonic nature and hence the phonological deficit hypothesis maintains that such difficulties are apparent in dyslexic individuals. The articulatory loop is thought to be of reduced capacity in dyslexic individuals (Gathercole and Baddeley, 1993). Certainly, all four students involved in the following case studies commented on the difficulties they experienced retaining information; often having to read and re-read texts several times in order to both absorb and retain information.

### **Secondary-Emotional Effects**

Miles makes the distinction between primary and secondary effects in relation to dyslexia (Miles,1993): primary effects being those related to the difficulties experienced in the acquisition of literacy skills, secondary, those difficulties faced by the individual as a result of primary effects.

Understandably, there has been much research centred on the secondary effects associated with dyslexia, namely low self-esteem and low self-confidence.

Invariably, individuals with fragile literacy skills have to confront both personal and public failure (Gaines, 1989). Indeed, Pumphrey and Reason (1991), view reading as a passport to success in 'civilised society'. Edwards' case study account of eight teenage boys demonstrates this clearly, with the interplay between pupils and teachers causing concern with regard to the experiences encountered by the boys, namely: violence, unfair treatment, inadequate help and humiliation (Edwards, 1990, 1994). Although Edwards presents a subjective account of extreme difficulties, having to deal with both personal and public failure inevitably contributes to lowered self-esteem. Certainly throughout the following case studies this has had a great impact across all participants. Maughan (1994) reviewed the long-term emotional welfare of poor readers and found little evidence, as adults, of any serious mental health issues, however evidence of increased anxiety and

depressed mood was apparent. Likewise, McLoughlin et al., (1994) comment that although many dyslexic adults are highly successful they face greater levels of psychological, emotional and social difficulties, and conclude that success is harder to achieve. McLoughlin et al., present four levels of awareness with regard to successful dyslexic adults, which are largely based on the model put forward by Gerber, Ginsberg and Rieff (1992). I shall return to the four levels of awareness put forward by McLoughlin et al, after outlining the findings of Gerber et al.'s (1992) study. In short, the study aimed to identify patterns of successful functioning in high-achieving dyslexic adults.

Their main goals were to:

- “1. find alterable patterns and ingredients of success
2. delineate the category of successful functioning
3. construct a model for success in adults with learning disabilities”

(Gerber et al., 1992, p.476.)

The study evaluated the success of both high-achieving and moderately-achieving dyslexic adults. Differentiation between the two groups was distinguished by the following criteria: income, job classification, level of education, prominence in one's field and job satisfaction. Primarily, retrospective interview techniques were used and the generation of themes discussed, finally a model outlining those qualities required for successful functioning of high- and moderate-achieving dyslexic individuals was presented.

Throughout Gerber et al.'s study, emphasis is placed on two components and the effect that these have in relation to the individual; namely, internal decisions and external manifestations. Internal decisions relate to a wish to succeed and the motivation to continue with skills, which cause frustration:

*“The internal decisions included a desire to succeed, being goal oriented, and an internal reframing of the learning disabilities ordeal into a more positive or productive experience.”*

(Gerber et al., 1992, p.479.)

Certainly, throughout the following case studies this is something that had a great impact on those dyslexic students who took part. Those who challenged the notion of a fixed level of performance and 're-evaluated' their learning style in a more

positive light, demonstrated a greater awareness of the skills needed to successfully complete their studies. However, the motivation and desire to achieve one's goals alone is not enough. Success is also dependent on the forms of compensatory strategies employed by individuals and their ability to adapt their particular learning style in order to manage their course effectively.

This leads to the second component, external manifestations. Hence, external manifestations, relate to the individuals' ability to adapt, thus:

*" The external manifestations were all ways of being what we call "adaptable". Adaptability included individual persistence, a set of coping mechanisms (i.e. learned creativity), a goodness of fit between one's abilities and the environment and a pattern or social ecology of personal support and planned experiences designed for success."*

(Gerber, et al., 1992, p.479.)

Within the two components were additional qualities and levels of awareness that ran across the two themes. The need to be in control was a central feature for participants, and is clearly demonstrated in the following quote:

*"I like to be in control. If things don't work out, okay, but if I lose control, I get unbelievably anxious."*

(Gerber et al., 1992, p.479.)

Gerber et al., make a distinction between those participants in the high-achieving and moderate-achieving groups based on the degree of control attained. The moderate group tended to cover up their difficulties, whilst those in the high-achieving group took control of their difficulties and found alternative strategies in order to succeed. A need to succeed therefore is identified by the authors as desire. A desire for dyslexic individuals to prove themselves was highly apparent. Likewise, this is an element that runs throughout the case studies presented in this thesis, and is something which participants openly identified with. The need to set goals is also something which is integral to the management of dyslexia in high achieving adults:

*" These people need success, they are anxious about the possibility of failure, so they set explicit goals to work towards."*

(Gerber et al., 1992, p.480.)

Again, a distinction is made between those individuals in the moderate- and high-achieving groups; the moderate group setting short-term goals and being easily diverted from them and the high-achieving group setting long-term goals. In addition, it is recognised that goal setting feeds itself, i.e. the positive effects of achieving one's goals inspires additional goals to be set, thus it is a cyclical process (Gerber et al., 1992).

In addition to the aforementioned qualities, the concept of 'reframing' is also introduced:

*"...reframing refers to the set of discussions relating to reinterpreting the learning disability experience in a more positive or productive manner."*

(Gerber et al., 1992, p.481.)

However, as is noted by Gerber et al., the ability to 'reframe' and to view weaknesses in a more positive light, is dependent on the recognition and acceptance of those weaknesses by the individual and their ability to adapt to their environment. Thus, internal decisions are then made possible through external manifestations; for example, being goal oriented and, in turn, finding strategies to attain those goals.

As mentioned earlier in this chapter, McLoughlin et al., (1994) based their four levels of compensation and awareness on the work of Gerber et al., 1992. The four levels are as follows:

1. "People at level 1 are not aware of their weaknesses and have developed no strategies to overcome them.
2. Those at level 2 are aware of their weaknesses but have not developed strategies to overcome them.
3. People at level 3 are aware of their weaknesses and have developed compensatory strategies, but have developed them unconsciously.
4. Finally, people at level 4 are aware of their weaknesses and they have consciously developed strategies to overcome them."

(McLoughlin et al., 1994, p.50.)

## **Encompassing the Four Levels in the Provision of Dyslexia Support in Higher Education**

With regard to students in higher education, the optimum level to reach would be level four. Hence, enabling students to manage their learning differences successfully in order to get the most out of their particular course and likewise attain the level required of degree study. Therefore, it is imperative that policy and practice within the higher educational setting encourages and facilitates this level of compensation in dyslexic students.

There are, of course, many reasons why this seemingly straight-forward type of support is difficult to deliver, not least because dyslexic students come forward for support at various stages of identification. Therefore, the need for a flexible and inclusive support system is paramount. Such a system would need to address many different issues because, as has been mentioned earlier, dyslexic students are by no means an homogenous group. The following scenarios encompass just some of those issues which institutions of higher education face with regard to the provision of support for dyslexic students:

**Scenario 1** Those students who have been identified as dyslexic in their earlier years and have built up sound strategies that have enabled them to reach their potential, albeit perhaps engaging in extended periods of study.

**Scenario 2** Those students who, although identified, have not been offered or have not gained an insight into their particular style of learning and have accepted poor performance as somehow 'fixed', i.e. there is no scope for improvement or enhancement of skills.

**Scenario 3** Those students who have only recently been identified as dyslexic whilst on their present course.

Clearly, there are many more scenarios that could be addressed, but for the purposes of this study these three effectively demonstrate the difficulties present when providing individual support, and reflect the experience of the four participants in Study One. Hence, there is a real need for support services which offer an arena in which dyslexic students can re-evaluate their learning in a positive light and re-frame their study skills so as to allow them to maximise their specific strengths and challenge any remaining weaknesses. This brings me to an evaluation of policy and

practice within higher education at present. Firstly, I will outline the present situation in higher education in the UK, with regard to support for dyslexic students.

### **Attaining Support: The Picture in the United Kingdom (UK)**

As mentioned earlier, support provision in the UK is dependent on the production of a recognised 'assessment'. Generally, this would be an assessment carried out by a suitably qualified professional, usually a chartered/educational psychologist (most desirably, one with expertise in the assessment of adults). Once evidence has been attained and the student's Local Education Authority (LEA) or Funding Body have confirmed eligibility, students qualify for Disabled Students' Allowances (DSA). DSA is split into four components:

1. **Specialist equipment allowance** - an allowance to purchase/hire equipment that is required as a direct result of disability (this also includes repair costs, technical support, insurance and extended warranty).
2. **Non-medical helper's allowance** - an allowance to pay for helpers, e.g. note-takers, required as a direct result of disability.
3. **General disabled students' allowance** - an allowance paid towards other disability-related spending, e.g. tapes, photocopying, book allowance.
4. **Reasonable spending on extra travel costs** - an allowance paid towards additional travel costs incurred as a result of disability.

(Department for Education and Skills, 2003/2004.)

Students are then advised to attain an Assessment of Need, which is generally carried out at an Access Centre (National Federation of Access Centres). The assessment of need report should identify the types of equipment and support required, together with cost and suppliers. The report is then forwarded to the students' LEA, who determine whether the recommendations put forward are to be approved. Therefore, dyslexic students are required, firstly, to provide evidence of disability/specific learning difficulty (in order to apply for DSA<sup>8</sup>), secondly, to receive an Assessment of Need (in order to determine the level of support required), and thirdly, to await confirmation of the recommendations listed in the assessment of need report, prior to support being made available.

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<sup>8</sup> Students in receipt of an NHS bursary are requested to contact their college for details of the support available to disabled students under the NHS Bursary Scheme.



As one might imagine, there has been considerable debate with regard to the time-frame between coming forward for support and support being put in place; with variation across institutions and Local Education Authorities. Similarly, there is due concern for those students who do not qualify, for whatever reason, for DSA. Understandably, there are significant issues surrounding the allocation and time-scale of support and I discuss these briefly below. I am fortunate to be in the position of working within this system, and part of my work entails carrying out assessments of need at a regional access centre. In order to determine the level of need required by students to enable them to fully engage in their course, it is important that claims for DSA be as straightforward and accessible as possible. Likewise, it is important that students have an awareness of what is expected of them on their course and some knowledge of what their particular course involves, in order that support can be tailored to their needs.

One of the central issues with regard to the processing of DSA applications, as mentioned earlier, is time-scale. This, however, is not a straightforward matter; although it is important that students feel supported from the onset of their course, attaining an assessment of need prior to commencement of their course can present difficulties. For example, if the student has not yet begun their course, it is difficult to determine what support will be required. Hence, the complexities involved in providing suitable support to dyslexic students which will encourage independent learning and successful study skills.

Often, as a result of recommendations within the needs assessment report, the following may be allocated: additional time in examinations, use of a scribe and reader of questions, etc. Such recommendations are held to be 'good practice'. Generally, for those students who have been identified 'dyslexic', support services profess to 'level the playing field'.

The National Working Party Report (1999), states that 99% of HE institutions that took part in the survey reported that they allowed additional time in examinations, 40% of which had a blanket allocation of time for all dyslexic students, regardless of individual ability. Of the 99% that allocated extra time, approximately 50% were awarded 10 minutes and 50% 15 minutes (Singleton, 1999).

However, caution is needed when applying blanket provision to a heterogeneous group, as is noted by Singleton:

*"Although provision of a standard amount of extra time for all students with dyslexia might appear to be the fairest solution all round, its appropriateness must be questioned in light of known variations in both nature and severity of the condition."*

(Singleton, 1999, p.143.)

Once again, we are reminded of the complexities involved in providing appropriate support to this particular 'group' of students. Blanket provision, therefore, cannot, in any way, be seen as desirable and, more importantly, fails to offer individual support that encourages independence. It seems sensible that the system should provide the necessary support required to those eligible, whilst it should also discourage those who do not require that particular type of support, thus reducing the depletion of scarce resources. As with any system there are bound to be those who 'play' the system, however, this in itself, should not discourage the provision of support per se. The difficulties arise when the system does not support those who require support. If support is offered on an pro-forma type basis, i.e. there is a certain amount of equipment, software and support which is claimed for each dyslexic student, geared toward a strict model of the 'typical' dyslexic student, such recommendations might in some cases be unfounded.

### **Dilemmas in Practice: The Political Climate in Higher Education**

Given the above plethora of definitions and 'identification' debates, one can, of course, appreciate the concern within HE surrounding identification, accommodations and practice. Siegel (1999) has been very influential in flagging up these tenuous issues, and provides a strong argument for a more cohesive stance within the dyslexia (LD) field. Both in the UK and abroad, the need for clear guidelines in the provision for dyslexic students in HE is heavily debated. One of the central arguments, regarding more thorough identification, is the concern that, in widening the assessment arena, we are actually in danger of trivialising the very real difficulties faced by dyslexic individuals and, in turn, may debase the idea of dyslexia entirely (Siegel, 1999; Gordon et al., 1999).

Indeed, as is noted by Siegel:

*"Questions such as, "Do learning disabilities exist?" and, "Aren't students with so-called learning disabilities just looking for undeserved privileges?" will continue to plague us unless we can resolve these definitional issues. It is inappropriate to ignore these fundamental questions without attempting to achieve a resolution."*

(Siegel, 1999, p.305.)

As mentioned earlier, in terms of identification, the presentation of a dyslexia assessment (often termed psychological report) is required in order to receive support and, both in the UK and USA, this includes special accommodations in examinations. Gordon et al., (1999) raise the following point in relation to identification and subsequent levels of support:

*"...extending services to individuals without significant academic impairment may tax or even deplete scarce resources for others in greater needs, distort the normal process by which individuals select careers, and diminish the credibility of the diagnosis itself."*

(Gordon et al., 1999, p. 485.)

Indeed, this is a concern for many practitioners and researchers in the field:

*"We need to be cautious about applying the label 'learning disabled'. Finding a subject difficult is not, in itself, evidence of disability."*

(Westling, 1995, pp.5-6.)

Moreover, Gordon et al., pose the following question:

*"...but why is someone who is average in spelling but outstanding in reading comprehension and maths considered disabled in spelling – why is he or she not just considered to be unusually good at math and reading comprehension? Are all relative inabilities properly characterised as disabilities?"*

(Gordon et al., 1999, p. 488.)

*"The fact that someone may have difficulty with certain tasks, such as test taking, does not constitute the proper definition of a disability".*

(Gordon et al., 1999, p. 486.)

Indeed, Ysseldyke et al., (1983) assert:

*"Up to 25% of normal achievers would be classified as LD according to one or another discrepancy formula."*

(Ysseldyke et al., 1983, pp.487-8.)

These are important issues for the delivery of support and special accommodations for those students in possession of a dyslexia report. Not least because, in the UK, specialist accommodations, equipment and support are delivered on the basis of successful attainment of Disabled Students Allowances (DSA) which are available to those students who have attained a suitably recognised dyslexia assessment.

However, in light of the increase in numbers of students coming forward for support (be this because of greater access/awareness of support available or a higher incidence of dyslexic students entering higher education) the important point is that students are not over-supported and that resources are not depleted unnecessarily. Of equal importance is the need for allocation of resources on an individual basis of need. At this stage I will play devil's advocate. Take, for example, a dyslexic student on a practice-based course that requires limited production of written work; would a personal computer be required? This should be a simple, straightforward question, however it is often 'loaded' within the assessment of need setting. Likewise, should a new computer be recommended for a student who is already in possession of a PC, albeit perhaps an earlier model? Likewise, the recommendation of support sessions to allow students to identify with their particular learning style and find ways of compensating or finding strategies which enable them to become more independent; is this level of support required by highly-compensated dyslexic individuals? Furthermore, is offering accommodations for the production of written work desirable if the student is to possess the same level of qualification and skills as his/her peers? I realise these are contentious issues for the field, however I feel they are important if support is to be both effective and useful in the management of dyslexia in higher education and will, likewise, encourage independent learning and confidence in qualifications attained.

A fine line exists, therefore, between offering support which enables individuals to reach their 'potential' and one which wrongly supports those students who do not face difficulties with regard to the production of their course work and examinations in relation to other students. The nature of relativity seems wholly ingrained within this dilemma, as there may indeed be those students who, although not failing, perceive their performance to fall below their own evaluation of their potential. The danger however, is perhaps more worrying with those students who struggle in silence and go unnoticed, never reaching their potential. This is by no means a

straightforward matter and contributes to the present predicament within the field, in terms of allocating appropriate support and accommodations.

It is clear that, as mentioned throughout this literature review, many issues are prevalent in the provision of support for dyslexic students at the present time. The complexities involved in providing suitable support are exhaustive.

Initially I reviewed the historical perspective of dyslexia and then, in turn, briefly discussed the current theories relating to aetiology. Following this was an appraisal of the support services available in higher education.

This thesis is concerned with dyslexic students' experience of higher education and their appraisal of the support they received. To this end, chapter 5 (case studies) attempts to 'get close' to participants' stories and I chose to incorporate qualitative methodology in order to do this. The aforementioned complexities involved within the field should be borne in mind when reading the following chapter.

## **Chapter 2:**

### **Study 1: Autobiographical case study**

#### **Why Study the Experience of Dyslexic Students in Higher Education?**

In this chapter I will discuss the reasoning behind the generation of the research question within the thesis, namely the experience of dyslexic students in Higher Education (HE). I shall approach this by presenting an autobiographical account of my experience within HE as a dyslexic student. Demonstrating how this experience shaped my understanding of support for dyslexic students and in turn led to my interest in this area, both on a personal level and in my role of student support advisor.

I have very personal reasons for becoming interested in this area and it seems appropriate, at this stage, to at least outline a historical perspective, which I hope reflects the rationale behind this study, and equally, how I position myself within the field of dyslexia.

I received my first dyslexia assessment at the age of 29, whilst in my first year of university as a mature student. I was therefore being very publicly defined, while, however, having a very private experience. Although, at first, I found the label to be almost liberating, in that it justified my poor school experience, I equally found it to be constraining, as it carried with it a fixed level of my performance as perceived by others (tutors, fellow students and providers of support).

I undertook my degree between the years of 1993 and 1996, at which time, support nationally for dyslexic students in receipt of an LEA grant was in place; hence I received Disabled Students Allowance<sup>9</sup>.

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<sup>9</sup> All dyslexic students in the UK are categorised as 'disabled' under the administrative procedures associated with applying for entry onto a university programme. Disabled students are entitled to apply for extra financial support, i.e. Disabled Student Allowance (DSA), to help with additional costs which the students may incur in order to attend their course, as a direct result of disability.

As I was studying psychology I had access to a wealth of information on dyslexia. It was therefore unsurprising that my initial enquiries surrounded aetiology. I wanted to know *why*; why had I experienced such difficulty acquiring both spoken and written language skills? Researching the dyslexia field allowed me to re-evaluate my own learning. I went to great lengths to learn about learning (metacognition), and to learn about language (meta-linguistics). I became engrossed in the mechanisms underlying phonological and short-term memory, and their relationship with the acquisition of language skills. In short, I became preoccupied with dyslexia, so much so that it became the focus of my undergraduate degree dissertation. I spent much time reading up on the acquisition of reading skills, and became immersed in the debate regarding the *look and say* and *phonics* approaches.

The main focus of my research into reading was to consider the most appropriate teaching method for those who experienced difficulties decoding textual information. Consequently, when I embarked on my teacher-training course, after completion of my degree, I felt confident in my abilities to teach language skills. I also felt that my own experience surrounding language acquisition allowed me to offer a sensitive and inclusive approach to language, which would encourage the children within my class to be comfortable in their learning, albeit with differing levels of confidence and accuracy. I was not complacent with regard to my delivery of literacy skills, but simply felt confident in my abilities to teach the skills required of a reception teacher. However, this was a concern for other student teachers I was studying alongside.

When in the second semester of my PGCE, whilst on placement in a reception class, my new-found skills and confidence were to be crushed. The teacher to whom I had been assigned instructed me to deliver baseline assessments to the children in her class (reception children aged 4-5 years of age). Two children in particular were struggling with the production of letter-sound correspondence and also showed signs of cross laterality. However, in children of this age it is important not to draw conclusions from such signs, but perhaps to be aware that a more explicit approach to language skills might be appropriate. I noticed also that these children found fine motor skills to be very taxing. I mentioned to the class teacher that I thought these children showed signs of dyslexic tendencies and perhaps it would be appropriate to work with them in a multi-sensory way. I spoke about my knowledge of dyslexia and the work I had carried out throughout my

undergraduate degree, together with my own background. The response was, to say the least, alarming. The teacher suggested that I would not be best placed in this profession, and that I should re-evaluate my career aims. Perhaps the most damaging remark was that I was not a good role model for these children. I cannot begin to explain the effect that this had on me. Unfortunately, the response that I received from tutors on the course did nothing to question the remarks made by this particular teacher and, despite the support of the dyslexia support officer within the university, I was not to reach my teaching goal and reluctantly left the course.

I became interested in the experience of other dyslexic students in higher education and their experience of support. Most specifically, did the support offered enhance self-esteem and encourage students to be confident in their learning?

I decided that in order to make use of my degree, I would have to prove my worth. I did this by completing an adult literacy certificate (City and Guilds 9282), enabling me to teach literacy/communication skills at a college of further education. For the initial period my skills were highly appreciated and positive comments were made regarding my performance with students. I noticed in one student a distinct pattern of skills – not unlike my own - and shared my experience with the student, who found this disclosure a very positive one. The tutors, however, from that point on, questioned my professionalism and literary prowess meticulously.

Alongside my City and Guilds course I embarked on a counselling certificate, which gave me the space and time to reflect on my learning experience and I became interested in the secondary effects associated with dyslexia: namely low self-esteem and poor self-confidence. This rekindled the interest I had in terms of the experience of dyslexic students in higher education. It also led me to question the worth of my degree, and to ask myself, was I not to have compensated what good would attaining this level of education be, if indeed my skill base were supposed to be commensurate with degree-level performance? Did the support I had been offered enhance my self-esteem and encourage me to become confident in my learning?

On an experiential level, I found that little of the information appeared relevant to my experience of dyslexia as both an undergraduate and postgraduate student. Whilst I felt able to relate to the information that I read with regard to my childhood years, and indeed the years leading up to my assessment, since my identification



and the compensation techniques that I had developed, I found it difficult to relate to the literature. In my experience as a dyslexic student, the expectation that met me from peers and tutors alike was one of fixed ability and, even more worrying, that this was only to be expected! In contrast, it was generally expected that non-dyslexic students progressed throughout their course acquiring those skills that deemed them worthy of a degree. This then generated my PhD research question and my interest in the lived experience of dyslexic students in higher education, together with their appraisal of support. And, most importantly, whether dyslexic students feel confident in their learning and subsequent qualifications.

In order to answer these important questions, I chose to carry out qualitative enquiry in the initial stages of my research in order to gain an insight into the experience of other dyslexic students studying in Higher Education. To gather information which could then be fed into a larger study gathering responses from dyslexic students across a wider population. The following chapter therefore serves to provide the rationale behind the employment of mixed methods applied throughout the thesis.

## **Chapter 3: Methodology**

### **The Rationale Behind the Employment of Mixed Methods**

#### **Selecting Appropriate Tools**

This chapter presents the rationale behind the employment of a mixed method approach throughout this thesis. Initially, I shall illustrate the benefits of employing the qualitative approach chosen in Study Two (see following chapter for a discussion of the philosophical underpinnings of the particular qualitative methodological stance employed). I shall then consider the use of quantitative methods and will introduce the questionnaire employed in Study Three. To conclude, I shall demonstrate why a mixed method approach was both beneficial and indispensable in approaching the research question put forward in this thesis.

#### **Qualitative Research: Choosing a Methodology**

As mentioned in Chapter One, the main aim of this thesis is to explore the experiences of dyslexic students in higher education. Hence, a methodology was needed which would enable participants' subjective understandings and experiences to be explored in detail and which could then be reflected in a thematic and analytical account.

In using a qualitative approach, I offer an understanding of the subjective experiences of those dyslexic students who have participated in the study. This type of approach is essential when embarking on research that endeavours to provide ways forward in terms of shaping both policy and practice. It is necessary to engage service users (in this case dyslexic students) in this form of participatory research in order to fully appreciate the issues which they, themselves, feel are both relevant and important in enabling them to fully engage in courses of higher education and, likewise, in attaining appropriate levels of support. I have chosen to use case studies as my method of data collection; the sessions themselves were centred on the students' experience in higher education and hence I adopted a format that reflected upon the students' individual accounts.

The data collection was carried out within guidance support sessions (see Chapter 4 for a summary of the guidance support sessions). Following discussion with the university counselling service, I was able to offer guidance support sessions to

dyslexic students and had the support of a counsellor, with much experience in this area, who agreed to be my mentor. The guidance support sessions were set up to give dyslexic students a forum in which to 're-frame' their learning style and to make the most of their skills; the emphasis was on coming to terms with, and managing, dyslexia. The dyslexia support officer flagged up the sessions to dyslexic students, and thus the participants in this study are self-selected dyslexic students who felt that this type of support would be beneficial, or who perhaps recognised a need for such support. Certainly this type of nonprobability sampling generates a sample population which has very limited generalisability. However for the purposes of this particular study, particularly in light of the fact that the data derived from the study was to be analysed through exhaustive qualitative methodology, the study was carried out in order to gain an insight into the experiences of those participants who were involved.

The sessions themselves were very open. My approach was broad and deliberately avoided terminology such as failure, weakness, struggling; thereby encouraging participants to offer their own account. In this way I was able to explore a number of pre-determined areas with participants and also to consider areas which emerged with each participant. In essence, the sessions, although loosely based on a framework of pre-determined areas, were open in the sense that they were led by the participants themselves. Had I employed a more structured interview technique then clearly the responses generated would differ from those obtained. The rationale behind my choice of approach was so as to enable participants to lead the discussion, rather than be led by the researcher.

Choosing an appropriate qualitative method of analysis involved the consideration of several methods prior to selecting an appropriate methodological tool. As the research question is involved with understanding the experience of dyslexic students in higher education and, in turn, their evaluation of support, it seemed fundamental that any methodology employed would need to address the complex interaction between dyslexic students and support provision/systems in place in their particular institution.

Initially, I had envisaged that I would carry out grounded theory on my data, however, versed in the more positivistic research methods which I had been introduced to in my undergraduate studies, I knew little of what this particular methodology entailed and found the literature very woolly. At that time I was introduced to Interpretative Phenomenological Analysis (IPA)(Smith, 1996) through discussions with Jonathan

Smith, a lecturer within my department who I had approached for guidance on qualitative methodology. I was fortunate to attend a conference centred on the use of IPA, where I met other postgraduate students who were searching for an appropriate qualitative methodological tool like myself. The conference confirmed that IPA could sit comfortably with my interest in the personal experience of dyslexic students in higher education and offered a framework for the analysis of my data. Interpretative phenomenological analysis (Smith, 1996) is a fairly recent methodological research tool, which is centred on the individual's experience (see following section for a discussion of IPA). As the name implies, IPA draws upon symbolic interactionism and phenomenology and acknowledges that meanings occur through social interactions. Thus:

*"...symbolic interactionism argues that the meanings individuals ascribe to events should be of central concern to the social scientist but also that those meanings are only obtained through a process of interpretation."*

(Smith, 1996, p.263.)

In using this methodology I am able to illuminate the issues which participants raised and to offer a thematic and narrative account. It is important to acknowledge that the themes on offer are not the only way to interpret the data, as there are various levels of interpretation that could be drawn, rather than an 'exclusive' interpretation of the text. By considering the themes, I am able to offer an understanding of the issues concerned; not merely, a professional/practitioner analysis but, rather, a sharing of the experiences and feelings which were raised throughout the study.

The first study, therefore, was employed in order to get close to participants' experience and to use this valuable source of information as a basis for further research in the form of a questionnaire.

### **Qualitative methodologies**

There is a multitude of qualitative methodologies that one can consider when researching participants' experience. This has had wide-ranging implications throughout the qualitative arena. Largely, this seems to be centred around confusion with the diversity of methodological tools available to researchers who are new to the qualitative field and who welcome a formula for gathering and analysing data. I, myself, initially embarked on Grounded Theory (Glaser and Strauss, 1967) for that very reason (see following section for an outline of Grounded Theory).

However, this is usually at the expense of a thorough grounding in the philosophical traditions that underlie the particular methodology used. An analogy might be the naive statistician who, although able to produce impressive multivariate analysis, is unable to interpret the 'meaning' of results. Whilst a *recipe*-style introduction may provide the starting point for a researcher new to qualitative methodology, the underlying philosophical assumptions are crucial to a wider understanding, and the production of a sound qualitative research methodology; thus, the ability to move confidently between philosophical principles and qualitative practice is invaluable.

Selecting the appropriate method of analysis involved researching several methods, evaluating their 'fit' in terms of the research question and choosing a preferred methodological tool. Initially, I had envisaged that I would engage in grounded theory methods, primarily as this methodology had been briefly covered within my undergraduate degree and I felt fairly familiar with it. Subsequently, through discussions with Jonathan Smith (a lecturer working in my department at that time), I was introduced to Interpretative Phenomenological Analysis (Smith 1996). A brief outline of grounded theory and Interpretative Phenomenological Analysis (IPA) follows.

## **Grounded Theory**

Grounded theory was first introduced by Glaser and Strauss (1967). In brief, the term 'grounded theory' proffers that theory is produced from data rather than being imposed upon it. The researcher thereby develops theoretical propositions/explanations from the data in a process which moves from the particular to the general (Mason, 1996). Glaser and Strauss (1967), present a sequence of stages of analysis in which the data is explored; a process termed 'constant comparative method' (Glaser and Strauss, 1967). Thus, the aim here is to *develop* a coherent theoretical account from the data. The initial process involves the development of a set of categories through thorough exploration of the data, followed by the generation of an indexing system within which to view the broad (low-level) concepts being distinguished. Subsequently, categories are developed in order to illustrate and identify deeper (high-level) categories to present a cohesive theoretical description (Henwood and Pidgeon, 1992).

## **Interpretative Phenomenological Analysis (IPA)**

Interpretative phenomenological analysis (Smith, 1996) is a fairly recent methodological research tool. The main tenant of IPA is centred on the individual's experience. As the name implies, IPA draws upon symbolic interactionism and phenomenology and acknowledges that meanings occur through social interactions.

As is noted by Smith (1996), those appreciative of such theoretical assumptions use a variety of tools to describe their methodological stance; the two main tools being phenomenology and grounded theory. Rather than proffering a particular school of thought, IPA offers a methodological *approach* to qualitative researchers. IPA, therefore, offers a flexible approach to researchers; a framework that can be adapted. Consequently, there are a number of different ways in which IPA can be carried out. Participants' accounts can be explored, looking for emergent themes, associations across/between themes, subsequently identifying/presenting collective themes and drawing the data together. Alternatively, participant's accounts can be explored individually and then mutually shared themes can be examined in further detail across participants; this being the format followed within this particular study.

Therefore, both grounded theory and IPA are concerned with the exploration of participants' accounts and meanings. Thus, these methodologies are well situated in the interpretative paradigm in that they are concerned with how the social world is interpreted by the individual.

### **Study Three: Developing an Item-Based Questionnaire**

In order to expand the findings of Study Two, I chose to incorporate the themes within a 45-item-based questionnaire. The rationale here being to generate items through qualitative analysis (due to the sparse information available on dyslexic students studying in higher education) and, hence, a need to explore the issues which users themselves felt were important in the management of their studies. In this way, the items reflected the experience of the four participants who took part in Study Two and were used to explore to what extent these held true for other dyslexic students studying across different institutions. As questionnaires can be distributed widely throughout the target population (in this case dyslexic students within UK universities), they allow for further study into the experience of

dyslexic students and therefore add to the research question being asked within this thesis.

## The Use of Questionnaires

Traditionally, person-based questionnaires are employed as a first stage of investigation; to gather the views and opinions of those participants involved. However, due to the scarcity of information relating to the experience of dyslexic students in higher education, the questionnaire employed in this third study forms the *second* stage of data collection and the items are drawn from the findings of Studies One and Two (see Chapter ?).

Questionnaires incorporate a number of questions, and can be 'closed', for example, requesting an answer of: a b c d or 1 2 3 4 5, or 'open' when respondents use their own words. Responses must be pre-planned when using closed questions and can be: **nominal** (e.g. FEMALE/MALE, YES/NO, AGREE/DISAGREE), **ordinal** (where respondents rate choices, e.g. a Likert-type scale: TOTALLY AGREE – NEITHER AGREE NOR DISAGREE - TOTALLY DISAGREE), or **numerical** (in which case numbers are requested; e.g. date of birth). Frey and Oishi (1995) suggest the following as essential characteristics of good questionnaire design:

1. Clear, unambiguous wording which is simple and specific
2. Precise indications of how responses should be recorded
3. Neutral phrasing of questions, avoiding suggesting to the respondent one answer is preferable to another
4. Only one issue per question
5. Closed questions, having mutually exclusive response options

(Frey and Oishi, 1995)

In view of the first point, Robson (1993) makes clear the need for specific questions:

*"The goal of standardised measurement is central to survey research; specific questions provide more standardisation."*

(Robson, 1993, p.247.)

In relation to the second point, Rust and Golombok (1992) also note the need for a straightforward questionnaire design:

*"...respondents feel less intimidated by a questionnaire which has a clear layout and is easy to understand."*

(Rust and Golombok, 1989, p.154.)

Indeed, in light of the sample population within this thesis (dyslexic students), clarity of instructions would seem imperative.

Formulation of the questionnaire followed (in part) Rust and Golombok (1989), namely:

1. Purpose of the questionnaire
2. Making a blueprint
3. Writing items
4. Designing the questionnaire
5. Piloting the questionnaire
6. Distribution

### **The Purpose of the Questionnaire**

The questionnaire builds on the findings of Studies One and Two; essentially the questionnaire was employed in order to illuminate further the findings of Studies one and two, in light of a larger sample population. Therefore, the premise on which the questionnaire was based, was the extent to which the statements generated from the case study themes held true for other dyslexic students studying in higher education.

### **Making a Blueprint**

The next stage required the generation of a blueprint; a framework in which to define the questionnaire items. The blueprint incorporates content areas and manifestations. Rust and Golombok (1992) recommend no less than four, and no more than seven, content areas; less than four generating scant findings and more than seven being too awkward to analyse.



The five **content** areas employed in the present questionnaire are drawn from the analysis of Study Two (see previous chapter):

- Looking for a reason
- Social comparison
- Low self-esteem
- Need for appropriate support
- Understanding learning style<sup>10</sup>

### Writing Items

When writing the items, it was imperative that they stay within the boundaries of the blueprint, however it was also essential to recognise that some items would fit well across one or more of the categories. For example:

**Table 1 : Table of Content and Manifestations**

Looking for a reason	Social comparison	Low self-esteem	Need for appropriate support	Understanding learning style
I have a clear understanding of what dyslexia is	I feel I am a valued group member	I sometimes doubt my intelligence	I feel the support I've been offered has helped me to become an independent learner	
No one has explained dyslexia to me	I'm sure I sometimes come across as a bit 'dippy'	I'm not very confident about myself	I value extra time in exams	I have to be organised, if not everything would fall apart

The item, "sometimes I get angry when I think about my school years", could sit equally well in either the 'Looking for a reason' content area or the 'Need for appropriate support' content area.

<sup>10</sup> Essentially, when one observes the themes collectively it is the participants' need to develop an understanding of their particular learning style, which becomes apparent. Therefore the additional theme of understanding learning style was used to develop items in the questionnaire.

## **Designing the Questionnaire**

As noted earlier, it was imperative that the questionnaire be straightforward, enabling the respondent to complete it with ease. The questionnaire was therefore divided in to four sections:

### Section one: letter

The letter introduced the researcher/research to the respondent and gave step-by-step instructions on completion of the questionnaire together with a completed example question (see appendix 4).

### Section two: personal history

This section required the respondent to complete questions relating to their personal history, for example: date of birth, age at first assessment, support received at school, family history of dyslexia, etc. (see appendix 4).

### Section three: 45 items

A seven-point Likert scale was used, comprising 45 items, to measure the respondents level of agreement with a particular item; the possible responses represented by the scale were: 1 (totally agree), 2 & 3 (agree), 4 (neither agree nor disagree), 5 & 6 (disagree), 7 (totally disagree).

### Section four: additional comments

A space was provided for respondents to comment on any aspect of dyslexia they felt was not covered by the questionnaire.

## **Piloting the Questionnaire**

The questionnaire was piloted on a group of 25 dyslexic students attending an in-house (university) dyslexia workshop. Traditionally, the minimum number of respondents needed is one more than the number of items (Rust and Golombok, 1992). However, in this instance, rather than omit the pilot stage completely, it was used to clarify the wording of the questions and not as a selection process for identifying the best items. The rationale here being that the items had been generated through exhaustive qualitative analysis and therefore the assumption that some items would be 'better' than others was unwarranted. The wording of three items was changed as a result of the pilot study, as it was thought that more clarity was needed on these items:

Question 2 of the pilot questionnaire: "I know what I want to say but I just can't find the right words." became "The difficulty is getting things down on paper."

Question 17 of the pilot questionnaire: "I've compensated for my difficulties but I'll always be dyslexic." became "I know that if I improve my: writing, reading and spelling, I'll still be dyslexic."

Question 23 of the pilot questionnaire: "I'm not naturally organised." became "I have to be very organised; if not everything would fall apart!"

In order to account for the presence of acquiescence (described by Rust and Golombok as: "the tendency to agree with items regardless of their content" (p. 153, 1992)) the items contained both positive and negative statements. For example:

Question 1 "I have a clear understanding of what dyslexia is." (positive)

Question 44 "I don't really know what dyslexia is." (negative)

Question 44 is a reversal of question 1.

Clearly, this increased the number of items in the questionnaire. Rather than increase the original 28 items to a total of 56, thereby reversing 100% of them, only 17 of the items were reversed. The total number of positive/negative items being 34, together with the remaining 11 items, thus a total of 45 items were written, with 60% of the items reversed.

## **Distribution**

A two-page, 45-item questionnaire was produced, which took approximately 10 -15 minutes to complete. The questionnaires were posted out to those dyslexic students registered with student services from each of two universities. A total of 164 questionnaires were distributed, with a stamped addressed return envelope enclosed. The first page included details of how to complete the questionnaire, together with descriptive items including: age, course, year of study, age at first assessment, etc. (see Appendix 4). In addition to the 45 items, there was a designated blank space for students' comments.

From a dyslexic student base of c.100 students, four students self-selected for the guidance-support sessions. Of the 164 questionnaires distributed across two UK Universities, a total of 86 questionnaires were returned, giving a response rate of 52% which is above the expected return rate for mailed questionnaires (Kline, 1993). In addition to the quantitative aspects of the questionnaire, I felt it important to give the respondents the opportunity to enter free comments. The comments are presented in Chapter (6) and, hence, this afforded further exploration of the themes generated in Study Two.

### **Peer Review Questionnaire (Study three)**

The peer review questionnaire followed the above procedure (see appendix 5). The questionnaire developed was 'open ended' to encourage respondents to write their own answers. The questionnaire comprised an introductory letter, introducing the research to other professionals in the field, together with three sections. Section one requested information on professional background/student population. Section two requested respondents to peruse the preliminary model (see Chapter 8) generated from the analysis of studies two and three, and comprised four questions, question three being split in to three parts. Section three was a free comment section, for respondents to raise any aspects of the model they felt were not incorporated in the questionnaire. Twelve questionnaires were sent out across twelve UK Universities, to disability officers/student advisors. Six questionnaires were returned generating a response rate of 50%.

### **The Benefits of Employing Mixed Methods**

In using a mixed methodological approach I am able to get close to the issues that are considered important to participants; this was fundamental in terms of gathering data which could then be explored on a larger scale. This type of approach seems essential when embarking on research that endeavours to explore experience and, in turn, provide ways forward in terms of shaping both policy and practice.

Mixed methods were therefore employed in order to gain an understanding of the experience of dyslexic students studying in higher education in the present system. Initially, qualitative methodology was used to explore, from the 'users' perspective, the benefits and limitations of the present system. A questionnaire was then employed in order to reflect on the themes generated in Study Two. Finally, the comments from respondents were analysed in order to further develop an

understanding of the issues raised which dyslexic students felt were important to them but where perhaps not addressed within the questionnaire items.

## Chapter 4: Underlying Theoretical Principles

As mentioned previously, a major aim of this thesis was to explore the experiences of dyslexic students in higher education. Hence, a methodology was required which would enable participants' subjective experiences to be explored in detail. This chapter presents a brief discussion of the theoretical and philosophical assumptions underlying the naturalistic, interactionist and interpretative methodologies presented within the case studies, and draws upon this stance, selecting the appropriate tools and demonstrating their ability to fit the particular research aim. Hence, I shall outline the use of this particular method of enquiry, firstly by discussing the methodological tools engaged and, secondly, by introducing the underlying theoretical principles. In conclusion, I shall summarise why this type of methodology is useful in researching this particular research question and discuss the need for a sound methodological approach.

### The Research Goal

The aim of this study is to explore the impact of dyslexia on the subjective experiences of students in higher education. Whilst there may be awareness, on a general level, with regard to dyslexia, this can often be insufficient as it may bring with it a pre-prescribed 'notion' of what dyslexia is. Interacting and engaging with those who have first-hand experience, 'lived experience', of dyslexia can enhance understanding and, most importantly, demonstrate the different perspectives that are offered by participants. Willis offers a clear and articulate rationale for this in the following quote:

*"Such knowledge is of great interest in many explorations of social science. It shows that different people participating in an event in their lives may give it radically different meanings. Thus a patient and a health professional, an adult educator and an adult learner, may engage in a shared activity but have quite radically different experiences of it."*

(Willis, 1999, p.100.)

Thus, this type of understanding is crucial when developing/enhancing existing methods of support; providing an opportunity to evaluate and improve practice and policy in line with the requirements of the service user.

## **Underlying Philosophical/Theoretical Assumptions**

An introduction to the theoretical and philosophical stances that underlie the particular research methodology used in this study seems appropriate at this stage. Two significant theoretical positions are associated with the interpretative paradigm: phenomenology and symbolic interactionism. I have therefore chosen to draw upon these perspectives and a brief outline of the two is presented in the following section.

### **Phenomenology**

Phenomenology is centred on the individual's account of reality (Smith, 1996). It focuses on the description or 'lifeworld' of participants, as opposed to explanations of scientific objective reality (Collins, 2002). Therefore, phenomenology is principally interested in the meanings that people ascribe to specific situations or objects. The following quote from Ashworth demonstrates the fundamental nature of phenomenology clearly:

*"Phenomenology recognises that the configuration of the meaning surrounding 'daffodil' will be different for a market gardener pressed by hard economic conditions and for a poet who wanders unexpectedly across a host of them. Daffodils have a different place in these two lifeworlds."*

(Ashworth, 2000, p.107.)

Essentially, then, phenomenology acknowledges the unique experience of individuals. Rather than looking for objective reality it is concerned with individual subjectivity and investigates these descriptions to explore experience.

### **Symbolic Interactionism**

Whilst phenomenology focuses on the individual, symbolic interactionism proffers that meanings are derived through social processes.

Within symbolic interactionism, *self* has two distinct but interconnected meanings. Therefore, it seems fundamental that an outline of *self* in relation to this particular research is given at this stage. Whilst *self* is a term commonly used in social psychology, the concept has various meanings, dependent on the understanding of those who use the term. The central argument of Mead's theory of social behaviourism (1934) is that *mind* and *self* are emergents of the social processes. (Ashworth, 2000). Firstly, and building on from Mead's social behaviourism, the

*self* is viewed as fluid, changing states of consciousness, which Mead describes as, "I" and "me". *Self* is also used to describe the dual processes of "I" and "me" as separate and distinct. Hence, "I" can be viewed as a person's identity and "me" as the person's ability to reflect on the attitudes and behaviour of others, therefore:

*"I generates a potential action which is adjusted by the me in light of the reactions others might have."*

(Ashworth, 2000, p.129.)

In this sense, *self* is an object, whether of the person or the others who act toward her/him (Ashworth, 2000). Consequently, the appraisal dyslexic individuals have with regard to their own abilities may be confounded by the expectations of others, for example, the practitioner who works to a strict model of dyslexic-type performance or, for that matter, the systems in place in attaining support and accommodations. Therefore, we reflect on our actions and the actions of others in complex and intricate ways. However, although the elements of 'I' and 'me', in relation to the *self* are distinct, the borderline is highly tuned and often a blend of the two is needed to interpret experience (see Ashworth, 2000). Thus:

*"...symbolic interactionism argues that the meanings individuals ascribe to events should be of central concern to the social scientist but also that those meanings are only obtained through a process of interpretation."*

(Smith, 1996, p.263.)

So, whilst I am interested in the 'whatness' of students' experience within this first study, I am also interested in their interactions; for example, with providers of support, tutors and fellow students and the influence that this has upon their experience.

## **Embarking on Sound Research Methodology**

When embarking on research, the construction of a sound methodology, together with the production of ethical research findings, is, of course, crucial. Acknowledgement of the standpoint of the researcher is essential when presenting results. The purpose of employing a research methodology that professes to offer insight into the lived experience of participants warrants careful consideration, not least, because of the possible power relations involved in any endeavour to understand a particular phenomenon. Therefore, it is essential that all stages of the



research and analysis be offered and the rationale behind the drawing of the themes presented. Hence, there is a fundamental need to offer the thematic and narrative account of my transcripts in such a way as to include all those who took part in the research, whilst endeavouring to provide a sound description of findings within the genre of academia.

With this in mind I turned to the work of Garman and Piantanida (1996) who present eight criteria for the presentation of expressive knowledge within qualitative research, namely: **verite**, **integrity**, **rigour**, **utility**, **vitality**, **aesthetics**, **ethics** and **verisimilitude** (Willis, 1999). **Verite** refers to the researcher's ability to offer findings that have coherence with established knowledge. **Integrity** is concerned with the rationale behind the employment of this particular methodology, in terms of the focus of inquiry. **Rigour** relates to the adequacy of intellectual work involved in the study, together with the preciseness of representation. **Utility** refers to the worth of the work, its relevance within the profession and contribution to its particular area. **Vitality** questions whether the research is meaningful, important and thought provoking. **Aesthetics** requires the researcher to question whether the findings offer 'insight' to readers. **Ethics** refers to the work's protection of confidentiality and respect for participants' 'ethical sensibility', i.e. total respect for those mentioned in the research (Willis, 1999). **Verisimilitude** represents the 'aha' phenomenon, i.e.

*"...the reader recognises some of the portrayed qualities from his or her own experiences and is thereby able to believe in the possibility - the credibility - of the virtual world [presented in the expressive text] as an analogue to the 'real' one."*

(Garman and Piantanida, 1997, p.74.)

The research presented within this thesis has endeavoured to embrace the above criterion, in the following ways:

**Verite** - I hope that the accounts presented *ring true* for dyslexic students and those working with them and, equally importantly, that they offer acknowledgement of issues which both students themselves and others within the field are able to identify with. Striking such a balance is indeed a complex and thought provoking predicament; whilst, on the one hand, one hopes to offer insights and descriptions which are held as credible, the thought that one might discover interesting recollections and experiences not previously encountered is of equal importance. Perhaps then, it is that such descriptions achieve a *fit*, which is both credible and thought provoking and of interest to participants and readers alike.

**Integrity** - the decision to employ qualitative methodology stems from a wish to gather participants 'stories' and share their experience of being dyslexic in higher education. To form an awareness of 'what it is like' for others, thus enabling me to formulate a questionnaire based on these accounts and to draw upon the findings to develop practice and policy.

**Rigour** - an understanding of the philosophical underpinnings underlying this type of intuitive enquiry was fundamental to the production of a sound research agenda. This was a complex issue, as my knowledge of this particular philosophical stance and related methodology was not exhaustive. The need for a cyclical and reflexive approach occupied much thought and this, in turn, led to an underestimate in terms of the amount of time required in order to complete the analysis of Study One.

**Utility** - there is sparse information within the dyslexia field in relation to the experience of dyslexic students in higher education. The research offers, or at least speculates on, appropriate support mechanisms for dyslexic students in higher educational institutions.

**Vitality** - I would hope that the issues raised communicate effectively to the reader those aspects which participants felt were important to them.

**Aesthetics** - I endeavour to relate further the issues raised by participants; to offer a closeness that, I would hope, incorporates the experiences shared within the guidance sessions and subsequent transcription and analysis.

**Ethics** - plays an intrinsic part in the generation and implementation of the research process. Throughout the gathering and analysis of the transcripts I was constantly aware of the absolute need for ethical sensibility with regard to the participants' 'stories'. This is something which, understandably, occupied much reflexive thought, as mentioned earlier in this chapter, because of the potential power relations involved when entering into and analysing participants' transcripts. Most importantly,

*"...how we write our research in a language which is acceptable to the academic community but does not alienate the people who took part in our research."*

(Standing, 2000, p.186.)

**Verisimilitude** - relates to the 'ah-ha' feeling; when one reads something and is able to relate to it in terms of one's own experience of a particular phenomenon. I hope that within the narrative the reader is able to identify with the accounts put forward and experience the 'yes – that's what its like' element - verisimilitude. This is indeed a powerful experience; I myself have been fortunate to come across research, which attains a richness of *knowing*, and the ah-ha quality is both encouraging and inspiring.

## **Reflecting on My Standpoint**

My own personal understanding of dyslexia is as a dyslexic student, a dyslexia support tutor, assessment of need officer at a Regional Access Centre<sup>11</sup>and, more recently, in my role as student advisor at Bath University. I would hope that my background adds to the depth of epistemological issues raised in the study, as the starting point and, one could say, the most crucial stage was the generation of the problem to be researched. This would not have been the case had I not experienced studying in HE as a dyslexic student myself. Awareness of my own standpoint has allowed me to stand inside that which is being researched and, of equal importance, has enabled me to relate to the participants on both a personal and professional level and to inform the reader of my own standpoint.

## **The Matter of Subjectivity**

As mentioned earlier, qualitative psychological research has often been criticised for its concern with individual experience; quantitative researchers questioning its robustness in terms of its application to a wider population, in the form of reliability, validity and generalisability. Moreover, the move towards a more humanistic qualitative research methodology, rather than offering an alternative complementary research tool, has often been challenged by proponents of the positivist stance who express concern with regard to the subjective nature of such studies together with their inability to make generalisations on the grounds of what can be regarded as 'sound', 'exact evidence' (Garrick, 1999). Clearly, subjectivity for quantitative research results in bias, but, for qualitative enquiry, it forms the basis on which to build, assimilate and acquire understanding of the experiences of individuals. The

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<sup>11</sup> The National Federation of Access Centres. Assessment forms part of the Disabled Student Allowance procedure; a non-means tested, government grant available to disabled students who incur extra costs as a result of their disability, in relation to the demands of their course. The assessment of need, evaluates the level of support (both personal and technical) which is required for students to reach their individual potential, within Higher Education.

primary focus of qualitative research, rather than being centred on its application to other members of a group, endeavours to build a picture of 'what it is like' (in this case, what it is like to be dyslexic and studying in higher education). The purpose of inquiry is to enter or join in the participants' world at that particular point in time. As such, *experience* is undoubtedly fluid in its relationship with change. For example, the individual's experience of a particular phenomenon (e.g. dyslexia), is constantly changing, hence, the underlying rationale behind employing a research methodology that taps into that change and offers a representation of the lived experience of that particular individual. It is an approach that seeks to describe rather than compare. To describe the *whatness* of a particular phenomenon and the ways in which, if at all, they shape the individuals experience. So, rather than looking for truths, this method of enquiry considers experience. (Willis, 1999).

It seems essential to express that the themes offered are a way to interpret those issues which participants discussed. Authoritative accounts that state 'what it is like', paradoxically misrepresent the underlying ethos of qualitative methodology, thus bell hooks<sup>12</sup> assertion:

*"Often, speech about the 'Other' annihilates, erases: No need to hear your voice. Only tell me about your pain. I want to know your story. And then I will tell it back to you in a new way. Tell it back to you in such a way that it has become mine, mine own. Re-writing you, I write myself anew. I am still author, authority, I am still the colonizer, the speaking subject, and you are now at the centre of my talk."*

(bell hooks, 1990, p.151.)

The above quote powerfully demonstrates the need for reflexivity. However, rather than presenting arguments against this particular method of enquiry, it enhances the need for research which is explicit in its aims. Undoubtedly, and not least because of the participants taking part in this particular research, the need for a narrative account which is accessible to all is paramount. Standing (2000) is eloquent in her description of this predicament:

*"We speak in a flowing, haphazard way. But to put the women's voices in the written text in this way looked 'wrong'. It jarred against the complex structure of my academic writing. The language in which the women, and I myself spoke (and indeed in which most of us, you the reader included, speak) is very different to the language of academic writing. To put the two side by side seemed to reinforce*

*the unequal power relations between me the researcher, and the women, the researched'.*

(Standing, 2000, p.190.)

Thus there is a need to take on board a different set of objectives when searching for validity within a qualitative setting. Rather than excusing the researchers presence, it is important to embrace the mutual creation of research findings, be they thematic, narrative or however presented. To appreciate the collective creation and discussion of meaning (Yardley, 2000).

Clearly then, the very nature of qualitative researching is a very cyclical one, occupying much thought and reflexivity throughout. Thus, reflexivity plays a pivotal role within qualitative research.

### **Reflective Practice**

Acknowledgement of the socially constructed nature of qualitative research is central to reflexivity, in that the researcher is actively engaged, involved and integral to the research process:

*"...the researcher reflects upon their own process of research, acknowledging their own biases, as well as the impossibility of objectivity."*

(Collins, 2002, p.112.)

Therefore, there is a close interplay between researchers and respondents and this mode of enquiry does *not* occur in a vacuum. By this I mean that as a researcher, dyslexic student and support tutor, I bring with me my own experience, however this in itself does not dilute the findings I present in my study, but rather contributes to my understanding and subsequent interpretation of the data. This is a point raised by Smith:

*"While one attempts to get close to the participant's personal world, one cannot do this directly or completely. Access is both dependant on, and complicated by, the researcher's own conceptions which are required in order to make sense of that other personal world through a process of interpretative activity."*

(Smith, 1996, p.264)

Nicolson expands this further and offers the following stance in relation to subjectivity within the qualitative arena:

*"What is important is not 'eliminating' the subjective interest in the research, but being able to recognise its existence and identify the part that this interest and commitment plays in the relationship between the researcher, respondents and the data."*

*(Nicolson, in press)*

## **Enhancing Practice: Incorporating Findings into Practice**

The findings of this particular piece of research therefore have implications for both policy and practice when working with dyslexic students in higher education. Although policy and provision are well anchored within higher educational institutions in Great Britain, a review of their efficacy has yet to be presented. Information on the experience of dyslexic students within the system is paramount if support is to be both appropriate and effective. Qualitative methodology allows for the generation of such information and, most importantly, affords practitioners and policy makers within the field to gain an insight and understanding from the views of those students using services.

This thesis is concerned with the lived experience of dyslexic students in higher education and their appraisal of the support systems they have encountered. Essentially, as outlined previously (Chapter 1), dyslexic students face a multitude of additional demands, in terms of securing support, over and above course requirements. Thus, the students' experience of studying is a complex one as their needs are assessed and a required level of support prescribed. Even when the student has a very clear understanding of their particular requirements and, in turn, an appreciation of their optimum learning environment, the allocation of support is still a complex one. With the interplay between: assessment officers, dyslexia support tutors, academic tutors and department administrators alike, requiring considerable co-ordination and advocacy, if recommendations put forward in the students assessment of need report are effectively put into place. Hence, due to the interactions which are involved in: seeking, allocating and providing appropriate support, a philosophical stance that acknowledges these relationships is clearly very desirable. Symbolic Interactionism therefore seems well suited to this particular group of individuals.

Employing qualitative methodology has enabled me to gather a rich source of information. Qualitative methodology contributes to our understanding of particular groups in society, not least because a sharing of experiences can shed new light on the particular phenomenon in question, thus offering alternative ways to interpret those issues which are deemed important to participants. In this particular research setting, the findings play an important part in enhancing awareness on a number of levels: pedagogical, policy and theoretical.

A dissemination of the issues raised will, I hope, enhance the understanding of those working with dyslexic students in higher education. Study One was employed in order to explore the experience of dyslexic students in higher education. For me this type of approach seems essential when embarking on a piece of research that inevitably should provide ways forward in terms of shaping both policy and practice. Therefore engaging service users (in this case dyslexic students) in this form of participatory research in order to fully appreciate the issues which users themselves feel are both relevant and important in attaining appropriate support and hence enabling them to fully engaging in courses of higher education. Hence, the need to employ a methodology that addresses the research question and *illuminates* the issues which participants raised. The aim behind this first study was to gather an essence of those experiences held as important to participants in order to:

*"...emphasise the researcher's role as an active learner who can tell the story from the participants' view rather than as an 'expert' who passes judgement on participants."*

(Creswell, 1998, p.18.)

To generate a piece of research which offers a clear portrayal of experience, in order that the reader feels they have gained a wider understanding of what it is like for someone, a sharing of experience.

To this end, the themes and quotes intend to explore the subjective experiences of those students involved in the study. They are offered as a way of appreciating those issues that participants deemed important to their understanding of what it is like to be dyslexic and to study in HE.

## **Chapter 5:**

### **Study 2: Case Studies**

#### **Aims and Objectives**

The study aims to offer an insight into the 'lifeworld' of dyslexic students: firstly, by identifying experiences and exploring them on an individual level and secondly, by offering a collective view of the subjective psycho-social, emotional and pedagogical factors which are held as having an influence on the students' experience of higher education (HE).

The particular research goal was to identify and explore the impact of dyslexia on the subjective experiences of students in HE.

#### **Participants**

All of the participants were assessed using Nicolson and Fawcett's (1997) Adult Dyslexia Diagnostic Test, providing an Adult Dyslexia Index (ADI). (See Chapter 1 for a review of this procedure.)

All names and other identifying details have been changed in order to protect confidentiality.

#### **Clare**

Clare was a mature entrant to university and had only recently had her dyslexia assessment at the age of 32. Throughout her school years she had experienced difficulties with literacy skills but had not been assessed at that time. Clare was studying for a degree in dental nursing and felt that she was unsupported by her department. She was in the second year of her degree and did not receive DSA.

#### **James**

James was a first year student studying biology. He had only recently had a dyslexia assessment at the age of 18. Whilst in school James' teacher mentioned the possibility of dyslexia but he declined to go forward for assessment at that time. Following his assessment, James found it extremely difficult to accept the dyslexic label. He was in receipt of DSA.



## **Richard**

Richard was a mature student studying archaeology. He was 54 years of age and had only recently received a dyslexia assessment. Richard found the dyslexia assessment very daunting and experienced high levels of stress throughout. He had returned to learning following many years of running his own business. He was in the second year of his course and in receipt of DSA.

## **Deborah**

Deborah was a first year student studying East Asian Studies. She received her dyslexia assessment prior to commencement of her degree course, after her mother urged her to go forward for assessment. Deborah had a family history of dyslexia; her brother and father were both dyslexic. She was in receipt of DSA.

## **Procedure**

At the initial meeting I assured participants of confidentiality and explained the emphasis of my research. Participants were also assured that should they not wish to be involved in the study the guidance support sessions were still available to them. All participants opted to take part. The sessions took place over a twelve-month period.

Participants were offered one-to-one guidance and support sessions via Student Services. Informed consent was discussed in detail at the beginning of the sessions and participants were asked to complete a consent form after details of the nature of the study were presented (See Appendix 1). Following discussion with the university counselling service, I was able to offer guidance support sessions to dyslexic students and had the support of a counsellor, with much experience in this area, who agreed to be my mentor. The guidance support sessions were set up to give dyslexic students a forum in which to *re-frame* (see Pg. 23 for a discussion on the term 're-frame' in light of the research carried out by Gerber, et al. 1992) their learning style and to make the most of their skills – the emphasis was on coming to terms with, and managing, dyslexia. The dyslexia support officer flagged up the sessions to dyslexic students, and thus the participants in this study are self selected dyslexic students who felt that this type of support would be beneficial, or who perhaps recognised a need for such support. The participants were first and second year students. Clearly it would have been invaluable to gain the views of students in their final year; this being

more reflective of the experience of student's managing their dyslexia at university over a longer period. However this was not possible due to both time constraints and access to participants. The questionnaire developed from the analysis of the case studies was able to address this by gathering the views of dyslexic student across each stage of their degree.

All sessions took place in the psychology department and involved myself together with individual participants. Overall, the data for Study One came from four participants; each participant had several sessions, apart from one participant (Clare) who attended one session. Of the other three participants, two had three sessions and the third had two sessions (nine sessions in total; each approximately one hour in length). The sessions adhered to a guidance/counselling setting. The structure within each guidance session was flexible; participants' discussed issues that they themselves felt were relevant to their appraisal of dyslexia. There was no 'interview' schedule as such, rather participants were free to focus on those areas which they felt important in terms of coming to terms with and 'managing' dyslexia. Throughout the sessions I endeavoured to 'de-centre' (listen to the participants' accounts and set aside my own experience of dyslexia), however 'disclosure' was practised when common issues between myself and participants were apparent. This approach enabled participants to develop awareness and views independently and encouraged reflection. Therefore, many of the issues raised within the sessions were initiated by participants themselves. Tapes of the sessions were later transcribed verbatim. A total of 14 hours of sessions were audiotaped and 9 hours of audiotape were transcribed; it was not possible to transcribe the remaining 5 hours due to poor quality. Initially, it was arranged for the tapes to be transcribed by a secretary within the department. However, upon completion of the first transcription I decided to transcribe the tapes myself; I felt that this would enhance confidentiality and also enable me to retain the 'richness' of the sessions.

### **Data Analysis**

The data was then analysed using Interpretative Phenomenological Analysis (IPA) (Smith 1999). In using this method a four-stage procedure was employed:

1. Noting down significant statements
2. Analysing the 'meaning of statements'
3. Generating 'themes'

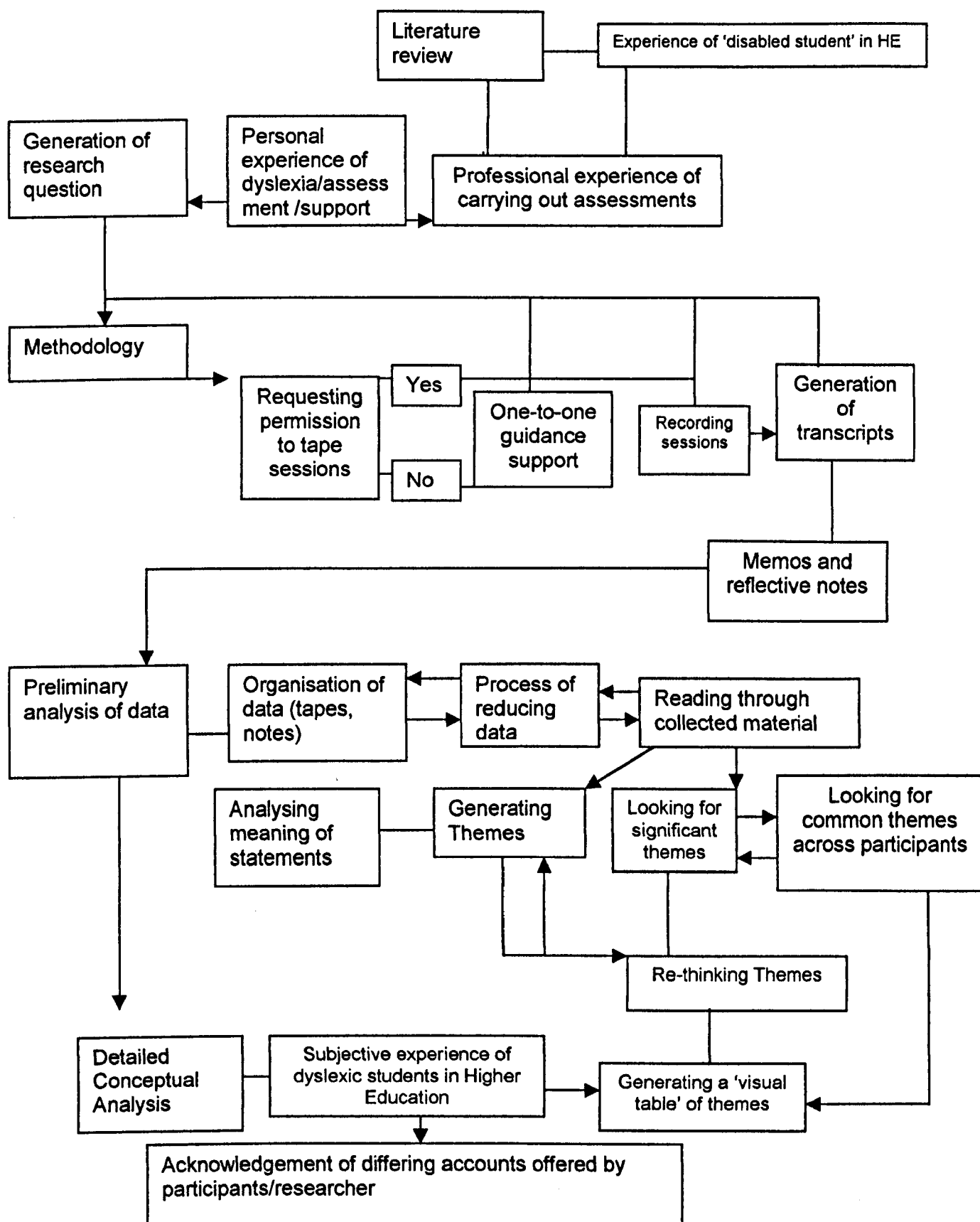
#### 4. Detailed conceptual analysis

The first stage of analysis involved examining each transcript to get an idea of what dyslexia meant to each participant. The first transcript was read through several times and brief notes were made in the margin about any statements that appeared particularly interesting or significant. The transcript was read through again, in more detail, and provisional themes, which emerged from the initial statements, were noted down. A list of provisional themes was considered and extracts relating to each theme were identified in the text. This process was then followed for the remaining transcripts.

The next stage involved the search for common themes across participants. This entailed a comparison process whereby patterns were identified in the data; searching for commonalities and differences across participants' transcripts. Themes identified across participants were explored in order to draw the data together. The themes are collated and presented in tables in the following section.

Thirdly, drawing on the emergent themes, an in-depth narrative account of each individual participant's transcript was presented. Finally, the collective themes were presented and comparisons were presented in a collective narrative account.

Fig 1. Data analysis



The analysis of scripts followed this four-stage procedure, however, the final stage (*detailed conceptual analysis*) was carried out after the generation of a table of 'major themes' consisting of all participants' data.

## Results: 1

### **Preliminary list of Clare's transcripts:**

- Past experiences 'other self'
- Personal need to understand (dyslexia)
- 'Others' need to understand differences
- Contradictions/selective recall of the past
- Social comparison - stress
- Social comparison - mature student
- Social comparison - literacy skills
- Social comparison - study skills
- Lack of understanding - department/school
- Lack of understanding - peers
- Self critical - self doubt
- Need for approval
- Unreasonable expectations
- Desperation
- Special pleading
- Difficult student
- Fear of failing - course
- Need to fail – fearing removal of support

The emergent themes are clustered as follows: **Clare**

- **looking for a reason**
  - making sense
  - finding strategies
  - past experience
- **Lack of understanding**
  - department/school
  - negative attitudes 'others'
  - special pleading

- **Low self esteem/confidence**

- self critical
- self doubt

- **Social comparison**

- stress
- mature students
- literacy skills
- study skills

### **Detailed Conceptual Analysis: Clare**

When asked about her experience of studying in higher education, the first theme to arise was Clare's initial concern to 'make sense' of her recent dyslexia assessment. Past educational experience (school) provided the 'backdrop' for Clare to share her experience of and 'location' within the educational system:

*'I was a thick student in the class at school, and I was the one who had reading lessons, but did quite well at science, and I was really confused at school and had a hell of a time.'*

Thus, the dichotomy of being a '*thick student*' in terms of reading whilst doing '*quite well at science*' left Clare feeling confused about herself. Having a dyslexia assessment upon returning to education was, for Clare, a way of dispelling the 'thick' label:

*'It was a time when no one knew about dyslexia, so I came here and all I wanted from the assessment was so that I knew that I wasn't thick, to boost my self esteem, which was really really silly, but there you go.'*

The initial need to 'make sense' of past experience is followed up with a need to 'make sense' of 'what dyslexia is' following her dyslexia assessment, and the difficulties that she feels she is experiencing as a consequence of it:

*'No one asked me to come and have an assessment, and since then I've had more problems with the University than enough, because one of the major reasons I'm here is I don't actually know what dyslexia is.'*

Not having an understanding of the nature of dyslexia, and ways in which to manage it, presents Clare with difficulties in relation to her department. Whilst she has received an assessment of need which states the requirement for extra time and use of a scribe in examinations, Clare feels her department have been reluctant in providing this type of support:

*'The University has given me this 15minutes (per hour) [ ] for an hour and a half they gave me an extra 6 minutes' [ ] 'I had to talk to the Head of Department, and the people who are setting the exam are also the people who are my clinical tutors and I just daren't. Julie (support tutor) sort of said, well, she could actually go to the school for me. I said, well, that will just get me into more trouble. I will fail my course because I will have such bad press.'*

This leads on to the second major theme: lack of understanding. Clare expresses a need to understand dyslexia in order to 'inform' and 'advocate' both her own needs and those of a fellow dyslexic student:

*'The problem is that I've actually done quite well in my exams, em, so then they're saying, well you've obviously done quite well so you don't need the extra time[ ] it's been said to one of the other girls that maybe she shouldn't have the extra time because she's coping anyway and we don't need it, and we're under so much pressure at the moment it's getting a bit tough.'*

The personal lack of understanding following her dyslexia assessment, together with the difficulties she has experienced with her department, are a central concern for Clare:

*'...but how do I explain to people, I mean I'm finding it difficult explaining to people what, because I don't know what dyslexia is and as I say I was just a thick kid, and I'm finding it, I mean the first term was so difficult because I had to say "I can't read this".'*

The third theme to emerge is that of 'low self esteem and lack of confidence', Clare's difficulty in both understanding and identifying, on a personal level, what dyslexia means, coupled with the difficulties she faces in attaining support are exacerbated by an understandable lack of confidence. Whilst Clare expresses relief at 'finding

out' she explains that her former experiences in education have coloured her perception of her abilities:

*'The whole world revolves around the fact that if you can write an essay you must be intelligent, and if you can't write an essay you must be dumb. And I fit neatly into there. I was dumb and hopeless, and it was really frustrating because I know I know lots of things[ ] ...and that's the way the world examines you and it's so unfair...'*

Clare's initial request for a dyslexia assessment was to prove to herself that she was not (as she puts it) 'thick':

*'So I came here and all I wanted from the assessment was so that I knew that I wasn't thick, to boost my self esteem.'*

However, this initial need to know is intensified by the problems that she faces on her course and Clare points out that whilst this initial need to 'find out' has been useful, both her past and present experience of education have instilled in her a feeling of failure:

*'It's too long, I'm just hopeless [ ] I've got no judgement.'*

This lack of confidence is compounded by Clare's perception of others' abilities and hence the fourth theme to emerge, 'social comparison' runs throughout the session both in terms of others' perceptions of Clare:

*"It's as if I'm taking something that everybody else isn't entitled to and nobody understands that I can't, I can't read these big words, these tricky words and I'm not actually taking, in fact 15 minutes might be totally inappropriate, but it's not actually helping me that much. If I can't spell it, I can sit for 15 minutes and I still can't spell the word, it doesn't help, but if you're a normal person, or whatever normal is, erm, these 15 minutes obviously would help so they can't work out that I'm not just getting this great big advantage."*

And, on a personal level, in Clare's perceptions of others' abilities:

*'I can do it if I work at it, but I mean somebody would have taken it home and done it in a night and it took me all week to do my comprehension'.[ ] 'When*



*I read somebody else's they weren't, they hadn't as much knowledge as I had, but they can just write. Now up at the \*\*\* school they're writing all these beautiful essays, all those flowery words, but I know mine have got more information facts in, but they can just write.'*

Clare's overall lack of understanding in relation to dyslexia can be seen as preventing her from acquiring the skills she needs in order to both get the most out of her course and, likewise, to attain similar skills to those (she perceives) of fellow students. It becomes apparent that although Clare progressed through the dyslexia assessment process she was not offered, or did not have the opportunity to gain, an understanding of what being dyslexic meant on a personal level. This lack of understanding is perceived by Clare as creating a barrier in her progression on her course and, equally importantly, as creating a difficulty between herself and her department in terms of appropriate support.

The fragility surrounding Clare's understanding seems to be exacerbated by her lack of confidence in her abilities, and even when she sees she is making progress she finds it difficult to acknowledge this. Clare talks of the differences between herself and a fellow dyslexic student in relation to the rest of her peers and although she expresses a belief in her understanding of the course material, she feels she is marginalised due to her perceived poor command of writing skills.

**Fig. 2 Table of Major Themes**

<b>CLARE</b>	
<b>Looking for a reason</b>	
<ul style="list-style-type: none"> <li>- making sense</li> <li>- finding strategies</li> <li>- past experience</li> </ul>	<p>'I don't know what dyslexia is'</p> <p>'so I'm looking for some coping strategies'</p> <p>'I was a thick student in the class at school, and I was the one who had reading lessons, but did quite well at science, and I was really confused at school and had a hell of a time'</p>
<b>Lack of understanding</b>	
<ul style="list-style-type: none"> <li>- department/school</li> <li>- negative attitudes 'others'</li> <li>- special pleading</li> </ul>	<p>'you've obviously done quite well, so, you don't need the extra time'</p> <p>'no one wants to talk about it'</p> <p>'it's virtually as if you're taking and you're an annoyance and a difficulty'</p>
<b>Low self esteem/confidence</b>	
<ul style="list-style-type: none"> <li>- self critical</li> <li>- self doubt</li> </ul>	<p>'I was just a thick kid'</p> <p>'I've not got any judgement.'</p> <p>'I'm hopeless really, it's so sad'</p>
<b>Social comparison</b>	
<ul style="list-style-type: none"> <li>- stress</li> <li>- mature students</li> <li>- literacy skills</li> <li>- study skills</li> </ul>	<p>'twice as stressful'</p> <p>'being an older sort of person'</p> <p>'If it's reading...I've got to have more time'</p> <p>'somebody would have taken it and done it in a night and it took me a whole week to do my comprehension'</p>

## Results: 2

### **Preliminary list of James's transcripts:**

- Social comparison
- Mother support
- Panic attack
- Low self esteem
- Questioning dyslexic label
- Awareness of volume of work
- Improve = withdrawal of support
- Social comparisons
- Past experiences
- Negative perceptions
- Questioning intelligence
- Good day/bad day
- Hiding true feelings
- Coping strategies
- Self critical
- Need for reassurance
- Significant others
- Proving 'others' wrong

The emergent themes are clustered as follows: **James**

- **looking for a reason**
  - making sense
  - past experience
  
- **Social Comparison**
  - dyslexic 'others'
  - peers – school
  - peers – university

- **Low self esteem**
  - self critical
  - self doubt
  - need for approval
  
- **Significant 'other'**
  - mother
  - relating to researcher
  
- **Need for Support**

### **Detailed Conceptual Analysis: James**

When asked about his experience as a dyslexic student in higher education, James' first agenda was to 'look for a reason' to enable him to 'make sense' of dyslexia. Following his dyslexia assessment, James expressed much difficulty in coming to terms with, and equally so, believing the assessment outcome:

*"...well, maybe I'm not dyslexic maybe I'm just a slow learner and yes found spelling extremely difficult because I'm, stupid."*

James spent much time evaluating the assessment situation and expressed deep concern with regard to the inclusion of an IQ test:

*"...when I went in there, the assessor said it's an intelligence test and all that, the first thing I said is - you may even be able to remember - I always never do anything like this because if I came out rubbish, I knew what I'd be like now."*

James found the dyslexia assessment very stressful and became panic stricken in that situation. Although he could readily appreciate that his anxious state had an impact on his score, on the psychometric tests he undertook, he was unable to view this in a more positive way, i.e. that given a less stressful situation his overall score would have been higher. Rather, he took it as an indication that had he performed slightly lower on the language tasks he would be taken out of the dyslexic range:

*"...as far as the assessment goes, make, take me out of the dyslexic range and basically label me as stupid."*

James expressed much difficulty in relating his performance throughout the assessment to that of dyslexia; questioning whether his performance was, in fact, representative of dyslexia:

*" When I look at the assessment there are things on there which, as I say, I can say that's totally true, I do find reading slow, I am slower in fact, I do tend to make mistakes when I'm reading and all that sort of thing. However, I don't know the sort of benchmark as in the difference between those I'm making aren't just because I'm not bright or you've actually got a problem."*

Within this first theme to emerge, 'looking for a reason', was the sub-theme of 'past experience'. Whilst at school, James' teacher had brought the possibility of dyslexia to the attention of his parents; no further action was taken at that time:

*"...at the first parents evening, literally the first one, I'd only been there in her class for what four weeks and she said it to my parents very quick sort of thing, "personally I think he's dyslexic"...that's it, and then she carried on and left it at that, I think she sort of gauged my parents look.'*

When James' parents expressed concern over the comment, James explained that he chose to ignore it:

*"...when my parents came home and said, "what did she say, it might be likely you're dyslexic," I just said "oh no no no, there's nothing wrong with me I just rush the essay and stuff"."*

James reflected on his experience at school and on a visit home he sorted out his old school books and was able to look back over his work and identify his difficulties:

*"...when I looked at it, I still get my Bs and Ds the wrong way round in the third year, well no, the fourth year!...and I was thinking no that's obviously not sort of what you'd expect from someone who's about to start their GCSEs."*

Although James was aware of the volume of work which was involved in attaining his GCSE and A' level examinations, he saw this as another indication that, rather than his difficulties being related to dyslexia, they were, in fact, due to his 'stupidity':

*" Further proving my own stupidity, as the grades I produced for both of these exams don't reflect the amount of work...working extremely hard for me consists of revising all my work thoroughly, which in turn involves me painstakingly rewriting all my notes."*

James explained that when about to embark on his English Language GCSE, he was unable to go through with the exam. The fact that he had not sat his English Language examination causes him further concern with regard to his ability to both manage and complete his degree course:

*"I went to the Doctors complaining I was extremely ill, rang the school and I was ill but no where near as ill as I made out[] because I was terrified, I knew I'd never get anywhere into university if I didn't pass GCSE English and I was damn certain I was not going to re-sit [] so as a result, I don't know whether I am capable of it or not now, so I'm looking at this now and thinking, yeah on paper I look as if I can do this but in myself I can't."*

A further theme to emerge is that of 'social comparison'; indeed, this is something which runs throughout the transcript. James' experience of the assessment situation demonstrates this aspect of his conflict in accepting that his difficulties relate to dyslexia:

*"I still performed below average in three of those tests (ACID tests in WAIS-R) [] I look at it and I think, well no, the reason why I came up with this result is not because I'm dyslexic, it's because I'm stupid."*

James attributes the amount of work that he had to do in relation to others on the course, as being very negative; not just in terms of the added volume but that this in some way signified that he was less 'intelligent':

*"...all day continually going around in my mind, you're here not because you're intelligent, you're here because you've just worked hard and there is no natural ability there."*

James felt extremely frustrated by the amount of work he was doing in relation to his peers:

*"...when I'm sitting there at god knows what time in the morning doing the work , when everybody else is out or asleep."*

James' understanding of his difficulties and his coping strategies, caused him to question the dyslexic label. He was able to identify that at the beginning of the semester his performance was far worse than at the end, when his skills had improved considerably. This improvement in the level of his performance created anxiety in James as he felt that it might nullify the outcome of his dyslexia assessment and, should he re-take the assessment, he worried that he might no longer be considered dyslexic:

*"So it's not really that marked a difference, that's why I'm saying to myself, you know, if that's the case...I'm just a half wit sort of thing."*

The third major theme to be drawn from James' transcript is that of 'low self esteem'. Again, this theme does not emerge in isolation; being apparent throughout the transcript. Although James repeatedly expressed his difficulty accepting the dyslexic label, he was well able to identify his difficulties with written language but equating them as 'justification' of dyslexia, proved problematic. James' perception of 'others' acceptance of the dyslexic label was in contrast to his own:

*"...there was a particular person at college who I could never understand. If I was him, I know what I'm like now, I can honestly say I'd definitely never be proud about something like this, whereas he was overly proud about it, you know , he never tried to do well, he used it as an excuse all the time, if that's what it means being dyslexic, I definitely do not want to be labelled."*

James' self doubt in his ability to fulfil the requirements of his course became intensified as he struggled with the idea that, without support, he would not be able to manage. This situation is again exacerbated by James' difficulty in accepting the outcome of his dyslexia assessment:

*"...without extra help and time, which being dyslexic brings, I would stand no chance of doing a degree, which is of course true because I can't keep up[] I simply cannot keep up with the writing of lectures and the reading, maybe*

*this is how it should be, erm, maybe I'm stupid and too slow, too slow and stupid to be at university."*

James' predicament seems a very complex one; he perceives that in order for him to successfully complete his course, he will need the 'additional' support, which is provided as a result of his dyslexia assessment. However, his reticence to 'accept' the dyslexic label places him in an awkward position. James' confusion would appear to be increased further by his frustration at receiving support and what this requires from him in terms of organising and managing his study needs:

*"My department has not, for some example, given me the information that I was relying on. They've cut that avenue off, and I was thinking that's what I was relying on [] I got somebody to transcribe my tape, it doesn't work, so I mean that's not gonna work, so that's two avenues gone already."*

In addition, the physical act of accessing support proves to be a difficulty for James and he perceives he is becoming a burden on support staff:

*"I can't deal with all these things and I'm constantly having to talk to people about it, it's some sort of reflection upon my character, and I think this person is absolutely fed up of seeing me and I shouldn't be doing this."*

The fourth and final theme to be considered is that of 'significant other'. James talks of the encouragement he receives from his mother when he is experiencing difficulties:

*"Me Mum's there and she's always telling me you can do this, you're not stupid, you can, you know all the gen. However, as soon as I come away and nobody is here to do this I automatically begin to think that I'm stupid, a failure."*

Upon his arrival at University, and the growing demands of his course, James had self-referred for a dyslexia assessment. He took this decision alone and on first telling his mother about the outcome of the assessment, he talks of a 'mistrust'; his mother being unaware that James had gone forward for the assessment:

*"Because when I rang her up, I was really upset and everything, that's what I mean it's very rare that I'll completely lose it altogether and I'll, I was just*



*distraught that time and I then I said to me Mum and she said but when did you do this sort of thing because I hadn't mentioned anything to them it was like mistrust sort of thing."*

After the initial shock of learning about his assessment, James talks of his mother's support in helping him to come to terms with the outcome, and, in turn, his acceptance of dyslexia:

*"...she can just sit there and say, "oh you know you're just going to have to accept that you're dyslexic"."*

James' reticence to accept the assessment outcome plays a prominent role throughout his transcript. Reflections on both his school experience and his experience of the assessment situation become apparent and, in turn, contribute to his struggle to accept the dyslexic label. Whilst James seems readily able to accept that he has struggled in the past and in his first year at university, he expresses much difficulty in coming to terms with dyslexia; doubting his intelligence and ability to complete his course. James' difficulties are compounded by a considerable lack of confidence and low self-esteem; comparing himself and his study habits with those of his peers and drawing distinctions between the amount of effort he has to put in and the 'natural abilities' James presumes his peers to have.

James' apprehension at the inclusion of an IQ test seems fundamental to this. His dread at being placed in this situation is clearly visible throughout the transcript; his need to fully dispel 'his' notion that he is 'stupid' being paramount to managing his study needs and subsequent completion of his course. The need for support is also a central concern for James. However, again, this is compounded by his difficulties with accepting the dyslexic label; therefore needing support would necessarily mean accepting the label and dispelling the notion of being 'stupid'.

In addition, James had considered taking the assessment again, in a less anxious state, however he felt that the label may be transitional and that upon him having a further test he would no longer fall into the dyslexic category; further complicating matters as he would not be eligible to access support and this would further confirm the doubts that James carried regarding his intelligence:

*"I do realise that the only way these questions can really be answered is to re-do the assessment, however bearing in mind I will, I'll just get as nervous as last time[] when I looked over the assessment, OK, taking into account*

*that I was very nervous at the time, but I always see that in myself, maybe I'm deliberately making myself nervous, so I'll never find out if I'm crap."*

The guidance and encouragement of his mother provided James with much needed support, and his lack of access to this type of support whilst away from home was a concern. James readily identified his need for support throughout the sessions and although he had come up with many ways of managing his study skills (colour coding, listing, memorising etc.) he remained concerned about this. James was concerned with the apparent ineffectiveness of support strategies, which had been put in place for him, and consequently his ability to complete his course.

**Fig. 3 Table of Major Themes: James**

	James
<b>Looking for a reason</b>	
- making sense  - past experience	"...well, maybe I'm not dyslexic maybe I'm just a slow learner and yes found spelling extremely difficult because I'm stupid."  "...naturally I began to compare myself with these people who were coming on." (Talking about radio programme on dyslexia.)
<b>Social Comparison</b>	
- dyslexic 'others'  -Peers 'school'	"I can't even say it...(dyslexia) ...I must be the only one." " <u>I'm</u> not using it as an excuse. <u>I'm</u> not doing this because I'm one of these people who's trying to get extra help, sort of thing."
<b>Low self esteem</b>	
- self critical  - self doubt  - desperation	"I've got myself into this situation now where I feel rubbish and then er, I've also come out with mediocre exam grades as far as I see it."  "I'll be doing it and then all of a sudden I'll just start saying I can't do this, no chance, don't even bother, you know."  " I simply cannot keep up with the writing of lectures and extra reading, maybe this is how it should be, erm, maybe <u>I'm</u> stupid and too slow too er, too slow and stupid to be at university."
<b>Significant 'other'</b>	
- mother  - relating to researcher	"...at home I don't generally get like this, because you know, me Mum's there and she's always telling me, <u>you</u> can do this, you're <u>not</u> stupid, you can, you know...all the gen!"  " ...then if I'm just stupid, the next time I do the assessment, it might not show as being dyslexic, it might just show I'm stupid."
<b>Need for Support</b>	
	"I know the fact that this is the first year, I'm hitting these problems now, in the future if I don't get any support..."

## Results: 3

### **Preliminary list of Richard's transcripts:**

- Social comparison - study skills
- Social comparison - 'normal'
- Social comparison - 'dyslexic'
- Social comparison – undergraduate
- Social comparison – postgraduate
- Time pressures
- Past experience
- Self understanding – awareness
- Self understanding - positive/negative
- Self understanding - study skills
- Self understanding – learning
- Desperation
- 'Other self' - pre dyslexia
- 'Other self' – family
- 'Other self' – work
- Personal need to understand dyslexia
- Problems – self
- Problems – system
- Stress – dyslexic
- Stress - 'normal'

The emergent themes are clustered as follows: **Richard**

- **social comparison**
  - stress
  - mature student
  - lecturers
  - 'normal'
- **self understanding**
  - awareness
  - (positive/negative)
  - study skills
  - learning

- **past experience**
  - work
  - pre-dyslexic
  - Access course
  
- **other self**
  - marriage
  - home
  
- **constraints of system**
  - time
  - theoretical constraints

### **Detailed Conceptual Analysis: Richard**

Richard had entered Higher Education as a mature student, after many years of running his own company. He was urged by his wife to go for a dyslexia assessment in the first year of his undergraduate course. Richard talks of the *diagnosis* of his dyslexia, and how it helped him to understand the way he processed information:

*"When I was diagnosed as being dyslexic, I got max score for verbal comprehension, but I got worst score for processing visual information, and since that has been pointed out to me, I realise, I can relate to where my problems lie."*

Whilst Richard was able to spend time evaluating the outcome of his dyslexia assessment, he had found the transition to university as a mature student very stressful and questioned at what level this was due to dyslexia. The first theme to emerge from Richard's transcript was that of 'social comparison':

*"If I'm nervous because we're having an exam, so is everyone else, that's normal...but what level am I stressed? Because I'm dyslexic or because I know I've not done the work - that level of stress."*

Richard felt particularly stressed about taking examinations and felt that his poor study skills added to his stress levels, as he was not able to engage with the course:

*"I'm so behind, I feel I've just not latched onto the course in any way at all, by not being able to relate to, and this applies to the majority of subjects, I feel as though I've missed something vital and it's stopped me getting hold of what it is I need to know."*

In contrast to his own struggle producing the written word, Richard felt that other students had some way of prioritising and subsequently producing their work:

*"...well, in normal circumstances no doubt everyone else manages, or gets by or has other methods in which they can allocate time or decide whether they need to spend as much time on this and this...I can't make this decision, I don't know, I've said it before, I don't have a filter system."*

In his first semester Richard reached a stage where he was unable to produce written work and became increasingly stressed. He spoke of normal stressful situations (examinations) and the stress that he felt he experienced over and above exam nerves:

*"...well, that is normal, that is a normal sort of stressful situation, which I should be able to cope with...the stress I can't cope with is not knowing what I should know and not knowing if I'm going to need it in the exam."*

Richard felt that a part of his difficulty was working within the university system and, hence, the second theme to be considered is that of 'system constraints'.

Richard talks of being dictated to; having to adapt to the system and the difficulties that this causes him when managing his studies:

*"It's dictated to me, the curriculum, the system, and me...the system says today I've got to attend lectures. I would like to be able to go home and spend this afternoon, and do some work, and that's the way I feel I should be, but I'm, after two hours of lectures, I'm exhausted."*

The difficulties Richard faced in catching up with his course work were perceived as being exacerbated by the ongoing demands of the course; so much so that Richard felt he was unable to gain any ground:

*"...there isn't enough, like I said I'm trying to catch up on work that's done months ago, hammer on with that, but the exam's going to come at the end of the course and I'm only just coming to terms with the vocabulary and the early stages of the course, and I'm never going to be in a position probably to understand the question properly."*

Richard's understanding of his style of learning and the impact that it was having on the management of his course gave rise to the third theme: 'self understanding'.

Richard expressed difficulty keeping to deadlines and felt that he was falling behind in his work, especially prior to the examination period. Whilst he was able to identify those elements that he found difficult in managing his course, and able to distinguish between his performance when not under pressure to complete work, he was, however, unable to specify those elements which would improve his study skills; ironically this is compounded by lack of time, in order to meet his current deadlines:

*"I'm not understanding anything as I should or gaining anything from what I'm doing with it, because tomorrow I can't afford time to continue doing it, because I've got to get on to the next bit [] but again the study skills I'm having to practice to see what works better, I've not got the time for that, I've not got the time to apply the stuff I've been shown."*

Richard had been receiving 'subject-specific' support, working with a post-graduate student in his department; whilst he saw this as being productive he felt that the time taken defeated its purpose:

*"...well again, that (post-grad) is in itself beneficial, but it is at a rate of progress which is so slow, it's actually helped me to get into study again without necessarily being productive with what I study, it's one aspect of what I need to know, it's stuff I should have done at the very beginning of the course, erm, if the progress is slow, so it's not really helped."*

In addition, Richard felt that although he was able to access this type of support, and at a time which fitted in with his timetable, his difficulties retaining the information persisted:

*"...he (post-grad) sets questions at a mutually agreeable pace, and it's suggested that I try to read the questions to take out all the details, well I tend to be good at that, so what I've been doing is reading the stuff and then looking at the questions, seeing if I can remember, that's another problem, seeing whether I can remember...or understand the question relative to what's being read."*

Richard spoke of his difficulties not just getting through the work and absorbing it, but being able to 'remember' and utilise it in the exam situation.

The fourth theme to emerge is that of 'past experience', and Richard talks of his present difficulties in light of his previous work experience:

*"I tend to be: I've made my point, short and brief and they want more and I'm not ...I'm used to working again, the other way, often in the past I've had to compile a load of technical information and condense it into a set of instructions, or advertising material all the points you need to say concise and neat, I can't do it the other way, I can't pad it out."*

Richard's sees his concise way of writing to be in conflict with the style that is expected of him at university:

*"I've always been able to go off and do things because I know the sequence of events, because it seems innate, you've got to do something, it's like if you were going down town shopping at lunch time you'd know you've got to get out of the building, down the street, turn left, you wouldn't, you'd put down go to Boots, WH Smiths, go to Woollies...you might write that down but you wouldn't go, go out the gate, walk down the street, catch a bus, you know! At what point does what's innate, where's the transition between what's natural to do and what you have to write down in some formal structure?"*

Richard was able to identify his preferred style of learning and this, in turn, enabled him to gain an awareness of where his difficulties lay:



*"...now if she'd have said: here's what we've done, here's what we need to know, these are the figures, I could cope with that, it's the vocabulary business that, and this ...that's the problem, it's processing the information."*

The fifth theme to emerge is other self; Richard talks of the additional stress he feels he is under and the impact that this has on his home life:

*"We've got plans to re-do the kitchen but it was getting me wife down and she said about the state of the kitchen and I just blew me top, because it was one more thing I couldn't handle[] you know I tend to take things as they come and on the strength of it damaging our relationship, I was going to pack it in, I wasn't going to allow this to happen so...but she persuaded me not to."*

Richard also talked of the difficulty of dividing his time between home and university:

*"...it's not just the studies, everything else is getting to look like that too, the house, I spent half of yesterday underneath the car[] it had to be done, I should have been studying yesterday but, I had time set aside for it and I was doing it and that's it...I don't have any choice about it I'm just dictated to."*

Although Richard felt that he had little control over his situation, he was able to see an improvement in his study skills and the support that his wife gave him clearly helped him to structure his time more effectively:

*"My wife did me a programme to work to [] it looked like quite a daunting day's work, yet it wasn't that difficult and yet a month ago I wouldn't ever have been able to attempt it."*

**Fig.4 Table of Major Themes: Richard**

Richard	
<b>1. Social Comparison</b>	
<ul style="list-style-type: none"> <li>- stress</li> <li>- mature student</li> <li>- lecturers</li> <li>- 'normal'</li> </ul>	<p>"...but what level am I stressed... because I'm dyslexic or because I know I've not done the work - that level of stress."</p> <p>"...you know...as a mature student you have the realities of life, so you've got the experience to go on."</p> <p>"Well the problem I find is, I get the impression that these people have never been in the real world."</p> <p>"Well in normal circumstances no doubt everyone else manages."</p>
<b>2. Self Understanding</b>	
<ul style="list-style-type: none"> <li>- awareness (positive/negative)</li> <li>- study skills</li> </ul>	<p>"When I was diagnosed as being dyslexic, I got max. score for verbal comprehension, but I got the worst score for processing visual information and since that has been pointed out to me, I realise, I can relate to where my problems lie."</p> <p>"Well, one problem I have is just basic study skills."</p> <p>"...it's the vocabulary business that, and this ...that's the problem it's processing the information..."</p>
<b>3. Past Experience</b>	
<ul style="list-style-type: none"> <li>- work</li> <li>- pre-dyslexic</li> <li>- Access course</li> </ul>	<p>"I've spent a life time working in the opposite direction."</p> <p>"When I started on the Access course they said, 'oh, you've got to come to terms with Word Processing'; this is before I was dyslexic!"</p> <p>"... people have suggested, my wife, we've done it in study skills groups and it sounds so logical and yet it's something I just don't seem to be able to get to grips with ."</p>
<b>4. Other Self</b>	
<ul style="list-style-type: none"> <li>- marriage</li> <li>- home</li> </ul>	<p>"...on the strength of me damaging our relationship, I was going to pack it in (course)."</p> <p>"...when there's all these other things which are lined up waiting to be done and it's the whole ...it's not just the studies..."</p>
<b>5. Constraints of System</b>	
<ul style="list-style-type: none"> <li>- time</li> <li>- theoretical constraints</li> </ul>	<p>"It's dictated to me, the curriculum, the system...the system says I've got to attend lectures - I would like to be able to go home and spend all this afternoon...and do some of the work ."</p> <p>"When you're reading stuff you think, no it's not, you look at some stuff from an anthropologist, and you know that he's looking from the outside, at what people are doing and interpreting it, in his way, but you can put yourself in the position of those, and think, oh no."</p>

## Results: 4

### Preliminary list of Deborah's transcripts:

- Past experience 'other self'
- Accepting dyslexia - personal
- Need to understand - deal with
- Self understanding - learning style
- Confidence - insight-awareness
- Depression/desperation/frustration
- Support - appropriate-required-friends
- Significant others - Mum/Brother/Father
- Study skills-essays-colour-Mind Maps...
- Planning-targets-interest
- Compensating-Techniques-Managing
- Social comparison - dyslexic-Brother-Dad
- Social comparison - peers(students)
- Social comparison - acquaintances
- Information overload - people-social
- Stress - writing
- Control

The emergent themes are clustered as follows: **Deborah**

- **self understanding**
  - accepting dyslexia
  - awareness (positive/negative)
  - study skills
  - control
  
- **social comparison**
  - dyslexic 'others'
  - peers – students
  - acquaintances

- **need for support**
  - appropriate
  - family/friends
  - 'outside agency'
  
- **significant 'others'**
  - sibling
  - parents
  
- **Past experience**
  - Depression
  - Frustration
  - desperation

### **Detailed conceptual analysis: Deborah**

When asked about her experience in higher education, Deborah first talked about her school experience and the circumstances that led her to have a dyslexia assessment. Deborah's younger brother had been assessed as dyslexic and she spoke of her father's dyslexia. Although reticent to have an assessment, she was persuaded by her mother when in the lower sixth form:

*"Mum's a teacher so she studied, started reading books and that, and my dad's really dyslexic but he didn't realise that so Mum nagged me for about nine months to get the assessment done, but I completely blocked her, I just basically, and then I finally gave in, I just thought well I might as well get it done, and I just sort of found out and I suppose a year after that I was still in shock."*

Deborah's initial reserve at having a dyslexia assessment was followed by a period of denial:

*"I almost blocked it out, Mum wanted to talk about it and she kept using things like 'hidden handicap' and I just blocked it out, basically I stonewalled anything to do with it, you know I knew, and then it's only been in the last well six months or so that I've been here, I've been telling people [ ] It's really only in about the last six months I am dyslexic!"*

Despite this initial uncertainty and apprehension about accepting the dyslexia label, Deborah had identified and gained an understanding of what implications her dyslexia had at that time in her studies. Thus, the first theme to emerge was 'self understanding' and it was apparent that Deborah had a strong insight into what it meant for her to be dyslexic:

*"I've had a long time to work out what it actually is thinking about it, I see it as a difference but I also see it as part of me, because it does influence who I am and it does influence a lot of things so it's part and parcel of me."*

Throughout the sessions it became apparent that Deborah valued being in control of her course work, and in order to manage her learning needs at university she spoke of the strategies she used when studying:

*"I do mind maps[ ] I do that for everything, shopping lists, thoughts, everything, erm, so I've got that done, maybe they're a bit muddled but I'm getting there."*

Deborah's confidence in her study skills techniques became very evident after she reeled off a list of techniques that she was familiar with:

*"I've got all my study skills routine up to a tee, where I can sail now."*

In addition to her knowledge of her strengths, Deborah was readily able to identify where her weakness lay and this, in turn, had encouraged her to work on ways of managing her studies:

*"I was actually working on them before I was diagnosed dyslexic, it's just survival techniques isn't it? So you grab hold of what you can in the darkness[ ] I read study books and stuff, its erm, its freeing up the ideas, I've been trying to do because when I didn't know what the problem was I used to get more scared."*

Being in control of her course is something which comes across as extremely important to Deborah, she talks of a need to be in control:

*"Oh, I definitely like to be in control, yeah[ ] maybe that was one of the reasons that I chose the degree that I'm doing, the people I'm studying – you*

*don't really get much more controlled than the Chinese and Japanese [] but the idea of being in control is definitely something that I like, because when I'm not , I just don't cope well, I mean sometimes I think yeah loosen up, I just, it just doesn't work[] because I don't have enough time not to be in control."*

Deborah's understanding of dyslexia in relation to her own experience, and that of other dyslexic people she has known, appears to have enabled her to gain an understanding of her preferred style of learning. She talks of the contrast between 'perfectionist' and 'laid back' personalities and relates this to 'other' dyslexic friends/peers/relations she has known:

*"I've been going to these dyslexia workshops as well and er, they're all perfectionists in a way, it's quite amusing in a way, it shouldn't go hand in hand –dyslexia and perfectionism []...the thing is the people that I've known in my life as dyslexic have either come into it like perfectionists who push themselves through because they're perfectionists and get there, like me because I've got here, and those ones that just bumble through. My brother is just a bumbler, he's more dyslexic than I am and in some ways it just frees him up 'cause it's almost as if he doesn't care because he forgets instantaneously."*

Deborah talks about a 'need for support' on a number of levels. Initially, her concern is with appropriate support; support that was reflective of her individual needs and the instances when she has been offered or expected to accept support, which she felt herself to be ineffective:

*"...they think they have to teach you , they get out the time planning book and all this stuff and you know, how to spell or you know just that way of thinking ...I just didn't need another person telling me' [] 'I've tried 'tape recorders', but I don't do anything auditory, so that is really well, that's a red herring."*

Deborah was able to identify what it was that made writing so difficult for her and was confident in the strategies that she had put in place to manage her learning:

*"It annoys me, they always say oh you need 'time management', time management, I mean, I can you know, it's just intelligence you can work out*

*how much time it is, I mean the thing is I make so many, you know...critical path analysis, working backwards, it's not that, it's the emotional things that get thrown in that throw it off, I mean I can add up time just like the next person."*

Deborah had set up a number of sessions at the local Dyslexia Institute whilst in her first semester and, although she did not feel that she used them fully, she was readily able to recognise effective ways of managing the sessions to suit her needs:

*"It works out that I have an hour a week to help me with my writing, so that should hypothetically help me, but it doesn't because I've very rarely done any work before I go down, in order to work on it in the class, so it could work excellently but I haven't managed it yet."*

**Fig.5 Table of Major Themes: Deborah**

<b>Deborah</b>	
<b>1. Self Understanding</b>	
<ul style="list-style-type: none"> <li>- accepting dyslexia</li> <li>- awareness (positive/negative)</li> <li>- study Skills</li> <li>- control</li> </ul>	<p>"I almost blocked it out, my mum wanted to talk about it and she kept using things like 'hidden handicap' and I just blocked it out."</p> <p>"I see it as a difference, but I also see it as part of me, because it does influence who I am and it does influence allot of things-so it's part and parcel of me."</p> <p>"I was actually working on them before I was diagnosed dyslexic – it's just survival techniques isn't it? So you grab hold of whatever in the darkness."</p> <p>"The idea of being in control is definitely something that I like, because when I'm not, I just don't cope well, I mean sometimes I think yeah, loosen up I just - it just doesn't work."</p>
<b>2. Social comparison</b>	
<ul style="list-style-type: none"> <li>- dyslexic 'others'</li> <li>- peers – students</li> <li>- acquaintances</li> </ul>	<p>"I kind of realised from the outside perspective what was going on and how really dyslexic my Dad and my brother are...the information will percolate in their head, which I've noticed before but I hadn't really noticed what a disability it was, so that he couldn't understand what I was saying."</p> <p>"Er, I don't know everyone else is in that position (not getting handouts) I don't think I necessarily..."</p> <p>"When you come into a new group you can't say, 'the reason why I'm not saying anything is der der der.'"</p>
<b>Need for Support</b>	
<ul style="list-style-type: none"> <li>- appropriate</li> <li>- inappropriate</li> <li>- family/friends</li> </ul>	<p>"...like I thought it would be all like questioning me -'what do you need this for', but they were like -'are you sure you don't want this' and I was like - god these people are treating me like a person."</p> <p>"...they think they have to teach you , they get out the time planning book and all this stuff and you know, how to spell or you know just that way of thinking ...I just didn't need another person telling me."</p> <p>"I went through hell writing it, but it freed the wall enough to get through it, to start writing and then my Vick came in and she arranged key sentences and stuff and I got through it."</p>
<b>4. Significant 'others'</b>	
<ul style="list-style-type: none"> <li>- sibling</li> <li>- parents</li> </ul>	<p>"Making sure I've done like 25% of what he needs to do that day, I mean, to be pre-organised and written down, just what we're gonna do for the day to make us happy to keep the household running you know."</p> <p>"My mum said, I wouldn't be able to do my degree without support."</p>
<b>5. Past experience</b>	
<ul style="list-style-type: none"> <li>- depression</li> <li>- frustration</li> <li>- desperation</li> </ul>	<p>"I sat down in depression for about two weeks!"</p> <p>"I get like this, you just do it again, it's just really really annoying in a stupid way' ...cos I nearly left school, just I was too exhausted to do it! erm, I don't know how I would have kept going like that."</p>



# Conclusions

## Conceptual Analysis: Major Themes

For each individual, the process of managing their learning and gaining appropriate support was very specific. Whilst able to offer a framework within which to view these differing substantive perspectives, the individual accounts stand alone in offering an understanding of 'what it is like' to be dyslexic and to study in higher education for four individual students. Subsequently, offering up a collective view of the 'experience' of these four individuals may add to our understanding of an all too illusive social phenomenon: 'dyslexia', and the impact that it can have on students' management of their course.

## Theme 1: Looking for a Reason

This first theme ran throughout all participants' transcripts; the following extracts illustrate the issues concerned. It is interesting to note the differing personal, subjective experiences of participants in relation to the theme 'looking for a reason'. As one would expect, this brings for each individual a different set of questions.

### Narratives

#### Clare

*"I was a thick student in the class at school, and I was the one who had reading lessons, but did quite well at science, and I was really confused at school and had a hell of a time."*

For Clare, the initial impetus for self-referring for a dyslexia assessment, was to prove to herself that she was not *thick*.

*"All I wanted from the assessment was so that I knew I wasn't thick, to boost my self esteem which was really, really silly, but there you go."*

Irrespective of the dichotomy of Clare being accepted on a university course, Clare believed that she was in some way intellectually inferior to her peers. However, coming forward for the assessment, although enabling Clare to understand her former and present struggles, caused her considerable confusion and placed her in a difficult position with regard to her department:

*"If I'm given clinical notes to read, I've got to have more time [], they(department) are putting a very great block up, I feel it might just be my feelings but obviously I find it very difficult to cope with."*

Therefore, Clare's initial need to make sense of her past learning experiences is compounded by a need to make sense of her dyslexia and the perception that she now feels others (tutors/peers) have of her abilities. Her need to understand dyslexia, following her assessment, is further exacerbated as she feels she has no knowledge of what dyslexia is:

*"No one asked me to come and have an assessment and since then I've had more problems with the university than enough because one of the major reasons I'm here (guidance support session) is I don't actually know what dyslexia is."*

Therefore, for Clare, the main concern within the theme 'looking for a reason', was to understand her past learning experience and the impact that dyslexia had in relation to her present studies.

### **James**

James' need to 'look for a reason', brings a different agenda to light. Initially, he came forward for the assessment to identify why he was struggling and putting in extensive hours of study on his course; feeling that his study time was over and above that of his peers. The inclusion of an IQ test had thrown him into a total panic and he had found it extremely difficult to dismiss the notion that he was 'stupid'.

*"...well maybe I'm not dyslexic, maybe I'm just a slow learner and yes found spelling extremely difficult because I'm stupid."*

Hence, for James, 'looking for a reason' meant moving away from the *stupid* label and accepting the dyslexic one. However, this proved to be a very difficult transition for him to make and one that was complicated further by the perception he had of his performance in the assessment arena. As mentioned earlier, James found the IQ test very daunting, and when told he was about to undertake such a test he became very anxious. Even though James was able to accept that his anxious state would have a detrimental effect on the score that he generated in the

assessment, he was unable to reconcile that his score would have most probably increased had he been more relaxed:

*"OK, taking in to account that I was very nervous at the time but I always see that in myself...even though I know at the time I was nervous I always look at myself...maybe I'm deliberately making myself nervous so I'll never find out if I'm crap or not."*

This feeling of failure ran throughout James' transcript and, within this particular theme, his need to look for a reason is clearly a very complex one.

### **Richard**

Richard's need to 'look for a reason' enabled him to identify those areas of weakness that he found he struggled with when using language. Initially, Richard talks of *diagnosis*, and how it helped him to understand how he processed information.

*"When I was diagnosed as being dyslexic, I got max. score for verbal comprehension but I got the worst score for processing visual information and since that has been pointed out to me, I realise I can relate to where my problems lie."*

Richard then sees this as creating a barrier between what is expected of him and how he feels his skills are some how *static*; feeling that he has not the time to improve them.

*"Well, in normal circumstances no doubt everyone else manages, or gets by or has other methods in which they can allocate time or decide whether they need to spend as much time on this and this...I can't make this decision...I don't know...I've said it before... I don't seem to have a filter system."*

Richard was increasingly frustrated by a lack of understanding of his learning needs and felt that teaching methods were not geared to his style of learning.

*"...it's the vocabulary business that and this...that's the problem; it's processing the information..."*

Therefore, in Richard's case, the need to look for a reason, although initially providing useful insights into his learning style, unfortunately created a block where he felt unable to use compensatory strategies in order to adapt to the system.

### **Deborah**

For Deborah, the theme 'looking for a reason' brings a very positive appraisal of her dyslexia assessment. She talked of dyslexia as being something which was intrinsic to her: '*part and parcel of her*', and of how it helped her to justify why she struggled when producing written work:

*"I see it as a difference, but I also see it as part of me, because it does influence who I am and it does influence a lot of things so it's part and parcel of me."*

It is also interesting to note Deborah's overall acceptance of the label; however, she too talks of a period of denial following her initial assessment and the encouragement of her mother:

*'My Mum wanted to talk about it and she kept using things like hidden handicap and I just blocked it out basically I stone walled anything to do with it.'*

Following her assessment, Deborah talked of the relief of knowing why she had struggled with the production of written work:

*"When I didn't know what the problem was I used to get more scared, more closed and I used to try and write everything[]having not known what the problem was, my technique was to close up as much as possible."*

Following her assessment, Deborah talked of the need to hone in on her study skills and to re-address her former difficulties; something she felt confident that she had achieved.

*"I've got all my study skills routine up to a tee where I can sail now."*

Therefore, for Deborah, the assessment enabled her to understand her style of learning and, although she spoke of the strain of emotional aspects of written work, she felt she was in control of her learning.

**Fig 6. Table of Major Theme 1: Looking for a Reason**

<b>Theme 1 Looking for a reason</b>		
<b>Sub themes</b>		
<b>Making sense</b>	<b>Finding strategies</b>	<b>Past experience</b>
<p><b>Clare</b></p> <p>"All I wanted from the assessment was so that I knew that I wasn't thick, to boost my self esteem, which is really really really silly, but there you go."</p>	<p>"so I'm looking for some coping strategies"</p>	<p>"I was a thick student in the class at school, and I was the one who had reading lessons, but did quite well at science, and I was really confused at school and had a hell of a time"</p>
<p><b>James</b></p> <p>"Well, maybe I'm not dyslexic maybe I'm just a slow learner and yes found spelling extremely difficult because I'm, stupid."</p>	<p>"As soon as somebody tells me I can't do something I will prove them wrong."</p>	<p>"It only took one of the teachers to say you weren't going in and you didn't go in, low and behold it was only the English that said no."</p>
<p><b>Richard</b></p> <p>"When I was diagnosed as being dyslexic, I got max. score for verbal comprehension, but I got the worst score for processing visual information and since that has been pointed out to me, I realise, I can relate to where my problems lie."</p>	<p>"...people have suggested, my wife, we've done it in study skills groups and it sounds so logical and yet it's something I just don't seem to be able to get to grips with."<i>(planning/structure)</i></p>	<p>"I've spent a life time working in the opposite direction."</p>
<p><b>Deborah</b></p> <p>"I see it as a difference but I also see it as part of me, because it does influence who I am and it does influence allot of things-so it's part and parcel of me." (Dyslexia)</p>	<p>"I was actually working on them before I was diagnosed dyslexic - it's just survival techniques isn't it? so you grab hold of whatever in the darkness." (strategies)</p>	<p>"...'cos I nearly left school, just I was too exhausted to do it! erm, I don't know how I would have kept going like that."</p>

**Theme 2: Social Comparison**

The second major theme to be considered is that of 'social comparison'; whilst demonstrating an interpretation of the feelings involved in identifying with the dyslexic label, it is, once again, a process for which each individual has their own agenda.

## Clare

Although Clare initially talked of the frustration of not knowing what dyslexia was, both on a personal level and a general one, she, nevertheless, seemed readily able to identify with the dyslexic label and talked both about other dyslexic students and non-dyslexic students on her course. In the first place, Clare talked about the difficulties she felt she faced over and above those of other students and the need for her to have more time to complete work:

*"I can do it if I work at it, but I mean somebody would have taken it home and done it in a night and it took me all week to do."*

Clare perceived that other students did not struggle in the way that she did when writing assignments and, although she considered that she had adequate knowledge, she felt constrained by her literacy skills:

*"The whole world revolves around the fact that if you can write an essay you must be intelligent and if you can't write an essay then you must be dumb and so I fit neatly into there I was dumb and hopeless and it was really frustrating because I know I know lots of things[ ] when I read somebody else's they weren't, they hadn't as much knowledge as I had but they can just write."*

Although Clare identified with the dyslexic label (and the notion of belonging to that group) she talked about the difficulties that this brought; she felt dyslexia was not well understood by her department, as they discouraged the recommendations put forward in her Assessment of Need Report:

*"If I can't spell it I can sit for 15 minutes and I still can't spell the word, it doesn't help, but if you're a normal person or what ever normal is, these 15 minutes obviously would help so they can't work out that I'm not just getting this great big advantage."*

Therefore, for Clare, the theme of social comparison brought with it much frustration; although she accepted she had the required knowledge to succeed on her course, she felt that her ability to demonstrate her skills was inferior to that of her peers. In addition, she considered that her difficulties were unsupported by her department and this caused her additional pressure.

## James

For James, the theme of 'social comparison' brought with it a complex set of values. James made comparisons on a number of levels, however, he had much difficulty accepting the dyslexic label and this invariably caused him much concern. He talked of a need to compare himself with other dyslexic individuals and found that he had doubts about belonging to that group:

*"I'm not using it as an excuse. I'm not doing this because I'm one of these people who's trying to get extra help sort of thing."*

Secondly, James commented on his need for more time and the support that came with being dyslexic, however, again, he was concerned about belonging to that group:

*"Without the extra help and time which being dyslexic brings I would stand no chance of doing a degree which is true because I can't keep up, yeah, as I simply can not keep up with the writing up of lectures and the extra reading."*

James had great difficulty identifying where he belonged and although he made reference to the fact that he fared worse when being compared to his non-dyslexic peers, he talked at length of the frustration involved in accepting that he was dyslexic:

*"While I was at home I also dug up some of my old school books and flicked through them to see how bad, as it were, I really was then and surely enough, yes, my spelling was terrible, along with all the other things that you would expect from someone who is dyslexic, but the point is I can see these now, which you know, mistakes now, so then I would say to myself, "Well maybe I'm not dyslexic, I'm just a slow learner and yes, I found spelling extremely difficult because I'm stupid.""*

Furthermore, James had very high standards for himself and, although he attained a grade B in his A' level examinations, he was frustrated by the fact that his peers attained A grades:

*"I still only came out with a damn B; two other people did the same and they both came out with damn As."*

Therefore, it would seem that for James, the theme of social comparison involves a multitude of issues that are compounded by his difficulty accepting the label and the high standards he sets for himself.

### **Richard**

Richard talked of the difference between his work and that of everyone else; similar to Clare, he talked of his belief that his peers did not struggle when producing written work:

*"Well, in normal circumstances, no doubt everyone else manages."*

He talked of his problems in relation to other students on the course and how this affected his performance:

*"I get a scribe and word processor and I dictate, but it's only dictating what I remember of the essay that was probably shorter than anyone else's."*

Richard did, however, talk of *normal* stress and questioned his level of stress in terms of being normal or due to dyslexia:

*"...but what level am I stressed? Because I'm dyslexic, or because I know I've not done the work? That level of stress?"*

Therefore, although Richard talked about the differences between himself and his non-dyslexic peers, he also questioned his performance in light of what he termed 'normal', i.e. normal levels of stress; irrespective of dyslexia. So, whilst he made the distinction between his learning style and that of others, he also recognised that other factors impeded his performance and acknowledged that his peers also experienced difficulties.



## Deborah

*"I kind of realised, from the outside perspective, what was going on and how really dyslexic my Dad and my brother are...the information will percolate in their head, which I've noticed before, but I hadn't really noticed what a disability it was, so that he couldn't understand what I was saying."*

Whilst Deborah talked of *disability* in relation to her brother and father, and their experience of dyslexia, she spoke of her own coping mechanisms and the way in which she viewed her own study skills; identifying with her peers and the notion that she might work differently but that she had the same demands placed on her in relation to completing the course. Although she talked of a difference, her perception of her non-dyslexic peers was in contrast to that of the other participants as she acknowledged the struggles that they might have and was able to identify with them.

*"I don't know, everyone else is in that position."*

It is interesting to note that Deborah's perception of her difference in processing style was something which she, herself, had found ways of managing and, although she made the link between the amount of work needed to finish assignments, rather than assigning this to external demands, she justified it as being the way that she worked.

*"Those techniques I mentioned don't take up more time, they actually take less and that's why I've done them. So, even though it sounds like a lot, it makes it quicker for me, so I don't know if I spend more time doing it; in fact, sometimes I'll spend a lot less, because I'll go straight to the conceptual stage, rather than the logical one."*

Therefore, whilst Deborah made distinctions between herself and her peers, she spoke more in terms of her coping mechanisms and the benefits of gearing study skills toward her individual style of learning, whilst acknowledging that others too find the writing process a demanding one.

**Fig 7. Table of Major Theme 2: Social Comparison**

Theme 2 Social Comparison			
Sub themes			
Peers (University/school)	Study skills	Stress	Dyslexic 'other'
<p><b>Clare</b> "Somebody would have taken it and done it in a night and it took me a whole week to do my comprehension."</p>	<p>"If it's reading, I've got to have more time."</p>	<p>"So, we're (dyslexic friend) very worried and we don't know what to do and it makes exams twice as stressful."</p>	<p>"It's been said to one of the other (dyslexic) girls that maybe she shouldn't have the extra time because she's coping anyway...we're under so much pressure at the moment."</p>
<p><b>James</b> "Two other people did the same and they both came out with damn As."</p>	<p>"/ simply cannot keep up with the writing of lectures and extra reading."</p>		<p>"Naturally, I began to compare myself with these people who were coming on." (Talking about radio programme on dyslexia.)</p>
<p><b>Richard</b> "Well, in normal circumstances no doubt everyone else manages."</p>	<p>"I get a scribe and word processor, and I dictate, but it's only dictating what I remember of the essay...that was probably shorter than anyone else's."</p>	<p>"...but what level am I stressed... because I'm dyslexic or because I know I've not done the work - that level of stress?"</p>	
<p><b>Deborah</b> "I wasn't really behind, I just had to work and basically I didn't have a social life at all for five years, but I did mountains of work." (Pre-assessment.)  "I was always top in my class."</p>	<p>"Those techniques I mentioned don't take up more time, they actually take less and that's why I've done that. So, even though it sounds like a lot it makes it quicker for me, so I don't know if I spend more time doing it, in fact sometimes I'll spend a lot less because I'll go straight to the conceptual stage rather than the logical one".</p>	<p>"Actually, I left the writing to the end, I got a bit stressed, it was the same scenario of my essay writing and I er, snapped into I can't write, I do want to do East Asian studies but I can't write, so I'm going to Art school."</p>	<p>"I kind of realised from the outside perspective what was going on and how really dyslexic my Dad and my brother are...the information will percolate in their head, which I've noticed before, but I hadn't really noticed what a disability it was, so that he couldn't understand what I was saying."</p>

**Theme 3: Low Self-Esteem**

Low self-esteem was an issue, at some stage, throughout the transcripts of all participants. As one might imagine, this undoubtedly varies in degree and in nature from one person to another. In addition, throughout the transcripts themselves, the

self-esteem of participants is something that changes, depending on the situations to which they are referring.

## Clare

For Clare, low self-esteem was a major concern and was something that she, herself, hoped would improve following her dyslexia assessment. Clare talks of her experience at school and the effect that it had on her confidence. She talks of how her confidence is something that she feels incapable of enhancement:

*"It's so ingrained in me; maybe younger people who are picked up earlier...I've spent so long as something, but coming to university has helped and having an assessment was wonderful, because it meant I'm thick and stupid for a reason; I'm not just thick and stupid."*

Initially, Clare spoke of a need to have an explanation for her difficulties at school and she talked in terms of being a 'thick' kid and the realisation that she viewed herself as being 'thick' for a reason; that reason being dyslexia. The difficulties she encountered managing her course, caused Clare immense frustration and, at times, she felt that she could not sustain her self throughout the course\;

*"I could almost cry at the things I know I've got to do and I just can't be bothered anymore to a certain extent, because it's just, it's just such a hassle, [ ] so I'm doomed really; I give up now."*

Hence, within the theme of low self-esteem, Clare talked of the difficulties she faced improving her confidence; attributing her performance throughout school to being 'thick' and 'stupid'. Whilst she acknowledged that her assessment answered her questions in terms of why she struggled throughout her school years, she did not feel able to dispense with the notion that she was in some way less intelligent than her peers. Furthermore, Clare did not feel confident when requesting support from her department, even though this was requested in her assessment of need report.

*"The problem is I've actually done quite well in my exams, so then they're saying, well you've obviously done quite well, so you don't need the extra time, because this extra time is just making you do really well, [ ] I was*

*meant to have a scribe, but if I even mentioned that to the department, they just, they'd just throw me out."*

Hence, her experience of dyslexia at university is compounded by a lack of understanding as to what dyslexia is. She spoke of the need, both to understand it and to be able to explain her difficulties to her department, as being paramount to her progression on her course.

## **James**

James' profound low self-esteem and lack of confidence played a fundamental role in his ability to accept the outcome of his dyslexia assessment. He continually wrestled with the idea that he should not be at university and felt at times that he was unable to continue on his course:

*"...maybe this is how it should be, maybe I'm stupid and too slow, too slow and stupid, to be at university."*

The inclusion of the IQ test caused James much concern. He talked in terms of the extreme hard work that he had to do in order to stay on track, this he perceived as an indication that he had no natural ability.

*"...going around in my mind, you're here not because you're intelligent, you're here because you've just worked extremely hard and there's no natural ability there."*

James had very high standards for himself and talked of his disappointment in achieving a B grade at A' Level, when his peers attained As; feeling that he had worked twice as hard to accomplish what he viewed as second best. He talked about the support of his mother and the need to hear her words of encouragement:

*"...because, you know, me Mum's there and she's always telling me you can do this, you're not stupid, you can; all the gen'. However as soon as I come away and nobody is here to do this, I automatically begin to think I'm stupid; a failure."*

Therefore, James experienced particular difficulty within the theme of low self-esteem, not only in relation to his performance on his course, but with regard to the isolation he felt, as he no longer had the support of his mother.

### **Richard**

Richard's experience, in relation to the theme of low self-esteem, seemed rooted in his ability to complete his course:

*"I don't even have the confidence to think I'll be able to answer the question."*

His low self-esteem is compounded further by his reticence to engage with, and try out, different learning strategies. Undoubtedly, this seems inextricably linked to the pressure he felt under in terms of keeping on top of his work-load and he spoke of occasions when it all just got too much:

*"I feel as though I'm achieving a little ...but it's not enough that's the problem, I'm not going to get that, that's not going to be possible[ ] there are times when I just want to walk away from it."*

Therefore, within this theme, Richard's experience of low self-esteem hinders his progression and the development and application of any compensatory strategies he might have considered or been shown.

### **Deborah**

Deborah's experience of low self-esteem appeared to be fixed within her experience of writing. She talked of periods of depression and related these times to when she had large amounts of written work to complete:

*"...having enough trust in myself to let go of my ideas, where I can pull it together afterwards, it's quite frightening actually putting all your ideas out, it's quite, there's a lot of confidence involved."*

Deborah talked about a need to be in control and, when in control, felt extremely confident in her abilities; but any problems in work, social settings, study or with family, and her confidence became much lower. Deborah, akin to Richard, also

talked of times when she wanted to leave her course and times when she felt like running off to art school:

*"I got a bit stressed, it was the same scenario of my essay writing and er I snapped into I can't write. I do want to do East Asian studies, but I can't write so I'm going to art school."*

Deborah's experience of low self-esteem seemed more linked to the frustration that she felt within herself and her awareness of her capabilities. She talked of not remembering how things affected her when writing; always making the same mistakes:

*"I get like this, you just do it again, it's just really, really annoying in a stupid way."*

Therefore, Deborah's experience of low self-esteem seems concentrated around the production of written work and the cyclical process she experiences; generating enough confidence in herself to put her ideas down in written form, continually being 'thrown' by the emotional trauma of the writing process.

**Fig. 8 Table of Major Theme 3: Low Self-Esteem**

<b>Theme 3 Low Self-Esteem</b>		
<b>Sub themes</b>		
<b>Self critical</b>	<b>Self doubt</b>	<b>Desperation</b>
<p><b>Clare</b> "I was just a thick kid."</p>	<p>"I've not got any judgement."</p>	<p>"I'm hopeless really, it's so sad."</p>
<p><b>James</b> "I've got myself into this situation now where I feel rubbish and then er, I've also come out with mediocre exam grades as far as I see it."</p>	<p>"I'll be doing it and then all of a sudden I'll just start saying I can't do this, no chance, don't even bother, you know."</p>	<p>" / simply cannot keep up with the writing of lectures and extra reading, maybe this is how it should be, erm, maybe I'm stupid and too slow to er, too slow and stupid to be at university."</p>
<p><b>Richard</b> "I don't even have the confidence to be able to think that I'll be able to answer the question."</p>	<p>"I feel as though I'm achieving a little ...but it's not enough that's the problem, I'm not going to get that, that's not going to be possible..."</p>	<p>"There are times when I just want to walk away from it."</p>
<p><b>Deborah</b> "I'm just so annoyed that I get like this, you just do it again, it's just really really annoying in a stupid way."</p>		<p>"It's just like, it'll take me a week to just like drag myself up and then get my priorities straight and then start ."</p>

#### **Theme 4: Need for Appropriate Support**

The fourth theme, brings together the experiences of the participants in relation to support; it is, once again, interesting to note the different levels of 'appraisal' of support from each of the participants.

#### **Clare**

For Clare, the theme ' need for appropriate support' is central to her progression on her course. Clare talks of feeling marginalised, and the negative appraisal that she believes her course tutors now have of her as a result of the dyslexia assessment and subsequent Assessment of Need Recommendations Report:

*"It's almost that when you want to talk no one wants to talk about it [ ] I was meant to have a scribe and if I mentioned that to the Department they just, they'd just throw me out."*

Whilst Clare felt supported by her dyslexia support officer, she did not feel comfortable about intervention between herself and her department; feeling that this would put her in an even more delicate position:

*"\*\*\*\*\*(disability officer) sort of said, well she could actually go to the department for me. I said well, that will just get me into more trouble. I will fail my course because I will have such bad press."*

Clare also talked about appropriate support and the need for her to have extra time to complete her work; this being something which was recommended in her report but which her department had not yet put in place:

*"...but the department doesn't want me to have any 15 minutes for written work, but they don't seem to understand if it's reading, if I'm given clinical notes to read, I've got to have more time."*

Therefore, for Clare, the issues surrounding appropriate support are very complex. Whilst she felt the recommendations put forward in her Assessment of Need Report would enable her to complete her course more effectively, she did not feel confident requesting support from her department.



## James

James' experience of appropriate support was, once again, intensely related to his inability to accept the dyslexic label. On one level, the difficulty James faced was in relation to the need for extra time. Whilst this was something which he currently received, he felt that it would be taken away from him should he not be identified as dyslexic upon further assessment; something which James genuinely worried about:

*"I know the fact that this is the first year, I'm hitting these problems now, in the future if I don't get any support [ ]without the extra help and time which being dyslexic brings I would stand no chance of doing a degree."*

On another level, James felt that he had to justify the need for additional support and was eager to point out that his reasons were valid and that he was not using dyslexia as an excuse.

## Richard

For Richard, the main concern was with time constraints; he felt dictated to on his course and spoke of the need to have time to employ the different study skills he had been shown, feeling he had made no progress in applying them:

*"It's dictated to me, the curriculum, the system, and me...the system says today I've got to attend lectures. I would like to be able to go home and spend this afternoon, and do some work, and that's the way I feel I should be, but I'm, after two hours of lectures, I'm exhausted."*

Richard expressed the need to access his course using more accessible vocabulary, and felt that he was behind as he was unable to process the information, in the format it was delivered:

*"Now if she'd have said here's what we've done, here's what we need to know, these are the figures, I could cope with that, it's the vocabulary business that, and this ...that's the problem it's processing the information."*

In addition, he spoke of the difficulties of using a scribe in his exams and the demands that this placed on him, with regard to both remembering and structuring information:

*"I get a scribe and word processor and I dictate, but it's only dictating what I remember of the essay that was probably shorter than anyone else's."*

## **Deborah**

For, 'Deborah', the need was for support which reflected the stage she felt she was at in identifying and understanding her learning needs. She talked of the inappropriate nature of support that she had been offered, in that it was not geared to the difficulties she felt she experienced, but rather more to the support tutors model of what was needed. Deborah talks of her experience of inappropriate support as being both patronising and ineffective:

*"...they think they have to teach you , they get out the time planning book and all this stuff and you know, how to spell or you know just that way of thinking ...I just didn't need another person telling me."*

**Fig 9. Table of Major Themes 4: Need for Appropriate Support**

<b>Theme 4 Need for Appropriate Support</b>		
<b>Sub themes</b>		
<b>Department</b>	<b>Support - access</b>	<b>Support - specific</b>
<p><b>Clare</b>                      "If I can't spell it, I can sit for 15 minutes and I still can't spell the word, it doesn't help, but if you're a normal person - or what ever normal is - erm, these 15 minutes obviously would help, so they can't work out that I'm not just getting this great big advantage".</p>	<p>"****(disability officer) sort of said, well she could actually go to the Dental Hospital for me. I said well, that will just get me into more trouble. I will fail my course because I will have such bad press".</p>	<p>'so I'm looking for some coping strategies'</p>
<p><b>James</b></p>	<p>I'm not using it as an excuse. I'm not doing this because I'm one of these people who's trying to get extra help, sort of thing".</p>	<p>"I know the fact that this is the first year, I'm hitting these problems now, in the future if I don't get any support...".</p>
<p><b>Richard</b>                      'It's dictated to me, the curriculum, the system, and me...the system says today I've got to attend lectures. I would like to be able to go home and spend this afternoon, and do some work, and that's the way I feel I should be, but I'm, after two hours of lectures, I'm exhausted'.</p>	<p>'but again the study skills I'm having to practice to see what works better, I've not got the time for that, I've not got the time to apply the stuff I've been shown'.</p>	<p>'now if she'd have said here's what we've done, here's what we need to know, these are the figures, I could cope with that, it's the vocabulary business that, and this ...that's the problem it's processing the information'.</p>
<p><b>Deborah</b></p>	<p>'...like I thought it would be all like questioning me -'what do you need this for', but they were like-'are you sure you don't want this' and I was like - god these people are treating me like a person'.</p>	<p>'...they think they have to teach you , they get out the time planning book and all this stuff and you know, how to spell or you know just that way of thinking ...I just didn't need another person telling me'.</p>

## Discussion

As stated earlier, the study was designed to evaluate the impact of dyslexia on the subjective experiences of students in HE; I would hope that the above narrative account goes some way to offering an insight into what it was like for those dyslexic students involved in the study. Exploring how the four participants managed their weaknesses in learning style, in order to manage their courses effectively. In the following discussion, the four themes generated from the case studies are presented. As mentioned earlier in this chapter, the accounts can sit equally well across all four themes. Essentially, when one observes the themes collectively it is the participants' need to develop an understanding of their particular learning style, which becomes apparent. In terms of the theme looking for a reason, by participants looking back on previous education and also their experience within higher education. Evaluating individual learning styles in comparison with peers, is demonstrated within the theme of social comparison. Within the theme low self-esteem was the need for participants to move away from a negative appraisal of ability. And finally, searching for and identifying suitable types of support is included within the theme of need for appropriate support. Certainly the themes developed from the case studies sit well in terms of the research generated by Gerber, et al, (1992)(see literature review pg 23. for an in-depth discussion of their findings) in that participants progressed through various stages of awareness in the development/understanding of their particular strengths and weaknesses and it was apparent that each participant differed in the level they had achieved.

### Looking for a reason

Within the first theme, looking for a reason, as one would expect, this was something for which each individual had their own agenda. For Clare 'finding out about strategies' was a central concern and, indeed, was the main reason that she had come forward for assessment/support. Upon reflection, Clare was able to acknowledge that the compensatory strategies (CS) she had been employing (for example, when learning subject-specific vocabulary) were in themselves a very effective way of remembering; drawing on the principles of mnemonic learning. Deborah, in contrast to Clare, felt that she had dealt with dyslexia and talked of working and learning in a different way. For Richard, it was the frustration that he himself did not have time to apply those CS that he had been shown. And finally,

for James, the difficulties he faced in coming to terms with dyslexia appeared to be very much compounded by his reticence to accept the label.

Throughout the sessions, Clare became more aware of the ways in which she was using CS, and the effectiveness of such techniques, however, although she was able to acknowledge the management of her difficulties, she found it very difficult to form a positive appraisal of her learning style. James, although very able to identify his CS, felt that they were not effective in managing his course. He talked of the immense amount of time that was involved in employing such techniques and his anguish that they were not as effective as they should be; worrying that at a later stage he would not be able to keep up with the requirements of the course. Richard expressed much concern about the ineffectiveness of his CS and although he was able to identify those skills that would be useful to him, he felt that he had no time to use such techniques. Deborah, in contrast to the other participants, felt very confident in the CS she employed, explaining that they lessened the amount of work that she needed to do. Deborah's evaluation of her learning style, was a very positive one; one in which she talks of a difference, rather than a difficulty.

### Social Comparison

Within the theme of social comparison, Clare talked of the difficulties she felt she faced over and above those of fellow students and the need for her to have more time to complete her work. Perceiving that her peers did not struggle to complete written work and that her skills were inferior. Essentially, James struggled to accept the dyslexic label and the notion of belonging to that group however he readily accepted his need to have additional time to complete his work. Furthermore, James set very high standards for himself and resented the fact that he attained a B grade in his A Level examination, when his peers attained A' Grades. For Richard it was the feeling that his peers did not struggle when producing written work. However whilst he made contrasts between himself and his fellow students, he questioned the extent to which other factors, for example stress, interrupted his performance and acknowledged that this was something which his non-dyslexic peers had to contend with. Whilst Deborah talked of the differences in learning style in relation to her non-dyslexic peers, she readily identified with the notion that equal demands were placed on them with regard to completing the course, acknowledging that others find the writing process demanding too.

## Low Self Esteem

For Clare, low self-esteem was a major concern, one which she hoped would improve as a result of having her assessment. She talked of the effect that her school experience had on her confidence, something which she felt she was unable to enhance, referring to herself as being a thick kid. She did not feel that the assessment had allowed her to redress these beliefs and was frustrated by the difficulties she encountered securing support from her department. James experienced profound low self-esteem and continually wrestled throughout the sessions with the idea that he should not be at university, referring to himself as being slow and stupid. James felt that the amount of hard work he had to do to complete work merely reflected the fact that he had no natural ability. Richard's experience appeared fixed in his ability to complete the course, he spoke of those times when he just wanted to walk away. Deborah's experience was centred on the writing process and periods of depression that occurred when writing, when she felt like running off to art school.

## Need for appropriate support

The fourth theme need for appropriate support proved very different for each individual. Clare did not feel supported by her department. She felt that rather than her Assessment of Need Report providing clear and useful information to her department, it had, in fact, created a barrier to her success on the course as she felt that she was now seen as a difficulty and an annoyance, by her tutors. Although Clare felt that the recommendations put forward in the report would enable her to manage her course more effectively, the frustration that such recommendations (e.g. extra time in examinations and use of a scribe) were not being put in place, caused her immense concern and she felt unsupported. James' experience of support was in contrast to Clare's, his need was for assurance that support would not be taken away as he felt that should this happen he would in no way be able to manage. James commented on his embarrassment at being a drain on support staff; he worried that he was too demanding of their time. Richard had support from a post-graduate in his department, although he described this as good, he felt he was still unable to manage his course effectively due to time constraints. He had had access to dyslexia-specific study skills, but talked about his inability to use the techniques he had been shown as he was so far behind in his reading and course work. Furthermore, Richard had used a scribe in examinations, however he was concerned about his ability to dictate enough information. Deborah talked of the need for support

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to be geared to her style of learning. She spoke of the inappropriateness of support she had been offered, commenting on the ineffectiveness of some of the CS she had been shown and the patronising attitudes she had encountered. It is interesting to note Deborah's appraisal of the support she had been offered and the level of awareness that she has of her individual needs. She talks, not of the mechanics of learning, but the emotional aspects of producing written work, and the need for support at that stage.

Certainly the case studies have highlighted the need for dyslexic students to understand their individual learning style in order to develop weaknesses and build on strengths, in essence managing differences in learning. Particularly in light of the constraints placed upon them within education, especially in higher education where there is a greater emphasis on self directed study. And on an institutional level, for example, the need for additional time to complete written work, access to accommodations in examinations to compensate for fragile literacy skills when under time constraints, accessible format of text based material, study skills support; the opportunity to discuss and develop an understanding of dyslexia.

The themes presented from the analysis of Study Two, form the basis of the next study and should be kept in mind when reading Chapter 6: Study 3 Questionnaire.

## Chapter 6:

### Study 3: Questionnaire

#### Overview

This chapter presents the findings from the questionnaire employed within Study Three, in which items were generated building on the themes from Study Two (see Chapter 4). As questionnaires can be distributed widely throughout the target population, in this case dyslexic students within UK universities, they allow for further study into the experience of dyslexic students and, therefore, add to the research question being asked within this thesis. (For a discussion of overall design and distribution (procedure) see methodology Chapter 3) The results will be presented with an analysis of the findings in the form of descriptive and inferential statistics.

#### Questionnaire Analysis

##### Results of Study 3: Descriptive Statistics

###### 1. Respondents

Table 2 shows the gender/age characteristics of the 86 respondents who participated in the study.

**Table 2: Table Representing Respondent Characteristics**

Number	Mean age in years	Minimum age	Maximum age	Standard deviation
86	24.38	19.00	47.00	6.99
<b>Male</b>				
38	23.97	19.00	45.00	6.82
<b>Female</b>				
48	24.71	19.00	47.00	7.18

Of the 86 respondents, 38 were male and 48 were female, with a mean age range of 23.97 and 24.71, respectively. Of the 86 respondents, 41 were studying at a traditional university and 45 were studying at a new university.



Of the 86 respondents, 82 were studying full time and 4 were studying part time; 94.3% and 4.7%, respectively.

Of the 38 female respondents, 26 were studying at a traditional university and 22 were studying at a new university. Of the 48 male respondents, 15 were studying at a traditional university and 23 were studying at a new university.

**Table 3: Table Representing Age at First Dyslexia Assessment**

<b>Number</b>	<b>Mean age in years</b>	<b>Minimum age</b>	<b>Maximum age</b>	<b>Standard deviation</b>
86	18.64	5.00	47.00	9.10
<b>Male</b>				
38	15.79	5.00	41.00	8.87
<b>Female</b>				
48	20.90	8.00	47.00	8.71

Of the 86 respondents, the mean age at first assessment was 18.64. Of the 38 male respondents the mean age at first assessment was 15.97, with a minimum of 5 years and a maximum of 41 years. Of the 48 female respondents the mean age at first assessment was 20.90, with a minimum age of 8 years and a maximum of 47 years.

Analysis of these data by means of an independent measures t-test revealed this was a significant difference ( $t = -2.68$ ,  $d.f. 84$ ,  $p = 0.009$ ); male respondents receiving assessment significantly earlier in age than female respondents.

**Table 4: Proportion of Respondents with a Family History of Dyslexia**

	<b>Number</b>	<b>Mean age (in years) of first assessment</b>	<b>Minimum Age</b>	<b>Maximum age</b>	<b>Standard deviation</b>
Family history	42	16.79	6.00	47	9.60
No family history	44	20.41	5.00	41	8.31

Of the 86 respondents, 42 reported a family history of dyslexia, whilst 44 did not. The mean age at first assessment for those respondents **with** a family history of dyslexia was 16.79, the minimum age was 6.00 and the maximum was 47 with a standard deviation of 9.60. The mean age at first assessment for those **without** a family history of dyslexia was 20.41, the minimum age was 5.00 and the maximum was 41 with a standard deviation of 8.31.

Analysis of these data by means of an independent measures t-test did not reveal a significant difference ( $t = -1.87$ ,  $d.f. 84$ ,  $p = 0.064$ ) between those with a family history of dyslexia and those with no family history, in relation to receiving earlier assessment.

**Table 5: Overview of Part 1 Questionnaire Responses**

<b>Descriptive</b>	<b>Total No. Respondents = 86</b>	<b>Male N = 38</b>	<b>Female N = 48</b>
<b>Part Time</b>	4		
<b>Full Time</b>	82		
<b>New University</b>	45	23	22
<b>Traditional University</b>	41	15	26
<b>Assessment prior to 16</b>	35	21	14
<b>Assessment prior to 16 years and support at school</b>	26	18	8
<b>Assessment prior to 16 years and NO support at school</b>	9	3	6
<b>Support received at school</b>	34	20	14
<b>Support at University</b>	66		
<b>Students in receipt of DSA</b>	65		
<b>Students in receipt of DSA at New University</b>	40		
<b>Students in receipt of DSA at Traditional University</b>	25		

Of the 86 respondents, 34 reported that they had received support at school, whilst 52 reported that they had not.

Of the 48 female respondents, 14 reported that they had received support at school, whilst 34 reported that they had not.

Of the 38 male respondents, 20 reported that they had received support at school, whilst 18 reported that they had not.

Analysis of these data by means of an independent measures t-test showed a significant difference ( $t = -2.22$ ,  $d.f. 75.67$ ,  $p = 0.029$ ) between males and females who received support; males reporting a higher incidence of support than females.

Of the 35 respondents who had received assessment prior to 16 years of age, 26 had received support at school, whilst 9 had not; 74% and 26%, respectively. Of the 35 respondents who received assessment prior to 16 years of age and received school support, 21 were male and 14 were female. Of the 21 males, 18 reported that they received school support and 3 reported that they did not. Of the 14 females, 8 reported that they received school support, whilst 6 reported that they did not.

Of the 86 respondents, 66 were receiving support at university, whilst 20 respondents were not; 76.7% and 23.3%, respectively.

Of the 86 respondents, 65 were receiving DSA and 21 were not receiving DSA; 75.6% and 24.4%, respectively.

Of the 41 respondents studying at a traditional university, 25 were in receipt of DSA and 16 were not; 61% and 39%, respectively. Of the 45 respondents studying at a new university, 40 were in receipt of DSA and 5 were not; 88.9% and 11.1%, respectively.

Of the 86 respondents, 34.9% were in their 1<sup>st</sup> year, 32.6% were in their 2<sup>nd</sup> year, 27.9% were in their 3<sup>rd</sup> year, 3.5% were in their 4<sup>th</sup> year and 1.2% were in their 5<sup>th</sup> year of study.

**Table 6: Course Details of Respondents**

Course	N =	%
Arts	34	39.5
Science	10	11.6
Engineering	9	10.5
Social Sciences	8	9.3
Nursing	6	7.0
Medicine	6	7.0
Architecture	5	5.8
Social Work	4	4.7
Law	2	2.3
Accounts	1	1.2
Teaching	1	1.2

Of the 86 respondents, the highest course percentage of 39.5% was assigned to those students studying for an arts degree. While 11.6% was assigned to those students studying for a science degree. The third largest group was those studying for an engineering degree: 10.5%. Architecture was the fourth highest course rate with 9.3%. An equal number of students were studying for both nursing and medical degrees: 7%. 5.8% of the respondents were studying for a social science degree, whilst 4.7 were studying to be social workers. An equal number of respondents were studying for a degree in teaching and accounting; 1.2%, respectively.

#### Course Details Relating to Those Students Studying at a Traditional University

Of the 41 respondents studying at a traditional university, the highest course percentage of 41.5% was assigned to those studying for an arts degree. The second highest percentage was 12.2%, which was assigned to both medicine and architecture. The fourth highest course rate, with 9.8%, was for those respondents studying for a science degree. Engineering, nursing and social sciences had a course rate of 7.3%. And finally, 2.4% was assigned to those respondents studying for a degree in teaching.

## Course Details Relating to Those Students Studying at a New University

Of the 45 respondents studying at a new university, the highest course rate of 37.8% was assigned to those studying for an arts degree. Both science and engineering accounted for 13.3%. The third highest course rate was for those studying for a social sciences degree: 11.1%. The fourth highest course rate group, with a percentage of 8.9%, was for social work, followed by 6.7% of respondents studying for a nursing degree and 4.4% studying law. Both medicine and accounting were assigned 2.2%.

### Male Respondents Course Details

Of the 38 male respondents, 36.8% were studying for an arts degree, followed by 15.8% who were studying for an engineering degree. 13.2% were studying for a science degree and 10.5% were studying for a nursing degree. 7.9% were studying for a degree in the social sciences, and both medicine and architecture received an equal percentage of 5.3%. An equal percentage of 2.6% of the respondents were studying for degrees in law and accounting.

### Female Respondents Course Details

Of the 48 female respondents, 41.7% were studying for an arts degree, followed by an equal percentage of 10.4% for those respondents studying for a degree in social science and science. 8.3% of respondents were studying for degrees in medicine and 8.3% for social work, followed by 6.3% who were studying for an engineering degree and 6.3% who were studying for a degree in architecture. 4.2% were studying for a degree in nursing and, finally, an equal number, 2.1%, were studying for degrees in law and teaching.

## Section 2: Questionnaire Items

**Table 7: Questionnaire Items Listed in Highest to Lowest Response Rate (%)**

**Highest response N 1-10**

N	Questionnaire Number	Agree	Neither agree nor disagree	Disagree
1.	<b>17</b> I know that if I improve my writing and spelling, I'll still be dyslexic.	91.9%	5.8%	2.3%
2.	<b>27</b> I'd like to find 'long-term' solutions to my difficulties.	87%	11.6%	1.2%
3.	<b>3</b> I value extra time in exams.	82.6%	8.1%	9.3%
4.	<b>1</b> I have a clear understanding what dyslexia is.	82.6%	5.8%	10.5%
5.	<b>22</b> It's important to me that I find ways to become independent in my work.	79.1%	14%	6.9%
6.	<b>2</b> The difficulty is getting things down on paper.	77%	14%	5.8%
7.	<b>30</b> I feel I am just as intelligent as anyone else on my course.	75.6%	10.4%	14%
8.	<b>7</b> It's weak STM* that I find the most annoying consequence of dyslexia.	75.6%	14%	10.4%
9.	<b>13</b> I worry about telling future employers about my dyslexia.	73.3%	10.5%	16.2%
10.	<b>16</b> I get embarrassed when reading aloud.	73.3%	9.3%	17.4%

**Table 8: Highest Response N 11-20**

N	Questionnaire Number	Agree	Neither agree nor disagree	Disagree
11.	<b>31</b> I feel confident using my computer.	73.3%	12.6%	14.1%
12.	<b>5</b> I feel I am a valued group member.	72.1%	17.4%	10.5%
13.	<b>23</b> I have to be very organised; if not everything would fall apart!	72.1%	15.1%	12.8%
14.	<b>28</b> I'm sure I sometimes come across as 'a bit dippy'!	70.9%	11.6%	17.5%
15.	<b>4</b> I will always be a bad speller.	70.9%	14%	16.2%
16.	<b>39</b> I feel I offer future employers the same qualities as my non-dyslexic peers (fellow students).	68.6%	5.8%	25.6%
17.	<b>8</b> Sometimes I get angry when I think about my school years.	67.4%	16.3%	16.3%
18.	<b>33</b> I find it difficult to manage my time effectively.	65.1%	5.9%	29%
19.	<b>24</b> I check my work thoroughly and ask a friend to read through it.	64%	12.8%	23.2%
20.	<b>25</b> I find it difficult to explain what dyslexia is.	64%	18.6%	17.4%



**Table 9: Highest Response N 21-30**

N	Questionnaire Number	Agree	Neither agree nor disagree	Disagree
21.	<b>40</b> I like to be up-front about my dyslexia with lecturers.	59.3%	18.6%	22.1%
22.	<b>41</b> I find group work very helpful.	53.5%	23.3%	23.2%
23.	<b>10</b> I feel the support I've been offered has helped me to become an independent learner.	53.5%	26.7%	19.8%
24.	<b>45</b> I prefer to work to my own deadlines.	53.5%	23.3%	23.2%
25.	<b>19</b> I sometimes doubt my 'intelligence'.	50%	11.6%	38.4%
26.	<b>29</b> Lecturers/tutors don't understand what dyslexia is.	50%	32.6%	17.4%
27.	<b>38</b> I feel in control of my course work.	47.7%	10.5%	41.8%
28.	<b>37</b> I do not feel guilty about getting equipment.	46.5%	20.9%	32.6%
29.	<b>9</b> I consider myself 'average' at written work.	45.3%	11.6%	43.1%
30.	<b>21</b> I'm not very confident about myself.	39.5%	23.3%	37.2%

**Table 10: Highest Response N 31-40**

N	Questionnaire Number	Agree	Neither agree nor disagree	Disagree
31.	<b>35</b> I don't know how to get the most out of my computer.	36%	17.4%	46.6%
32.	<b>15</b> I feel guilty about getting all this equipment.	36%	18.6%	45.4%
33.	<b>42</b> I sometimes think I should just give up the course.	34.9%	5.8%	59.3%
34.	<b>6</b> I find it 'annoying' when people say I suffer from dyslexia.	32.5%	32.6%	34.9%
35.	<b>43</b> I feel embarrassed using a tape recorder in lectures.	32.6%	51.2%	16.2%
36.	<b>20</b> I'd say my spelling is now average.	30.2%	14%	55.8%
37.	<b>36</b> I feel confident about reading aloud.	26.7%	11.6%	61.7%
38.	<b>44</b> I don't really know what dyslexia is.	25.6%	5.8%	68.6%
39.	<b>18</b> I prefer NOT to tell lectures/tutors that I'm dyslexic.	26.7%	23.3%	50%
40.	<b>12</b> No one has explained 'dyslexia' to me.	25.6%	11.6%	62.8%

**Table 11: Highest Response N 41-45**

<b>N</b>	<b>Questionnaire Number</b>	<b>Agree</b>	<b>Neither agree nor disagree</b>	<b>Disagree</b>
41.	<b>11</b> <b>I prefer to use a tape recorder in lectures.</b>	23.3%	40.7%	36%
42.	<b>32</b> <b>I worry that if I improve I won't get the support.</b>	22.1%	31.4%	46.5%
43.	<b>26</b> <b>My parents didn't support me.</b>	16.3%	10.5%	73.2%
44.	<b>14</b> <b>My parents felt they let me down.</b>	15.2%	27.8%	57%
45.	<b>34</b> <b>I tape lectures but it's not helpful.</b>	14%	67.4%	18.6%

## Summary of Questionnaire Results

The above results will be presented within the four themes generated from the participants' transcripts in Study Two, and in light of the overall exploration of understanding learning style, which encompasses the four themes:

- **Looking for a reason**
- **Social Comparison**
- **Low self-esteem**
- **Need for appropriate support**
- **Understanding learning style**

The themes are used as a framework to view the response rate of items/questions on the questionnaire. As mentioned previously, the questionnaire items can sit equally well across the themes. I have chosen to summarise the results in this way in order to illuminate the responses made and to compare the findings of Study Three in light of the themes developed in Study Two.

### **Theme 1: Looking For a Reason**

#### **Question 1: 'I have a clear understanding of what dyslexia is'**

82.6% of respondents agreed with this statement. Whilst this is very encouraging and suggests that the respondents have been offered information and support, and have, likewise, developed their own understanding of how dyslexia affects them on a personal level, caution is needed when summarising the results of such an item. Whilst it might be the case that those respondents who agree with the above statement have a clear understanding of what dyslexia is, this, in itself, is not suggestive that their understanding is an accurate one. Take, for example, a student who has been misinformed and does not feel there is any scope for improvement of their literacy skills. In order to further evaluate the response from question 1 it seems appropriate to consider the response rate of additional items which sit well within this first theme.

Question 1 was reversed in question 44: **'I don't really know what dyslexia is'**.

One might expect, from the response rate of question 1, that the majority of

respondents would have disagreed with the above statement and, indeed, this is the case: 68.6% of respondents disagreeing with the reversed statement in item 44.

Question 17 sits well within this theme: **'I know that if I improve my writing and spelling, I'll still be dyslexic'**. This received the highest 'agree' response rate of all items on the questionnaire: 91.1%. Again, this is a very encouraging result and suggestive that the respondents involved in this particular study have a sound sense of what dyslexia means to them.

Likewise for question 22: **'It's important to me that I find ways to become independent in my work'**. This item received a response rate of 79.1% agreement from respondents; again this is favourable as it suggests that the respondents wish to take responsibility for their learning and develop successful ways of managing their course.

Question 27: **'I'd like to find long-term solutions to my problems'** builds on question 22 above. This question received a response rate of 87.2%; the second highest 'agree' response rate of the questionnaire. Again, this is very favourable as it suggests that respondents wish to develop their skills and ultimately 'manage' their dyslexia.

Question 40 also builds on this theme: **'no one has explained dyslexia to me'**, 62.8% of respondents disagreed with this statement and, again, this is very encouraging. Interestingly, however, 25.6% of respondents agreed with the above statement, suggesting that they had not been given or been offered information other than a 'label'; this is worrying at least.

Question 32: **'I worry that if I improve I won't get the support'**. 46.5% of respondents disagreed with this statement; again this is promising and suggests that the respondents felt comfortable developing their skills. Once again there was a substantial agree response rate, 22.1%, suggesting that those respondents did not feel comfortable that support would be forthcoming should they develop their skills. 31.4% of respondents checked the 'neither agree nor disagree' category, which might suggest that the question was less explicit than would have been desired.

Question 25: **'I find it difficult to explain what dyslexia is'**. This received an 'agree' response rate of 64%, which at first sight seems to contradict the response rate from question 1: **'I have a clear understanding of what dyslexia is'**.

However, caution is needed when interpreting these results. Having an

understanding of something is one matter, but being able to convey that understanding is perhaps more complex.

Question 8: **'sometimes I get angry when I think about my school years'**, received an agree response rate of 67.4%; certainly, this is an issue which is raised regularly in the assessment of need setting and one which was discussed at length by participants in Study One.

Question 14: **' My parents felt they let me down'**. This item received an agree response rate of 15.2% and a disagree response rate of 57%. Question 14 was further evaluated in Question 26: **'My parents didn't support me'**. This item received an agree response rate of 16.3% and a disagree response rate of 73.2%. Clearly, from these response rates the majority of respondents felt supported by their parents. Indeed, this was an issue which was raised in the case study sessions and something which is discussed regularly in the assessment of need setting; students talking about the involvement of their parents in terms of accessing assessment and securing support.

## **Theme 2: Social Comparison**

Question 30: **'I feel I am just as intelligent as anyone on my course'**. This item received an agree response rate of 75.6%. This suggests that those participants who agreed with the above statement feel positive about their academic ability; again this is a very favourable outcome for this particular item.

The above question (no. 30) was reversed in question 19: **'I sometimes doubt my intelligence'**. One might have expected a low agree response rate for this item given the high agree response rate for question 30. However, it received an agree response rate of 50% and a disagree response of 38.4%. Upon closer inspection the reversed question: 'I sometimes doubt my intelligence', does not carry reference to 'peers' and therefore one might expect a more general response rate for this item across the student population.

Question 28: **'I'm sure I sometimes come across as a bit 'dippy'!**', received an agree response rate of 70.9%. Participants in Study One identified with the feeling of being 'dippy' and the response rate for this item certainly suggests that the majority of questionnaire respondents identify with the statement.

Question 5: **'I feel I am a valued group member'** received an agree response rate of 72.1%. Again, this is a very positive response, suggesting that those respondents who agreed with the statement felt comfortable contributing on their course.

The above item was further evaluated in Question 41: **'I find group work very helpful'**, this item received an agree response rate of 53.3% and a disagree response rate of 23.3%. Again, this is an encouraging response rate for those respondents who agreed with the item, suggesting that they feel comfortable engaging with their peer group.

### **Theme 3: Low Self Esteem**

Question 21: **'I'm not very confident about myself'**, received an agree response rate of 39.5% (15.1% checking 'totally agree'). Whilst this is indeed worrying, it is encouraging to see that 37.3% of respondents disagreed with the statement.

Question 16: **'I get embarrassed when reading aloud'** received an agree response rate of 73.3%. All participants in Study One expressed concern at having to read in seminars and discussions and the response rate for this item is in accordance with their concerns. Again, one has to be discerning about any conclusions drawn from this particular item, as reading in front of an audience can be quite a threatening scenario for everybody. Nonetheless, the high 'agree' response rate clearly demonstrates that the respondents did not feel comfortable reading out loud.

Question 36 was a reversal of question 16 (above): **'I feel confident about reading aloud'**. This item received an agree response rate of 26.7% and a disagree response rate of 61.5%; this is in line with the response generated in question 16.

Question 42: **'I sometimes think I should just give up the course'**. This item received an agree response rate of 34.9%. This was a concern for all the participants in Study One and it is worrying to acknowledge that 34.9% of respondents felt, at times, that they should leave their course. It is, however, very reassuring that 59.4% of respondents disagreed with the statement.

Question 13: **'I worry about telling future employers about my dyslexia'**. This item received an agree response rate of 73.3%; clearly, this is an undesirable response rate for this particular item and raises concern on a number of levels, including students' self esteem, equal opportunities, dyslexia awareness training.

Question 13 was further evaluated in question 39: '**I feel I offer future employers the same qualities as my non-dyslexic peers (fellow students)**'. This item received an agree response rate of 68.8% from respondents. This is a more favourable response for this item given the response from question 13, suggesting that the concern about disclosure is perhaps more related to misconceptions about dyslexia by employers per se. 25.6% of respondents disagreed with the item. Again, caution is needed when interpreting this response as it might well be that those respondents who disagreed with the statement feel they offer qualities over and above those of their fellow students.

Question 4: '**I will always be a bad speller**'. This item received an agree response rate of 70.0% and a disagree response rate of 16.2%. This response is worrying; suggesting, perhaps, that respondents who agreed with the above statement feel there is no scope for improvement with regard to their spelling skills.

The above question was further evaluated in question 20: '**I'd say my spelling is now average**'. This item received an agree response rate of 30.2%. Given the response rate for question 4, this is an encouraging response and suggests that those students who agreed with the statement consider their spelling in the average range. Clearly, the high disagree response rate (55.8%) for this item, suggest that the majority of respondents do not feel comfortable with their spelling skills.

#### **Theme 4: Need for Appropriate Support**

Question 29: '**Lecturers/tutors don't understand what dyslexia is**'. 50% of respondents agreed with this item; clearly, this is disappointing and suggests that respondents do not feel that their differences in learning are understood by their tutors/lecturers. Only 17.5% of respondents disagreed with this item. It is reassuring that this proportion of respondents disagreed with the statement, suggesting that they felt that their tutors/lecturers had an understanding of dyslexia.

Question 40: '**I like to be up-front about my dyslexia with lecturers**'. This item received an agree response rate of 59.3% and a disagree response rate of 22.2%. Given the response rate for the item above (29), it is encouraging that such a high proportion of respondents felt comfortable disclosing their dyslexia with lecturers. However that, in itself, is not suggestive that those respondents felt their lecturers were supportive/aware.

Question 40 was further evaluated in question 18: '**I prefer not to tell lectures/tutors that I'm dyslexic**'. This item received an agree response rate of



26.7% and a disagree response rate of 50% which is in line with the response rate for question 40.

Question 11: **'I prefer to use a tape recorder in lectures'**. Only 23.3% of respondents agreed with this statement. This suggests that the notion that certain equipment, in this case a recording device, is desired or appropriate for all dyslexic students is unfounded. 36% of respondents disagreed with the statement, leaving 40.7% neither agreeing nor disagreeing. Certainly, when carrying out assessment of needs with students I have encountered a large variation between students and it is imperative that they feel comfortable and at ease with recommended equipment, if it is to be both useful and manageable.

Question 11 was further evaluated in question 34: **'I tape lectures but it's not helpful'**. Given the response rate of question 11, one would imagine that this particular item (34) would receive a high agree response rate. However, only 14% of respondents agreed with the statement, suggesting that they did not find taping lectures useful. 18.7% disagreed with the statement, confirming that they did find taping lectures a useful study method. 67.4% of respondents neither agreed nor disagreed with the statement; again, caution must be taken with this response rate, it may well be that students had not experimented with recording equipment in lectures per se and therefore felt they could not respond either way.

Question 43 evaluated this particular method of support/study skill further with the following statement: **'I feel embarrassed using a tape recorder in lectures'**. This item received an agree response rate of 32.6%, neither agree nor disagree 51.2% and disagree 16.2%. Given the response rate for items 11 and 34, the responses for question 43 are in line with these; offering one particular explanation of why respondents prefer not to tape lectures.

Question 10 examined the theme of appropriate support in the following statement: **'I feel the support I've been offered has helped me to become an independent learner'**. This item received an agree response rate of 53.5% which is very reassuring, suggesting that those students feel they have benefited from the support they have received. Clearly, there is concern for those respondents who disagreed with the statement (19.8%) in that they do not feel that support has been beneficial to them. 26.7% of respondents neither disagreed nor agreed with the statement. Again, caution is needed interpreting this response rate with regard to the availability and offer of support.

Question 15: **'I feel guilty about getting all this equipment'**. This item received an agree response rate of 36%. Neither agree nor disagree, 18.6% and disagree, 45.4%. Question 37: **'I do not feel guilty about getting equipment'**, was a reversal of question 15. 46.5% agreed with the statement, whilst 32.6% disagreed, the remaining 20.9% neither agreed nor disagreed. Clearly, the response from these two items is consistent and suggests that, whilst some students feel guilty about receiving equipment, others do not. Certainly, this is an issue that was raised in the case studies in Study One and also an issue which arises within the assessment of need setting; some students feeling uncomfortable accepting DSA equipment whilst others do not.

Question 3: **'I value extra time in exams'**, received an agree response rate of 82.6%, suggesting that the majority of respondents value the provision of additional time in examinations. Again, this was an issue that was raised throughout the case study sessions in Study One, and is something which students regularly talk about in the assessment of need setting. Interestingly, 9.4% of respondents disagreed with the statement, suggesting that extra time was not valued.

### **Theme 5: Understanding Learning Style**

Question 2: **'the difficulty is getting things down on paper'**. This item received an agree response rate of 77%, suggesting that the majority of respondents found it difficult to express their thoughts on paper; this being an area discussed exhaustively throughout the case study sessions of Study One. Likewise, it is a major concern with the majority of students whom I come into contact with in the assessment of need setting. The item received a disagree response rate of 5.8%, suggesting that those respondents feel comfortable expressing their ideas in written form. However, it may be the case that those particular students who disagreed with the statement have fewer demands placed on them with regard to written work.

Question 9: **'I'd consider myself 'average' at written work'**, further evaluates question 2. Question 9 received an agree response rate of 45.3% and a disagree response rate of 43.1%, 11.6% neither agreeing nor disagreeing with the statement. The response rate suggests that whilst some respondents feel their written work falls within the 'average' range others do not; caution is needed interpreting this item however as some respondents may feel that their written skills are above average.

Question 23: **'I have to be organised; if not everything would fall apart!'**. This item received an agree response rate of 72.1%. Again this is a very favourable

response, acknowledging the need for respondents to practice sound organisational skills. This was an issue which was raised throughout the case study sessions of Study One.

**Question 7: 'It's weak short-term memory that I find the most annoying consequence of dyslexia'**. This received an agree response rate of 75.6%. Again, this is a concern of many of the students I encounter and a point raised throughout the case studies in Study One. As mentioned in Chapter One, Mcloughlin et al., (1994) cite short-term memory weakness as fundamental when referring to adult dyslexia, and the results from this particular item certainly qualify that assumption for the respondents who completed the questionnaire.

**Question 33: 'I find it difficult to manage my time effectively'**. This item received an agree response rate of 65.1% and a disagree response rate of 29%. Given the additional time required to produce written work, one can readily see that this would cause concern with regard to time management; again this is an area which is often discussed in the assessment of need setting.

**Question 45: 'I prefer to work to my own deadlines'** received an agree response rate of 53.5%. 23.3% of respondents checked the neither agree nor disagree category, the remaining 23.3% checked the disagree category. Again, this is encouraging, suggesting that the respondents who checked the agree category have an awareness of the additional time required to produce their written work.

**Question 24: 'I check my work thoroughly and ask a friend to read through it'**, received an agree response rate of 64% and a disagree response rate of 23.4%. Certainly, this was an issue that was raised throughout Study One, with participants commenting on the need to have their work checked by others as they often overlooked their mistakes. Indeed, this a concern for students I encounter in the assessment of need setting.

**Question 38: 'I feel in control of my course work'**. This item received an agree response rate of 47.7% from respondents, which is most favourable and suggests that those respondents feel able to manage their course in light of their dyslexia. However, 41.8% checked the disagree category suggesting that they did not feel in control of their course work and, clearly, this is not desirable for this particular item; suggesting that those students require support to develop their study skills and, in turn, manage their course more effectively.

Question 35: **'I don't know how to get the most out of my computer'**. This item received an agree response rate of 36%, suggesting that, if equipment is to be recommended, then it is crucial that initial and on-going support is provided in order for students to fully benefit. However, 46.5% of respondents disagreed with the statement, suggesting that they feel comfortable using their equipment; this is clearly more favourable.

Question 35 was further evaluated in question 31: **'I feel confident using my computer'**. This item received an agree response rate of 73.3%. This is, of course, reassuring, given the response rate from question 35. However, again caution is needed when evaluating the response; it might well be that students feel confident using their computer up to a point but they may feel there is potentially much more to be mastered with regard to their equipment.

Question 6: **'I find it 'annoying' when people say I suffer from dyslexia'**. This item received an agree response rate of 32.5%, a disagree response rate of 34.9% and neither agree nor disagree response rate of 32.6%. The response rates suggest that the item could perhaps have been more clearly worded. However, this is an area that was raised throughout the case study sessions and a concern that is raised in the assessment of need setting; students commenting on the positive aspects of dyslexia.

## **Responses From the Free Comment Section**

Respondents were requested to:

**'Please use the space below to comment on any aspects of dyslexia you feel have not been covered in this questionnaire.'**

Of the 86 respondents, 48 completed the 'free comment' section (56%). This is a very desirable outcome. The comments are presented in line with the five themes within the following section:

### **Looking for a Reason**

*'I do not fully understand what dyslexia is, coming to university has helped me to come to terms with admitting I am dyslexic.'*

*'I often wonder how far and how different things would have been if I was diagnosed dyslexic earlier - I still feel very angry about my dyslexia - but not sure why.'*

*'In the five years since realising my dyslexia I have gone through many stages of awareness of what it entails. In the past year it has become more and more evident that the psychological package of dyslexia shapes every facet of my life in some way. For example extreme fear of any change, or an 'all or nothing' mentality, or over thinking a subject laterally in concepts. I think this dyslexic 'personality' should be more documented and understood by teachers and lectures if they want students to get through the system. There is a lot more to helping us than merely from an academic angle. To be honest I haven't thought through a solution to this but I thought I'd raise the point'. 'Some times I even go as far as to think we are a breed apart.'*

## **Social Comparison**

*'Regarding my course, because I take an arts based subject (History) I feel that I get less understanding from my department/lecturers/tutor than people in science based subjects and other departments. There is a definite feeling that if you have a problem like dyslexia, you shouldn't be taking the course.'*

*'Some people who know I'm dyslexic ask me if I'm 'ok' or 'can do' relatively simple tasks (usually academics) and I find this slightly patronising.'*

*'Lecturers could be informed as to what dyslexia is and that the students don't need to be spoken to differently to the others. I come across this everyday with some tutors.'*

*'Lecturers don't understand, mostly they come from highly academic background and have difficulty recognising a different way of learning'.*

*'People stereotype that dyslexia will take a certain form, and they often won't accept you are dyslexic when it's not in the well known/typical form, eg. I don't get letters the wrong way 'round.'*

*'In general I perform better in exams that are not 100% essay based i.e. have maths in them or are multiple choice, due to a lack of essay writing skill. However I believe that I am equally skilled in the actual subject just that my knowledge of a subject is hard to translate in a 100% essay exam.'*

*'I feel the misunderstanding of dyslexia, by those who are not dyslexic is caused by their none knowledge of it, not in the fact of intelligence but by the none reading of researchers into dyslexia the professional neurologists, they only have limited knowledge of it, but are quick to judge.'*

*'Other people's knowledge of dyslexia; having had on going comments: "you're not dyslexic, you can't be, you're not stupid".'*

*'I am not, and never have been embarrassed or ashamed of being dyslexic - but many others are and maybe if it was a more openly discussed and know about topic this would help people to understand more about it and not feel second rate.'*

*'I have different qualities my non-dyslexic peers do not have - how dare you think having the same qualities as other people is a positive.'*

## **Low Self Esteem**

*'On feelings with dyslexia I wish I had not found out because it would not of been as much of a struggle. I would just been dumb and not attempted to prove that I can do a university course! But not all the time.'*

*'As well as reading aloud, in conversation, find it very frustrating when the appropriate word won't come to mind, but also lack confidence, often choosing a more basic term rather than fear of using an inappropriate, more sophisticated alternative.'*

*'I do think that my fear of reading outloud is getting worse and becoming a phobia.'*

*'Practical measures used to combat or get round difficulties - amateur dramatics to get over shyness talking to large groups.'*

*'The future worries me - who would possibly want to employ me?'*

## **Need For Appropriate Support**

*'The way in which some lecturers/tutors have no understanding of dyslexia. The way in which some lecturers/tutors offer no help to dyslexic students even when asked. The way in which some lecturers tutors show resentment*

*to dyslexic students after they help them. The way in which no help is offered to disabled students, dyslexic or otherwise unless the student 'pester' the university'. The slowness of the LEA in providing help to the student'.*

*'I feel I need specific help in overcoming my short term memory problems and how to concentrate when reading'.*

*'The assessment process at Sheffield & through the access centre has been v. slow, so I did not receive any support in my 1<sup>st</sup> year.*

*'I'd like to learn more about the equipment that has been given to me. Maybe a few meetings - to briefly go over things'.*

*'I don't think we get the right help from university both in lectures and in support group'.*

*'Constantly, through out education at school I found that teachers had an 'apparent' understanding + appreciation of the difficulties of the dyslexic student, yet in practice they had little consideration and knew none of the practicalities which would have helped me - especially expecting me to give in assignments with out extra time allowances. I was so thankful however + felt extremely crucial that I was allowed extra time in exams (external exams).*

*'I feel very angry that as a nursing student I don't receive any help or equipment, apart from extra time in exams and library books - I find it very unfair'.*

*'I completed an English degree 2 years ago and was delighted to get a 2:2 which was borderline 2:1. I had more help and support for that than the course I'm on at present. My reading ability is really high my organisational skills are not too good plus the fact that I write very slowly we are not allowed tape recorders'.*

*'At age 11, my parents had me tested for dyslexia and financed private support after school hours. My school provided no help'.*

*'My dyslexia was only discovered 3 days before my finals - after the initial test - I was allowed 15 minutes extra time in my second exam. However after this I have received no information about dyslexia, how to improve on my weaknesses & courses. I would like to be able to spell better and have more*

*confidence reading out loud - but don't know where to go or who can help. Finding out so late in my course completely knocked my confidence - and I found it very traumatic. Despite achieving a 2.1 degree I would have liked some more support.'*

*'There is a period inbetween being diagnosed as dyslexic + help/support coming in to action, which means theres a long wait before one feels your progressing - This is what I've found and am finding most frustrating about my dyslexia - I'm impatient to see results and feel I want to get on improving myself but don't know how!'*

*'while university has been very helpful and understanding with my dyslexia - the single sex private school I went to was terrible. They did not believe in the disability and everytime my Mum and I tried to get help from the LEA (ie equipment, extra time etc) my school was would stop us. I think major changes are needed within private schools'.*

*'I enclose problem I have faced since finding out that I have dyslexia. I went for my test in February and received my results in April. I gave a copy to my personal tutor. Her reply was to give the course up and if you want to work in the caring profession get a job as a care assistant. She is not supportive to any student only them that get 16/16 marks. On the 27<sup>th</sup> June she had me in front of the assistant dean. Telling me that I was a liability on the ward. My personal tutor accused me of cheating on my last assignment. I did not. She told the assistant dean that she was upset that she had not noticed my dyslexia and would have offered support/ Personal I feel she does not believe in dyslexia, therefore I am changing personal tutors. I am going to ask for a tutor who has had dyslexia students before and remaining on the course.'*

*'One problem is lecturers believe they know what it is but actually don't have a clue. have had to fight the department for adjustment and consideration with essays. Find I'm a lot slower + the problem is not what I write but how I write it, and often lecturers appear not to be bothered with trying to interpret it (fair enuf) but the sense is still there in my mind + I can discuss it more than adiquatly with them. I also find examinations are a particularly pointless almost torcherous exercise + have considered taking them as more of a form of torture + breech of human right than an academic exercise'.*



*'Physiotherapy - there is a lot of reading involved, medical cards/notes, note taking after every placement and abbreviations. I don't think dyslexics get enough support on clinical placements'.*

*'I feel the course that I am doing at this present moment, is not for me. The course I feel I need to be on I need my English GCSE-grade I have been given D because they did not know I had dyslexia, so they did not give my extra time and I was penalised'.*

*'I only get extra time/spell checker in big exams, but we have phase tests as well - I don't get any special treatment for these'.*

*'I feel very grateful for the support I receive as a dyslexic student'.*

*'well I don't know if it has much to do with dyslexia but I have really enjoyed attending the group session and it has boosted my confidence no end. I would also like to say thankyou to (support tutor) who has patiently listened to me rant and rave about life, dyslexia and people in general. As this has also enabled me to be more relaxed and confident in myself'.*

*'I feel the support of the group and other individuals are the best mean by which to deal with dyslexia. Once you start to succeed dyslexia is less of an issue'.*

*'Although , I personally am allowed 1 hour with a tutor per week for my reading, I have never meet this tutor and wouldn't even know where to contact he/she neither. After the learning contract is in place there should be another meeting to identify individuals needs and set up venues to meet tutors etc. also better guidance for exams. However apart from the above, the reminding services I have received have been brilliant. Keep up the good work.'*

*'I didn't know I was dyslexic till last year therefore I received no support and struggled. This year is totally different, my computer reads to my articles out to me, I tape my lectures, and I use all the learning strategies I have learnt, not to mention the support and encouragement I get from (support tutor). It has made a world of difference to me. Thankyou'.*

## Understanding Learning Style

*I do find dyslexia , eventhough I have learnt many techniques to deal with it, can be quite crippling in terms of memory skills, and especially having confidence reading out loud infront of many people. I do find the condition frustrating and annoying as reading books is a real effort - not in terms of actually reading, but in terms of remembering what I've just read'.*

*'I do not feel your questionnaire allowed me to explain that I see dyslexia as something others perceve me as, not something that I am. I also feel that I may be a poor speller etc but my mind definitely works in a different way to other 'normal' people. It is hard to explain but I feel my dyslexia makes me view the world around me differently. I find it easy to see things from other angles and points of view. I also feel that my dyslexia allows me to create complete 3d diagrams and maps in my mind which I can travel through. I am defintly difrent and at times the unique nature of my mind can cause me to get frustrated with those close to me, who are not dyslexic, as they are unable to see things like me. I also feel I could learn to spell to an average level if only I could be arsed'.*

*'benefits of being dyslexic'.*

*'When writing fast my writting can become ilegable even to me! I sometimes read things incorectly but it has positive aspects - I think in 3 dimentionis , I am creative + my musical standard is well above avarage - like natural aptitude'.*

*'I find dyslexia very frustrating, knowing the words and the context that they are used in, yet having to sub in other words for fear of miss-spelling it. Pressure increases my dyslexia. And who thought of calling it 'dyslexia'? The hardest word to spell, don't you think!!!'*

*'I don't use a tape recorder as I would not find it helpful. I find reading aloud difficult as when I recognise words and understand their meanings rather than saying the words in my mind'.*

*'reading books and not remembering what I am reading about. Even after re-reading the paragraph'.*

*'I feel that going to university has given me a chance to deal with my problem on my own. Although at times this has been challenging overall I think the experience has enabled me to develop and change'.*

*'I understand my brain has pros and cons that all must be symptomatic of dyslexia - terrible at working out prices in shops, good at thinking of original ideas. But, what gets me down is walking into things all the time - I always have at least one bruise on the go!'.*

*'I do not use a tape recorder because it would take even longer to do the work, I spend too much time at it already'.*

*'I know that we get extra time in exams I sometimes feel I need more and - I know this year (2<sup>nd</sup> semester) they've put dyslexia on exam paper, but I still feel not all if many markers will see beyond not just spelling and grammar. What I mean is I've just had an exam the other day it was 2 hrs with 20 mins extra (I wish it was 3 hrs exam as we had in 1<sup>st</sup> year + 2<sup>nd</sup> year 1<sup>st</sup> semester, because it takes so long to get going, and though I've written some bullet points on the 2<sup>nd</sup> question, I don't know whether they'd mark it generously in the sense seeing it the person had time he could have written proper sentences. '*

*'relating to the last point, I know you've asked us whether lecturers understand what dyslexia really is, do they know? Have they been explained by yourself or by dyslexic students?'*

## **Discussion - implications of the questionnaire**

As one can see, the questionnaire proved invaluable, providing a rich source of data that demonstrated a high agree response rate from respondents thus verifying the themes developed in study two. The responses generated from the items together with the free comment section were useful in identifying both the positive aspects that respondents identified with and also those negative viewpoints that were raised. Allowing a preliminary model of dyslexia support to be generated (see chapter 8).

Essentially, respondents felt they had a clear understanding of dyslexia and identified with the need to become independent in their studies, looking for long-term solutions. Overall, respondents agreed that they received more than just a label, e.g. an explanation of dyslexia, however this does cause concern for a minority of

respondents, who did not. Over half of the respondents felt that their lecturers did not understand what dyslexia was, although two thirds stated that they liked to be up-front about dyslexia with their lecturers. Overall respondents did not feel that they were able to explain what dyslexia was and this warrants concern when looking at issues surrounding advocacy, e.g. informing tutors of appropriate teaching/learning methods-different learning styles. Certainly, when one looks at the literature (particularly the four levels of awareness put forward by McLoughlin et al, 1992 (see chapters 1 & 7) and from experience in my role of Student Advisor, it is clear that students require access to information relating to dyslexia, both on a generic level and in terms of the implications for each individual student. In this sense, the questionnaire generated evidence that suggests the need for support services to offer guidance that enables students to form an understanding/awareness of their dyslexia if they are to develop and enhance their academic performance.

Over a third of respondents reported weak short-term memory as the most annoying consequence of dyslexia, with just under two thirds finding it difficult to manage their time effectively, indicative of poor organisational skills. Certainly when one looks at the literature (see Gilroy and Miles 1996) poor organisational skills are a central concern, hence the need for students to access specialist support which develops and encourages sound study skills, centred on making to most of those support recommendations which may have been included in the assessment of need, for example: Texthelp/Inspiration<sup>13</sup>. Reassuringly, half of the respondents felt that the support they had been offered helped them to become independent learners, but this clearly warrants concern for those who did not. This was an issue that was also raised in the free comment section, respondents reporting on the lack of/delay in receiving support following their assessment. Furthermore, respondents reported limited access to IT training in the use of specialist software equipment that was recommended in their assessment of need report. Hence the need for sound follow up support if students are to benefit from recommendations and in turn develop their study skills. Of equal concern, however is the feedback from the free comment section which reports difficulties respondents experienced accessing the recommendations made within the assessment of need, and the reticence of departments who failed to adhere to accommodations, this being something which was raised in the case studies by Clare.

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<sup>13</sup> In brief, TextHELP is a piece of specialist software, which provides text to speech facilities/enhanced spellcheck (including homophone corrections) together with comprehensive dictionary thesaurus. In brief, Inspiration, software is based on MindMapping, users can work in diagram mode to compose written work and then convert their plan into text.

A high proportion of respondents reported that they were not confident about themselves and the majority felt embarrassed reading aloud. Just under one third of respondents felt that sometimes they should give up their course and over two thirds worried about disclosing dyslexia to future employers. Hence the responses identified the need for awareness training across institutions so as to ensure that those working along side dyslexic students are aware/informed with regard to particular 'possible' behavioural patterns, which if unknown may be perceived as disinterest, rather than poor retention/slow information processing speed etc.

Thus the findings from the questionnaire provided useful and thought provoking information. Thereby generating data which substantiates/develops the themes developed in study two, allowing the generation of a preliminary model to be developed. Prior to this the following chapter will provide a summary of findings from both the case studies and the questionnaire, in order to set the scene for the introduction of the preliminary model of dyslexia support (chapter 8).

## **Chapter 7:**

### **Overall Summary of Findings from Studies Two and Three**

In this chapter, I briefly summarise the empirical work undertaken, followed by an outline of the main points which emerged throughout the analysis of Studies Two and Three, I then present a summary of the findings, in line with current theory, practice and policy. Finally, I set the scene for the following chapter: A Preliminary Model of Dyslexia Support.

The overall aim of the thesis was to look at the ways in which dyslexic students in higher education 'manage' their courses and any implications that being dyslexic has in relation to this. By 'manage their course' I refer to how dyslexic students actively manage those aspects of their learning that causes them difficulty. By developing strategies to overcome them. Such strategies might include the development/enhancement of literacy skills, time management, organisation and stress management. Basically all those skills which any student requires in order to complete their studies. Hence, to actively manage those aspects of their weaknesses in learning style which cause difficulties. Central to this, are the students' evaluations of the support services they have experienced, with specific focus on the assessment process and the resulting systems of support.

Together with a comprehensive literature review, the thesis incorporated two major types of research: case studies and questionnaire. The two studies evaluated the subjective experiences of dyslexic students in higher education using both qualitative and quantitative methodology and subsequent analysis.

#### **Study 2: Case Studies**

This method of qualitative enquiry was chosen in order to gather information on the experience of dyslexic students in higher education.

The first stage was the organisation of the guidance sessions. These were set up following discussions with the counselling services, where it was arranged for me to work closely with a counsellor who had much experience in this area. The sessions were flagged up to students via student services and I worked with four students over a period of approximately eighteen months. Each student varied in the amount of sessions they attended/requested. The sessions were tape recorded (see

appendix 2 for consent form) and transcribed by myself. The transcripts were then analysed following the method put forward by Smith (1996), see Chapter 5 for a detailed review of the analysis and methodological procedure employed.

The analysis of the transcripts fell into four themes:

- Looking for a reason
- Social Comparison
- Low Self Esteem
- Need For Appropriate Support

It is very interesting to note how the individual participants relate to these themes. As has been stated previously (Chapter 4), the themes provide a way to view the issues which arose throughout the guidance support sessions. These are briefly summarised below (see Chapter 5 for a more detailed analysis).

## **Synopsis of Case Study Themes**

### **Looking For a Reason**

In brief, for Clare, the main concern within the theme 'looking for a reason', was to understand her past learning experience and the impact that dyslexia had in relation to her present studies. For James, 'looking for a reason' meant moving away from the *stupid* label and accepting the dyslexic one. Richard's need to look for a reason enabled him to identify those areas of weakness that he found he struggled with when using language. And finally, for Deborah, the need to look for a reason brought a very positive appraisal of her dyslexia assessment, whereby she talked of dyslexia as a difference.

### **Social Comparison**

Clare talked about the difficulties she faced over and above those of other students and the need for her to have more time to complete her work. For James, the theme of social comparison brought with it a complex set of values. Although he made comparisons on a number of levels, in relation to his performance in light of his peers, he found it difficult to accept that he was dyslexic and, furthermore, spoke of his disdain for some dyslexic students who he felt were using the label as an

excuse. Richard talked of the difference between his work and that of everyone else, feeling that his peers did not struggle with the production of written work in the same way. Deborah, in contrast, spoke of her own coping mechanisms and the way in which she viewed her own study skills; identifying with her peers and the notion that she might work differently but that she had the same demands placed on her in relation to completing the course.

### **Low Self-Esteem**

For Clare, low self-esteem was a major concern and something that she felt unable to enhance. Although she acknowledged that her assessment had helped her to come to terms with her poor school experience, she talked of '*being thick and stupid for a reason*', the reason being dyslexia. James' profoundly low self-esteem and lack of confidence played a fundamental role in his ability to accept the outcome of his dyslexia assessment. He continually wrestled with the idea that he should not be at university and felt at times that he was unable to continue with his course. For Richard, the theme of low self-esteem seemed routed in his ability to complete the course. This was further exacerbated by his reticence to engage with, and try out, different learning strategies. Deborah's experience of low self-esteem appeared to be fixed in her experience of writing. She talked of periods of depression and related these times to when she had large amounts of written work to complete.

### **Need For Appropriate Support**

For Clare, the theme 'need for appropriate support' is central to her progression on her course. She talked of feeling marginalised and did not feel that her department were supportive, in any way, of the recommendations put forward in her Assessment of Need Report. James' experience of appropriate support was, once again, related to his inability to accept the dyslexic label. Whilst he felt that he warranted additional time in examinations, he did not want to appear as if he was using the 'label', and continually worried about the possibility that he might not be dyslexic. Furthermore, James was worried that he was being a drain on resources and expressed concern that he felt uncomfortable requesting assistance from support staff. For Richard, a primary issue was with time constraints; he felt dictated to on his course and spoke of the need to have time to employ the different study skills he had been shown. Deborah spoke of her experience of inappropriate support and of those instances when she felt the support tutors' approach was patronising.



The themes developed in Study Two were then used as a basis for further exploration in the form of a questionnaire.

### **Study 3: Questionnaire**

The questionnaire was employed in order to illuminate further the findings of Study Two, in light of a larger sample population. Therefore, the premise on which the questionnaire was based, was the extent to which the statements generated from the case study themes were characteristic of other dyslexic students studying in higher education.

The questionnaire employed a seven-point Likert scale, from Agree to Disagree (see Chapter 3). Respondents were all studying in higher education across two institutions. The questionnaire study produced a rich source of valuable data from 86 respondents. In the main, the results tended to confirm the themes developed in Study One. In addition to the 45 items was a free comment section and this was completed by a total of 48 of the respondents, it proved particularly illuminating, and should serve to guide future developments in the field (see Chapter 6).

Responses from the questionnaire items are presented in the previous chapter and the results are displayed in line with the themes. As mentioned previously, although it is useful to view the responses in line with the themes developed from Study Two, it is clear that the statements can sit equally well across themes.

### **Synopsis of Questionnaire Responses**

In brief, respondents generally felt they had an understanding of what dyslexia was. This is clearly very encouraging and suggests that the respondents have been offered information and support and, likewise, have developed their own understanding of how dyslexia affects them on a personal level. Similarly, an overwhelming majority of respondents felt that should they improve their writing and spelling, they would still be dyslexic; suggesting that the respondents involved in this particular study had a sound sense of what dyslexia means to them. Respondents also felt that it was important for them to find ways of becoming independent in their work and wished to take responsibility for their learning and develop successful ways of managing their course and, ultimately, their dyslexia. However, just over a quarter of respondents reported they had not received an explanation as to what dyslexia meant, suggesting that they had not been offered or given information other than a 'label', and this is worrying in the least. Furthermore, just under a quarter of the

respondents felt concerned that, should their skills improve, they may no longer have access to support. Clearly, this has implications for appropriate support; support which encourages independent study skills but which students feel is on hand should they need or wish to develop their skills further.

The majority of respondents felt supported by their parents. Indeed, this was an issue that was raised in the case study sessions and something which is discussed regularly in the assessment of need setting. Students talking about the involvement of their parents in terms of accessing assessment and securing support and, in some instances, providing support.

Just below three-quarters of the respondents felt embarrassed when reading aloud. Likewise, all participants in Study Two expressed concern at having to read in seminars and discussions and the response rate for this item is in accordance with their concerns. In relation to spelling, a large proportion of respondents indicated that they did not feel their spelling skills would improve. Again, this response is worrying, suggesting perhaps that respondents feel there is no scope for improvement with regard to their spelling skills in that they had been offered a 'fixed' (reading age) level/score, which had not been properly explained. However, just under a third of the respondents felt that their spelling skills were in the average range; this is an encouraging response and suggests that those respondents feel they have been able to develop their skills in this particular area.

Over three-quarters of respondents felt they were just as intelligent as others on their course, suggesting that they feel positive about their academic ability. Again, this is certainly a desirable outcome for this particular item. Just under three-quarters of respondents felt that they were a valued group member. Again, this is a very positive response, suggesting that those respondents felt comfortable contributing on their course.

Almost a third of respondents felt that sometimes they should just give up the course. This was a concern for all the participants in Study Two and it is worrying to acknowledge that respondents felt at times that they should leave their course. It is, however, very reassuring that almost two thirds of respondents did not feel this way.

The issue of disclosure was evaluated and revealed that three-quarters of respondents worried about informing future employers about their dyslexia. Clearly, this is an undesirable response and raises just concern on a number of levels: students' self esteem, equal opportunities, dyslexia awareness, etc. However, a

large proportion of respondents felt they offered future employers the same qualities as their non-dyslexic peers, suggesting that the concern about disclosure is perhaps more related to misconceptions about dyslexia by employers per se. This particular area was further evaluated in the following statement: 'I feel I offer future employers the same qualities as my non-dyslexic peers (fellow students)'. This received strong feedback from one respondent in the free comment section, namely:

*'I have different qualities my non-dyslexic peers do not have - how dare you think having the same qualities as other people is a positive.'*

Certainly, the item could have been worded more clearly, but the response is obviously a passionate one and draws attention to the notion that dyslexia is often described as a 'weakness' in learning style rather than a difference.

For a detailed account of the questionnaire responses see Chapter 6.

### **Free Comment Section**

The free comment section was completed by 48 of the 86 respondents; this was a very favourable outcome. The comments are presented within the four themes developed in Study Two. There was rich information, both positive and negative, with regard to students' experience in HE and a brief overview is presented below; the full comments are presented in Chapter 5.

### **Synopsis of Free Comment Section**

In brief, the majority of comments centred on appropriate support, for example:

*'I'd like to learn more about the equipment that has been given to me. Maybe a few meetings - to briefly go over things.'*

Clearly, this suggestion raises concern about allocation and provision of training. If equipment is to be useful, those students who require initial support to familiarise themselves with recommended equipment need support to be both available and forthcoming.

Likewise, the issue of support outside university was raised, in this instance on clinical placement:

*'Physiotherapy - there is a lot of reading involved, medical cards/notes, note taking after every placement and abbreviations. I don't think dyslexics get enough support on clinical placements.'*

As is noted from the above comment, this respondent felt there was a need for support within the placement setting, this raises the issue of delivery and accessibility of appropriate support in practice.

There was also reference to differing levels of support. In the following comment, the respondent did not feel supported on their present course and raised the issue of accessibility to those support strategies which were useful but which were not encouraged or allowed:

*'I completed an English degree 2 years ago and was delighted to get a 2:2 which was borderline 2:1. I had more help and support for that than the course I'm on at present. My reading ability is really high my organisational skills are not too good plus the fact that I write very slowly we are not allowed tape recorders.'*

Furthermore, the issue of others 'understanding' of dyslexia and the impact that it has on the students' production of written work was raised. The following comment captures this very well:

*'Constantly, through out education at school I found that teachers had an 'apparent' understanding + appreciation of the difficulties of the dyslexic student, yet in practice they had little consideration and knew none of the practicalities which would have helped me - especially expecting me to give in assignments with out extra time allowances. I was so thankful however + felt extremely crucial that I was allowed extra time in exams (external exams).'*

Another concern was the time element taken in accessing DSA and subsequent support being put in place:

*The slowness of the LEA in providing help to the student.'*

There were also numerous comments from respondents that sit well within the theme of social comparison. For the following respondent it was the misconception that all dyslexic students experienced similar difficulties:

*'People stereotype that dyslexia will take a certain form, and they often won't accept you are dyslexic when it's not in the well known/typical form, eg. I don't get letters the wrong way 'round.'*

Similarly, comments surrounded the notion that dyslexic students face difficulties with all elements of their course; this was certainly an issue that was raised in the case study sessions and the following comment illustrates this point:

*'Some people who know I'm dyslexic ask me if I'm 'ok' or 'can do' relatively simple tasks (usually academics) and I find this slightly patronising.'*

And, likewise, in the following comment:

*'Lecturers could be informed as to what dyslexia is and that the student don't need to be spoken to differently to the others. I come across this everyday with some tutors.'*

In addition, comments both relate to and sit well within the theme of low self-esteem. The following comment once again raises the issue of awareness with regard to dyslexia; the respondent clearly has a very negative appraisal of dyslexia and the influence that it may have on their future career:

*'The future worries me - who would possibly want to employ me?'*

Furthermore, the following comment is concerned with the respondent's confidence to express their ideas; feeling that they are often unable to find the right word and hence demonstrate their understanding:

*'As well as reading aloud, in conversation, find it very frustrating when the appropriate word won't come to mind, but also lack confidence, often choosing a more basic term rather than fear of using an inappropriate, more sophisticated alternative.'*

Another area that was brought to light within the free comment section, sits well within the theme of looking for a reason. The following comment raises the issue of time of assessment:

*'I often wonder how far + how different things would have been if I was diagnosed dyslexic earlier - I still feel very angry about my dyslexia - but not sure why.'*

Clearly, a wealth of information has been generated from the free comment section of the questionnaire; comments are presented in full at the end of Chapter 4.

### **What Can be Drawn From the Findings of Studies Two and Three?**

It is interesting to note the responses of the participants, both in terms of the case studies and, indeed, the responses generated from the questionnaire. Certainly, the case studies provided a rich and invaluable source of information for the development of the questionnaire and the responses generated sit well within the original themes put forward in Study Two. Within this chapter, I shall relate the findings to the initial overview of the literature (see Chapter 1).

### **Linking the Findings of the Case Studies to McLoughlin et al.'s Four Level Theory**

Firstly, I shall draw on the four levels put forward by McLoughlin et al. (1994). The four levels are useful for demonstrating the level that each of the case study participants may possibly identify with. The four levels are as follows:

1. People at Level 1 are not aware of their weaknesses and have developed no strategies to overcome them.
2. Those at level 2 are aware of their weaknesses but have not developed strategies to overcome them.
3. People at level 3 are aware of their weaknesses and have developed compensatory strategies, but have developed them unconsciously.
4. Finally, people at level 4 are aware of their weaknesses and they have consciously developed strategies to overcome them.

(McLoughlin et al., 1994, p.50.)

### **Clare**

In terms of the proposed levels from McLoughlin et al., it would seem that Clare is located within level 2. Although aware of her weaknesses, Clare does not feel that she has developed strategies in order to manage her course. However, it became clear throughout the session that she used a variety of study-skills techniques that she had developed, but was reticent to acknowledge them as being useful. This seemed to be very much linked to her lack of confidence in her academic abilities;

however, she did talk about 'having the right information' but not being able to demonstrate it in a conventional way.

Clare's overall lack of understanding in relation to dyslexia can be seen as preventing her from acquiring the skills she needs in order to both get the most out of her course, and likewise, to attain similar skills to those (she perceives) of fellow students. It becomes apparent that although Clare progressed through the dyslexia assessment process, she was not offered, or did not have the opportunity to gain, an understanding of what being dyslexic meant on a personal level. This lack of understanding was perceived by Clare as creating a barrier in her progression on her course and, equally importantly, as creating a difficulty between herself and her department in terms of appropriate support.

The fragility surrounding Clare's understanding, therefore, seems to be exacerbated by her lack of confidence in her abilities; even when she sees she is making progress she finds it difficult to acknowledge this. Clare spoke of the differences between herself and a fellow dyslexic student in relation to the rest of her peers and, although she expressed a belief in her understanding of the course material, she felt marginalised due to her perceived poor command of writing skills.

### **James**

James could be said to be located within level 3. He is profoundly aware of his weaknesses and has subconsciously developed strategies to compensate. Whilst one would imagine that the development of compensatory techniques would be a positive outcome, James' profound lack of confidence in his academic ability clearly prevents him from moving into level four: feeling confident in the strategies that he has developed.

James' reticence to accept the assessment outcome plays a prominent role throughout his transcript. Reflections on both his school experience and his experience of the assessment situation became apparent and, in turn, contribute to his struggle to accept the dyslexic label. Whilst James seemed readily able to accept that he struggled in the past and in his first year at university, he expressed much difficulty in coming to terms with dyslexia; doubting his intelligence and ability to complete his course. James' difficulties seemed compounded by a considerable lack of confidence and low self-esteem, comparing himself and his study habits with

those of his peers and drawing distinctions between the amount of effort he had to put in and the 'natural abilities' James presumed his peers to have.

James' apprehension at the inclusion of an IQ test seemed fundamental to this. His dread at being placed in this situation was clearly visible throughout the transcript; his need to fully dispel 'his' notion that he was 'stupid' being paramount to managing his study needs and subsequent completion of his course. The need for support is also a central concern for James, however, again, this is compounded by his difficulties with accepting the dyslexic label; needing support would necessarily mean accepting the label and dispelling the notion of being 'stupid'.

### **Richard**

Richard appears to be located within level 2. Although initially he talked of the assessment process as enabling him to see where his difficulties lay, he did not feel he was able to enhance his skills.

Richard reached a stage where he was unable to produce written work and became increasingly stressed. He spoke of normal stressful situations (examinations) and the stress he felt he experienced over and above exam nerves because of his dyslexia. He spoke of being dictated to, having to adapt to the system and the difficulties that this caused him when managing his studies. Whilst he was able to identify those elements that he found difficult in managing his course, and was able to distinguish between his performance when not under pressure to complete work, he was unable to specify those elements which would improve his study skills.

### **Deborah**

Deborah seems well located in level 4. Despite her initial uncertainty and apprehension about accepting the dyslexic label, Deborah demonstrated a strong insight in to what it meant for her to be dyslexic. Throughout the sessions it became apparent that Deborah valued being in control of her course work and, in order to manage her learning needs at university, she spoke of the strategies she used when studying. In addition to her knowledge of her strengths, Deborah was readily able to identify where her weakness lay and this in turn had encouraged her to work on ways of managing her studies. Being in control of her course was something which came across as extremely important to Deborah. Likewise, she spoke of the need for appropriate support, support that was reflective of her individual needs, and the instances when she encountered support which she found ineffective. Deborah was



able to identify what it was that made writing so difficult for her and was confident in the strategies that she had put in place to manage her learning.

## **Linking the Findings of the Case Studies and Questionnaire in Light of Current Theory**

In this section I shall summarise the findings from both the case studies and questionnaire by drawing on research which has been carried out with regard to the causes/consequence of dyslexia, and which has been addressed in the literature review (see Chapter 1), namely:

- The Phonological Deficit Hypothesis
- Short-term Memory Weakness
- The Dyslexia Automatisation Deficit/Conscious Compensation Hypothesis
- Secondary Emotional Effects

### **The Phonological Deficit Hypothesis**

The underlying rationale behind this hypothesis is a difficulty with phonological processing; having an awareness of the relationship between letters and sounds (e.g. Vellutino, 1979; Stanovich, 1988; Siegel, 1992; Rack, Snowling & Olson, 1992). It is essential that readers have the capacity to reproduce explicitly the sound structure of spoken words if they are to become proficient at decoding alphabetic systems (Snowling, 1987). (For a detailed review see Chapter 1.) Certainly, within both the case studies and from the responses generated from the questionnaire, students commented on the difficulties encountered when reading textual information. Most specifically, this seemed centred on the introduction of unfamiliar terminology. Clare talked of the difficulties she encountered learning complex terminology on her dentistry course, and the implications this had for her when undertaking examinations when she felt unsure of herself with regard to misreading information. Within the items on the questionnaire, students were asked about their confidence when reading aloud, with just under three-quarters of respondents agreeing with the statement 'I get embarrassed when reading aloud'. This is an issue raised in the following quote from the free recall section:

*'As well as reading aloud, in conversation, find it very frustrating when the appropriate word won't come to mind, but also lack confidence, often*

*choosing a more basic term rather than fear of using an inappropriate, more sophisticated alternative'.*

Certainly this is an area that is often raised in the assessment of need setting; students commenting on the time element involved in decoding textual information. Suggesting that, whilst dyslexic students are able to develop their phonological awareness and, in turn, reading skills, those skills tend to be more fragile and thus more susceptible to break down under pressure, for example in examinations. Caution is needed, however, as for some dyslexic students weakness in phonological processing skills may not be a primary concern. This could be for a number of reasons: encountering suitable phonological teaching methods, developing earlier weaknesses in that area, a different pattern of difficulties, perhaps more visually based. However, bearing in mind that this thesis is involved with the experience of dyslexic students in HE, it was important that the questionnaire be as broad as possible but also centred on the themes developed in Study One. It would, however, be interesting to do further investigation with regard to weak phonological processing skills in dyslexic students and, in reviewing the questionnaire items, it is apparent that more emphasis could have been placed on this area.

### **Short-term Memory Weakness**

Much research has focused on the premise that dyslexic individuals experience problems with short-term memory (Miles, 1982, 1983; Velluntino, 1979; Chasty, 1985; McLoughlin et al., 1994). More recently, research suggests that dyslexic students experience increased susceptibility to distraction (Smith-Spark et al., In Press). (See Chapter 1 for a more detailed account.)

This was an issue that was raised throughout the case study sessions; participants identifying with weakness in short-term memory and being easily distracted. Richard, in particular, spoke of the many times that he encountered 'action slips'; for example, putting the beans in the bin and the can in the pan! In terms of study skills, James talked of the need to over learn information and the frustration of reading information and then being unable to recall it. Within the questionnaire, three-quarters of respondents agreed with the statement, 'It's weak short-term memory that I find the most annoying consequence of dyslexia'. Again, this was an issue that was raised in the free recall section of the questionnaire and the following comment captures the difficulties associated with weak short-term memory that this particular respondent experiences:

*'I do find dyslexia , even though I have learnt many techniques to deal with it, can be quite crippling in terms of memory skills, and especially having confidence reading out loud in front of many people. I do find the condition frustrating and annoying as reading books is a real effort - not in terms of actually reading, but in terms of remembering what I've just read'.*

Again, this is a concern which is regularly raised in the assessment of need setting and the findings from Studies Two and Three certainly confirm that, for the majority of dyslexic students who took part, short-term memory difficulties were a concern in terms of the management of their studies.

### **The DAD Hypothesis**

The Dyslexia Automatisation Deficit Hypothesis (DAD) (Nicolson and Fawcett, 1990), suggests that dyslexic children have problems in fluency for any skill that should become automatic with extensive practice and suggests that dyslexic children demonstrate a more generalised weakness in the automatisation of skills. The most crucial concept to grasp here is that of 'automaticity', i.e. highly efficient behaviour – the final stages of skill acquisition (Anderson, 1983). Thereby offering an explanation of dyslexic symptoms in phonological, reading and other skills. (For a more detailed account see Chapter 1.) In addition to the DAD is the Conscious Compensation Hypothesis (CC) (Nicolson and Fawcett, 1992). The CC hypothesis proffers that if spare resources are available, dyslexic children will utilise such reserves, allowing them to complete tasks using 'controlled' rather than 'automatic' processing. The research suggests, therefore, that although dyslexic children can compensate by putting in greater effort, when required to perform dual tasks the ability to consciously compensate is weakened and performance suffers as a result. Thus, those dyslexic individuals who manage their learning do so as a result of consciously compensating. Certainly, both results from the case studies and the questionnaire responses suggest that participants/respondents experienced difficulties in the fluidity of their studies/skills.

Within the case studies, Deborah spoke of the need to be in control in order to manage her course and, although she felt that at times she needed to 'lighten up', she was aware that if she did, she felt panic stricken and out of control with her course work. Furthermore, she spoke of the periods of exhaustion and depression she suffered during and after completing large pieces of written work, to the extent that she wanted to run off to art school!

Within the questionnaire, just under three-quarters of respondents agreed with the statement: 'I have to be very organised; if not everything would fall apart!' And again, just under three-quarters of respondents agreed with the statement: 'I'm sure I sometimes come across as 'a bit dippy''. These responses verify the additional effort needed to complete tasks and those times when it is overwhelming. This particular issue is eloquently raised by one respondent in the following response from the free comment section:

*'In the five years since realising my dyslexia I have gone through many stages of awareness of what it entails. In the past year it has become more and more evident that the psychological package of dyslexia shapes every facet of my life in some way. For example extreme fear of any change, or an 'all or nothing' mentality, or over thinking a subject laterally in concepts. I think this dyslexic 'personality' should be more documented and understood by teachers and lectures if they want students to get through the system. There is a lot more to helping us than merely from an academic angle. To be honest I haven't thought through a solution to this but I thought I'd raise the point'. 'Some times I even go as far as to think we are a breed apart'.*

Indeed, within the assessment of need setting, students often talk about the good day/bad day scenario whereby, on a bad day, they feel they lose their ability to use the compensatory strategies they have developed. Likewise, the findings are in line with the square route rule put forward by Nicolson et al., 2001, in terms of the additional time taken to complete a given task (see Chapter 1).

### **Secondary - emotional Effects**

Miles makes the distinction between primary and secondary effects in relation to dyslexia (Miles et al., 1998); primary effects being those related to the difficulties experienced in the acquisition of literacy skills, secondary those difficulties faced by the individual as a result of primary effects. (For a review of secondary emotional effects see Chapter 1.) Certainly, both results from the case studies and the questionnaire responses suggest that some participants/respondents experienced difficulties in terms of low self-esteem and self-confidence. Within the case studies this was a concern for all participants, however James, in particular, experienced pronounced secondary effects and the majority of his sessions were devoted to coming to terms with and learning to manage dyslexia. However, this in itself was problematical due to the difficulties he had accepting the label and with dismissing the notion that he was 'stupid'. The secondary effects that James experienced

clearly prevented him from progressing on his course. Likewise, Clare spoke of her lack of confidence and the idea that it was something that she felt unable to improve upon. All participants spoke about times when they felt they should give up their course, however, when further evaluated in the questionnaire, just over one third of respondents agreed with the statement: ' I sometimes think I should just give up the course'. With just under two thirds disagreeing, this is certainly a reassuring response for that particular item, but a cause for concern for those participants who agreed with the statement. Just under half of the respondents agreed with the following statement: ' I'm not very confident about myself'. Furthermore, just under three quarters of respondents agreed with the statement: ' I worry about telling future employers about my dyslexia'.

What can be taken from this in order to enhance practice and shape policy in the future? Certainly, a rich source of information has been generated from both the studies which can be fed in to the system. In the following preliminary model I address these very real issues.

## Chapter 8: Supporting Dyslexic Students in Higher Education - A Preliminary Model

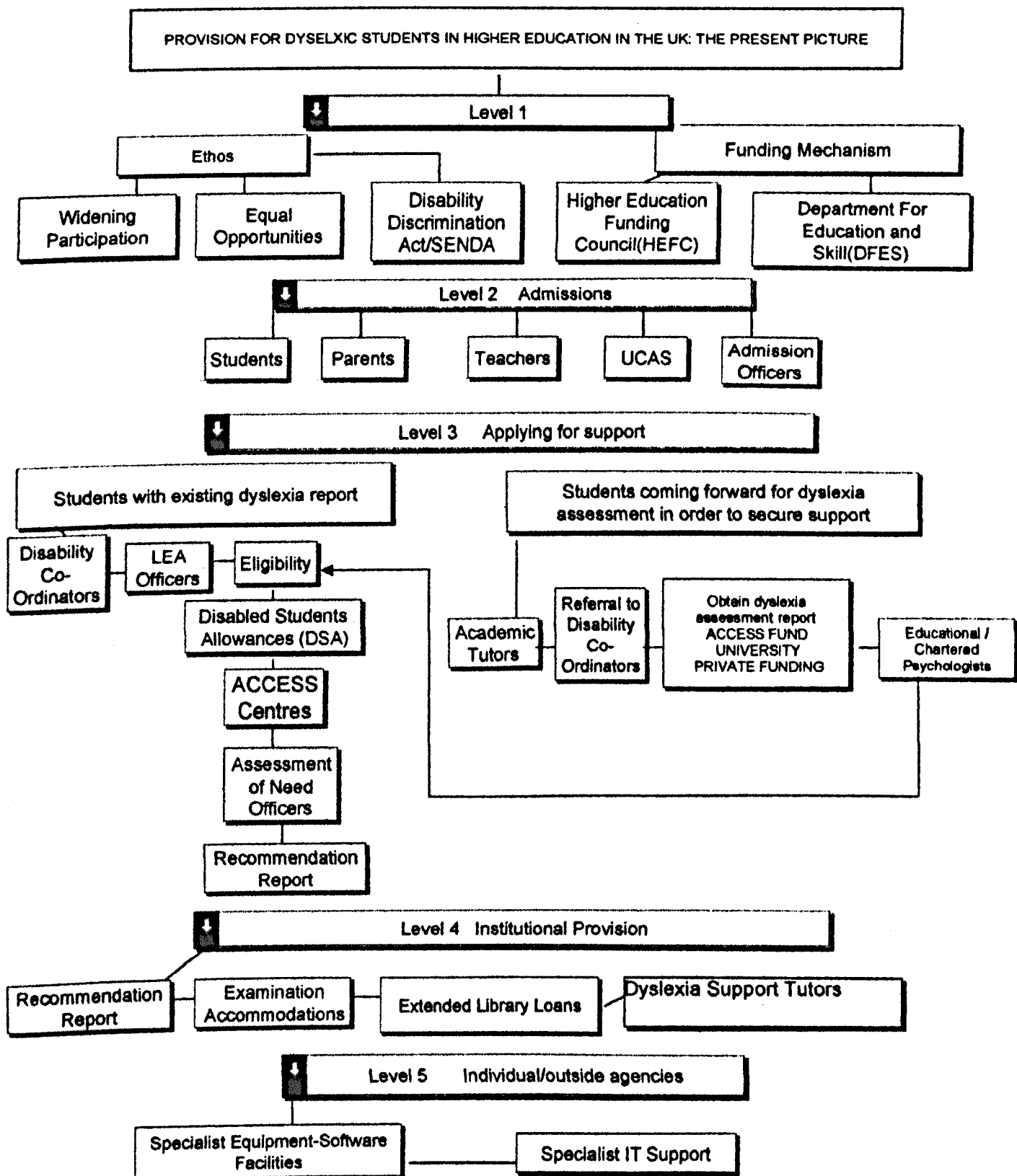
In this chapter I shall offer a preliminary model of dyslexia support. Initially, I will outline the limitations of the current system in place within higher educational institutions in the UK. I will then put forward a preliminary model of dyslexia support based on the findings generated from Studies Two and Three; the aim being to enhance policy and practice measures with regard to the experience of dyslexic students completing courses of higher education in the UK.

Certainly, there has been increasing recognition, in both further and higher education, of the need to identify and understand the difficulties experienced by dyslexic students (Singleton, 1996c). Whilst the Disability Discrimination Act 1995 (DDA), did not outlaw discrimination in terms of disability in education, a consequence of the Act meant that further and higher educational institutions were required to publish disability statements (McLoughlin et al., 2002). Hence, the National Working Party on Dyslexia in Higher Education was formed to consider the needs of dyslexic students in the UK, gathering information from a wide selection of professionals: academics, practitioners and clinicians. The report was published in January 1999 (see Chapter 1). This undoubtedly had positive outcomes in terms of access to higher education for dyslexic students. More recently, the Special Educational Needs and Disability Act (SENDA) came into effect from the 1<sup>st</sup> September 2002; removing the previous exemption of education from the Disability Discrimination Act (1995). However, it is one matter to encourage access and enhance awareness, but quite another to provide suitable learning environments, so, whilst legislation might well mean that dyslexic students now have more access to university, the next step is to determine whether those individuals' learning needs are being met. The information and feedback that was gathered from Studies Two and Three, therefore, provide invaluable information with regard to suitable support for dyslexic students in higher education. It appears that very few of these requirements are met within the current system; the following model outlines the system in place at present in the UK<sup>14</sup>.

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<sup>14</sup> It should be noted however that this is a tentative outline as clearly different models are employed across Universities, this model is based on the current system, e.g. access to funds via Disabled Student Allowances and it may be the case that some institutions may merge level 4 and 5.

**Fig 10. The Provision of Support for Dyslexic Students In the UK**



## **Limitations of the Current System**

The above model demonstrates that the current system is geared towards the provision and allocation of support and equipment on an individual basis. Clearly, there are justifications for this approach, not least as it allows those students who incur additional costs as a direct result of their disability to attain funds.

In order to evaluate the current system I shall discuss the issues under several headings:

### **Eligibility**

Certainly, there are those students who are unable to access support, as they do not fulfil the LEA's requirements for eligibility. Undoubtedly, there needs to be a mechanism within such a system that justifies the need for support, however, with such diversity between psychological assessments, it is clear that some students who may well have need for support are unsuccessful in attaining it.

### **Assessment of Need**

For those students successful in attaining DSA, an assessment of need is carried out in order that recommendations are in line with the needs of the individual concerned. Therefore, the recommendations put forward should enable the student to fully engage with their course. Again, this seems a very sensible way to allocate provision of support, however, it is by no means straightforward. Whilst it is stated by the Department for Education and Skills that students eligible for DSAs can attain up to a maximum allowance (for those students who require a high level of support), many students enter the assessment of need with unrealistic expectations of the allowance available to them. There is, therefore, a need for assessors to explain that recommendations are made on an individual basis; however, this is often a difficult situation for both student and assessor alike.

### **Equipment**

Provision of equipment can be attained via the specialist equipment allowance (presently up to £4,355 for the whole of the student's course; DFES, 2002). In many cases (with regard to dyslexic students), computing equipment is invaluable in the management of their course, specifically because of the fragility of literacy skills and, in turn, the additional time required to produce written work. However, there are occasions, for example those students studying on courses with little demand for large pieces of formal written work, where such recommendations are



unfounded. Likewise those dyslexic students who have developed their literacy skills and feel the need for equipment is unwarranted. Students have the opportunity to either use suggested suppliers or to submit quotes of preferred suppliers to their LEA or funding body. Issues surrounding warranties and insurance can also be met by DSA. In some circumstances, for those students applying for DSA towards the end of their course, there is the possibility of loan equipment. Again, this system seems reasonable, however the complexities involved are often extensive, for example: the time taken to attain equipment, recommendations being unsuccessful, suppliers being unreliable, appropriate access to IT training for those students with limited IT skills, ongoing technical support.

### **Specific Dyslexia Support**

The provision of support is discussed at the student's assessment of need. For some students, support is crucial if they are to develop strategies in order to manage their course successfully. Provision of such support varies widely across institutions, with some securing in-house support specialists and others employing outside agencies. Clearly, it is important that if support has been recommended, the student is able to access it but, equally so, it is imperative that the support offered is geared towards the student's individual style of learning and, most importantly, that it encourages independence and the development of sound study skills. Furthermore, whilst recommendations for support may be made, provision and availability is imperative if it is to be worthwhile. Likewise, there is a need for support throughout the application of DSA and, hence, it is essential that students have access to support services at that time, prior to allocation of funds.

### **Examinations**

Together with equipment and specialist support, recommendations for accommodations in examinations also form part of the assessment of need. Clearly, such recommendations need to be justifiable and geared toward the individual student concerned. Likewise, and of equal importance, the recommendations put forward should be feasible. Therefore, close liaison with the institution's examinations and awards staff is imperative for a number of reasons: availability of invigilators, room allocation, use of equipment, reader of questions and availability of scribes. Clearly then, if recommendations are to be made, it is imperative that there is provision available.

## **Time element of DSA**

There are various issues apparent with regard to the time element involved in applying for and attaining DSA. In the first place, it is essential that the relevant information regarding procedures involved in applying for DSA be made available to students. Secondly, students need an awareness of the demands of their particular course prior to attending an assessment of need, in order that recommendations made are in line with the needs of the particular individual concerned. And finally, the issue of availability of assessment (assessment centres being over prescribed), needs to be addressed. A further point concerns variation amongst LEAs, which can mean that students at the same institution receive variable levels of access to support.

## **Disability Co-ordinators**

Generally, disability co-ordinators and advisors hold responsibility for ensuring that disabled students are supported throughout their course. They provide information on the resources available within the student's institution and, on a more global level, in terms of legislation and policy matters surrounding the rights of disabled students. Invariably, this involves close links with outside agencies in order to ensure that support is available and accessible. It is, of course, desirable that close links are made with individual departments and organisations within particular institutions in order to attain a whole-institution approach and, hence, there is a need to develop and deliver awareness training across the whole institution.

## **Academic Departments**

There is obviously a need for close links with academic tutors in terms of course requirements should support/accommodations in examinations and assessment procedures, specialist equipment or software be recommended. These were issues raised by students across both studies and variation across departments, in terms of fulfilling students' assessment of need reports, warrants careful consideration.

## **Developing a preliminary model of dyslexia support**

The current system is geared towards the provision and allocation of support and equipment on an individual basis. Although there are reasonable justifications for this approach, as it allows students who incur additional costs as a direct result of their disability to attain funds, a whole institution approach would seem more desirable for the following reasons.

Firstly, those students who are proactive enough are generally able to access and attain support; those who are not can be dissuaded from coming forward for support due to the complexities involved in applying for DSA or, indeed, going forward for assessment. In contrast, there are those dyslexic students for whom support is not pivotal to their success as they have compensated for earlier difficulties with literacy skills. Therefore, is it essential that dyslexic students are not viewed as a homogenous group but as individual students in their own right; some of whom require support and others who do not.

Therefore, there needs to be a whole-institution approach; a process by which those students who fail to attain DSA do not go unsupported, and likewise, one in which students who are in possession of an eligible dyslexia report, but do not require additional support, are not over supported. The main ethos being that support is available to those students who need it. The most crucial point here being that institutions of higher education offer an environment where dyslexic students feel confident in their academic abilities. Thus, in-house provision seems fundamental if we are to establish a cohesive and accessible learning environment accessible to all students.

### **Generating a preliminary model of dyslexia support in light of findings from studies two and three**

This section draws upon the research generated in studies two and three in order to develop a preliminary model of dyslexia support. Initially I shall re-visit the themes generated in study one and discuss the implications of the findings in relation to appropriate support. I shall then re-visit the findings of the questionnaire (study three) and bring together those elements that emerge as providing effective support in order to develop a preliminary model of dyslexia support for students in Higher Education.

### **Drawing Upon the Case Study Themes (study two)**

Essentially, when one observes the themes generated from the case studies in study two collectively, it is the participants' need to develop an understanding of their particular learning style, which becomes apparent. Clearly this demonstrates the need for a model of dyslexic support which offers an environment that encourages and supports the individual's understanding of their particular needs.

In terms of the theme looking for a reason, supporting dyslexic students and affording them access to support which allows those who wish to review their past experience and also evaluate their present performance within higher education seems paramount. Therefore the model needs to offer access to suitable dyslexia specific study support, in this instance, the availability of practitioners with an in-depth understanding of the issues relating to both previously identified dyslexic students and those who have recently received assessment. Understanding of the assessment process is clearly fundamental if the support is to be beneficial, allowing students the opportunity to both understand dyslexia on a general level, and subsequently how it relates to them on an individual level. Hence the model needs to incorporate the provision of a dyslexia co-ordinator to fulfil this role. In addition, the services of study skills tutors with an in-depth understanding of dyslexia at the adult level would need to be incorporated.

Evaluating individual learning styles in comparison with peers is demonstrated with in the theme of social comparison. This was a concern that ran throughout the four participants' transcripts, however there was a varied approach from each individual. Essentially, it was the participants need for additional time allowances which became evident; requiring more time to complete written tasks both in examinations and when completing course work. For the most part the allocation of additional time allowance was valued by the participants; affording them the additional time to complete their work. The model clearly needs to address these issues and in order to do this allocation of accommodations in examinations needs to be included. Furthermore, a department representative working closely with the dyslexia co-ordinator would address some of these issues as student's lecturers/tutors could be made aware of potential difficulties with the production of written work and afford those students additional time to complete course work.

Within the theme low self-esteem was the need for participants to move away from a negative appraisal of ability. Clearly this is a difficult issue to address in any model, however providing an environment which encourages individual learning styles and encourages individuals to maximise on their strengths would offer a useful support mechanism. Incorporating such elements as: screening/assessment; specific and general study skills; provision of lecture notes; accessible resources, would go a long way to offering an environment which encouraged and motivated students in terms of their performance creating an inclusive learning environment.

And finally, searching for and identifying suitable types of support is included within the theme of need for appropriate support. As above, the key factor to arise from the case studies was the need for appropriate support. A worrying issue that arose throughout the case studies was that recommendations put forward in the assessment of need were not always provided by participants departments. Therefore it is essential that the model incorporate awareness training across the whole institution to ensure that recommended support is put in place. Furthermore, the model needs to include a mechanism for ensuring that delivery of IT and study skills support, when recommended, is both available and useful.

### **Drawing Upon the Questionnaire (Study Three)**

Over half of the respondents felt that their lecturers did not understand what dyslexia was, although two thirds stated that they liked to be up-front about dyslexia with their lecturers. Overall respondents did not feel that they were able to explain what dyslexia was and this warrants concern when looking at issues surrounding advocacy, e.g. informing tutors of appropriate teaching/learning methods-different learning styles. This was an issue that was also raised in the free comment section, respondents reporting on the lack of/delay in receiving support following their assessment. Hence, once more the need for close links with admissions/dyslexia coordinators/academic departments/Library representatives. Were awareness training delivered across the institution and mechanisms in place that would alert those working with dyslexic students, many of the difficulties reported in the findings of the questionnaire could be resolved.

Furthermore respondents reported limited access to IT training in the use of specialist software equipment recommended in their assessment of need report. Hence the need for sound follow up support if students are to benefit from recommendations and in turn develop their study skills. In part this problem could be resolved by ensuring that access is available (networked) across campus for such packages as TextHelp and Inspiration and it could be argued that such software packages (specialist study skills) would prove useful for all students irrespective of learning differences.

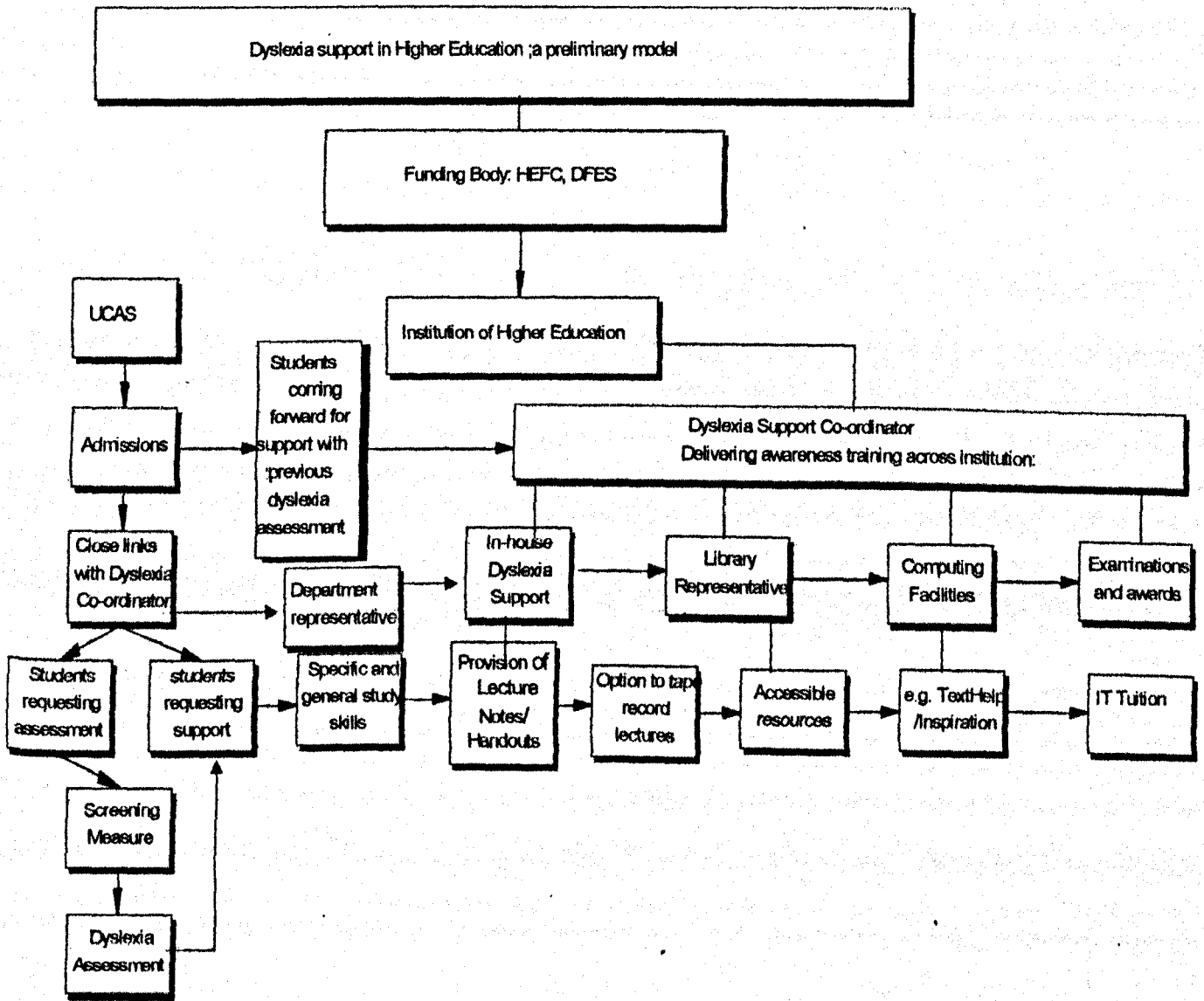
## **Dyslexia as a Disability**

The issue of dyslexia being defined as a disability, understandably, generates much debate. Under the Disability Discrimination Act (1995), the definition is based on the individual's ability to carry out 'normal day-to-day' activities. Were universities to fully embrace the concept of accessible learning environments for all students regardless of disability (a whole-institution approach which included recording all lectures and making them available via the university Intranet, providing access to specific software packages (e.g. TextHelp, Inspiration) via a site licence, additional time allowances in examinations and study skills support), many of the difficulties faced by dyslexic students would cease to present problems in terms of access and ability. Obviously, this is a contentious issue in terms of the system in place at present; a process by which students are required to present evidence of 'disability' in order to attain support.

It is obviously imperative that no student is disadvantaged in any way from accessing their particular course and, likewise, there is also cause for concern if the system itself generates obstacles that may prevent students from reaching their full potential. Of equal importance, is the possibility that the system over-supports students and hence does not encourage independent learning. Therefore, the creation of an environment where every individual, irrespective of disability, is given the tools to enable them to develop their skills, both during and upon completion of their formal education, is paramount.

One argument against the provision of a whole-institution approach might be that it would provide an unfair 'advantage' to those students who do not experience difficulties. However, this argument seems largely unfounded as, rather than providing an advantage to 'non-dyslexic' students, the system would, in fact, be accessible to all and would serve to encompass differences in learning styles. Surely this has to be a positive. Hence the following preliminary model of dyslexia support which has been generated from the findings of studies two and three incorporates this ethos.

Fig. 11 Dyslexia Support - A Preliminary Model



The above model focuses on the provision of support across whole institutions, rather than the allocation of support on an individual basis. Were it the case that funding was made available in this way, it would appear that all students would benefit greatly. Clearly, there is a need for such a system to be closely monitored and funding allocated in this manner would warrant careful consideration for a number of reasons.

Guidelines on the allocation of resources would need to be adhered to by institutions and students who needed a high level of support would require access to personal allowance. Therefore, it would seem appropriate that a more flexible approach be taken in the provision of support for dyslexic student's per se. Whilst I am not suggesting the discontinuation of DSA, I am suggesting that perhaps those resources allocated to DSA be disseminated in such a way as to provide institutions with accessible learning environments.

In order to evaluate the efficacy of the preliminary model a peer review was carried out in the form of a questionnaire. The questionnaire was distributed to Disability Officers/Student Advisors, across twelve UK Institutions of Higher Education. The findings are presented in the following chapter.



# **Chapter 9: Evaluating the Preliminary Model of Dyslexia Support**

## **Study Four: Peer Review Questionnaire**

In this chapter I present the findings from the peer review questionnaire-study four (see appendix 5). Essentially the questionnaire was employed in order to evaluate the preliminary model put forward in the previous chapter; generating feedback from professionals working in Higher Education with dyslexic students. Therefore, the premise on which the questionnaire was based was to consider the effectiveness of support systems reflected in the model. The results will be presented with an analysis of the findings in the form of descriptive statistics.

The questionnaire developed was open-ended requesting colleague's views. (For a review of questionnaire design see procedure, Chapter 3). An introductory letter presented an outline of the research to the respondent and gave step-by-step instructions on how to complete the questionnaire. Twelve questionnaires were sent out to colleagues (Student Advisors/Disability Officers) across twelve Universities in the UK. The questionnaire comprised three sections. Section one, requesting information on student population; section two, requesting respondents to peruse the model (see below) and answer six questions; section three, comprised a free comment section for respondents to comment on any aspects of the model they did not feel were addressed in the questionnaire. Six questionnaires were returned generating a response rate of 50%.

### **Questionnaire Analysis- Results of study four**

#### **Section one-student population/screening and assessment**

Respondents were asked how many dyslexic students they had registered with their service and what screening measures were used.

**Table 8: Peer Review Questionnaire-screening details**

Number of dyslexic students registered	Screening tools employed
180	BDT
620	LADS, background questionnaire, checklist
100	DAST
98	ADO Checklist LADS
350	DAST/BDT/ADO
1000	WRAT/ In house screening

BDT (Bangor Dyslexia Test); DAST (Dyslexia Adult Screening Test); ADO (Adult Dyslexia Organisation); \*LADS (Lucid Adult Dyslexia Screening); WRAT (Wide Range Achievement Test).

*\*Computerised dyslexia screening software for adults.*

Respondents were asked if full psychological assessment was available and if so who carried out the assessment.

**Table 9: Peer Review Questionnaire- assessment details**

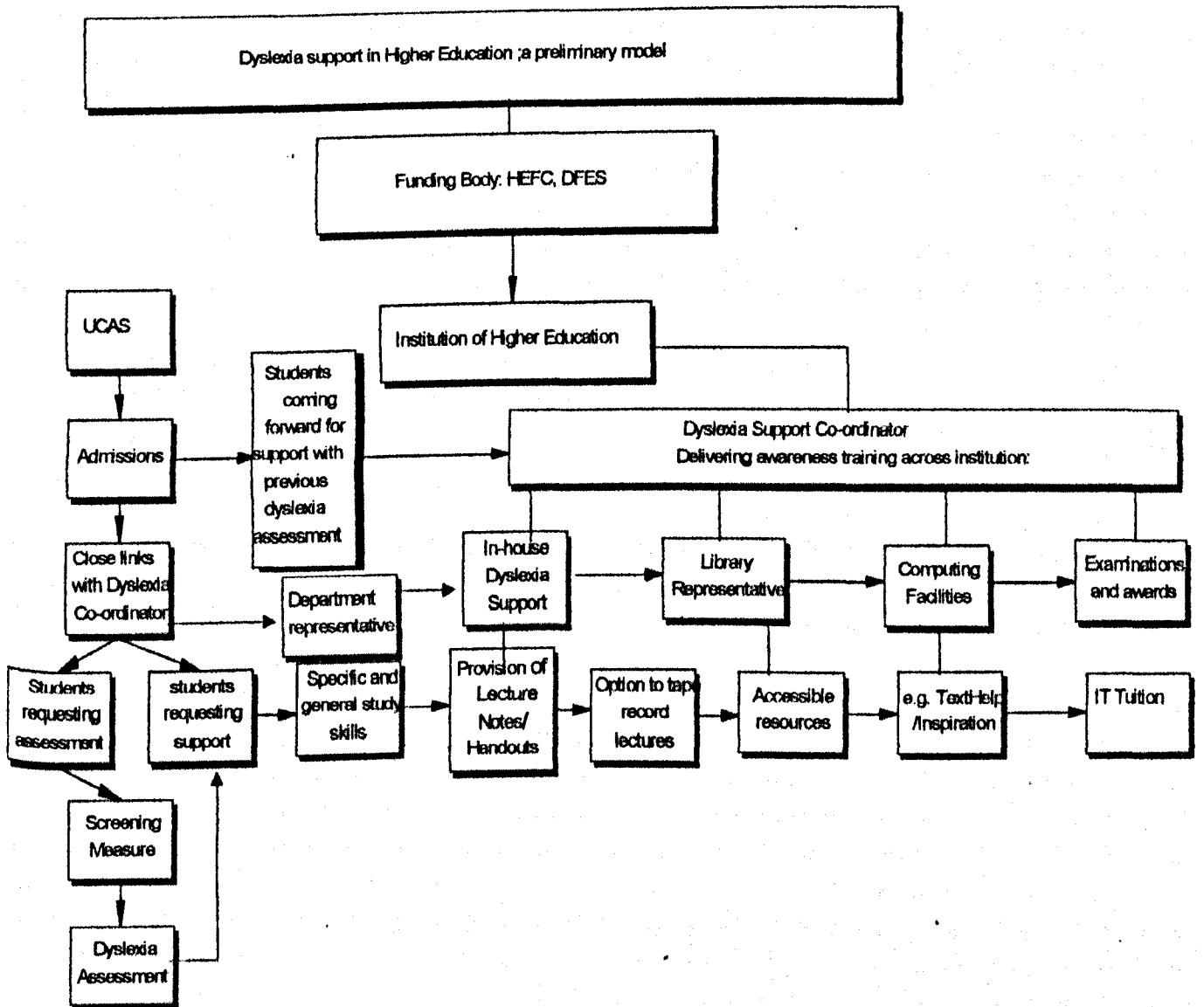
Is Psychological assessment available?	Who carries out the assessment?	Who carries out the assessment?	Who carries out the assessment?	Who carries out the assessment?	Is funding available?	If so where from?
	In-house Ed Psych.	Independent Ed Psych.	Individual with OCR SpLD Qualification	Other		
√	√				√	Hardship Fund
√	√				√	Hardship Fund
√		√	√		√	Hardship Fund
√		√			√	Hardship Fund
√		√			√	Hardship Fund
√		√			√	Hardship Fund

All six respondents confirmed that assessment/referral was available. Four confirmed that an independent educational/chartered psychologist carried out the assessment. Whilst two confirmed that an in-house educational/chartered psychologist was employed. When asked if funding was available for psychological assessment, all six respondents confirmed that funding was available through the hardship fund.

Section two - feedback from questions

The feedback from the six questions is presented in this next section. Respondents were asked to answer the following questions after perusal of the model (see below).

**Fig. 12: Preliminary Model of Dyslexia Support**



Responses for each question are presented separately.

**Table 10: Questionnaire Questions**

<b>Respondent 1- 3</b>	<b>1.</b>	<b>2.</b>	<b>3.</b>
<b>Question 1.</b> Which elements of the model do you feel reflect 'good practice'?	It's important to process the client as promptly as possible.	All of them.	All.
<b>Question 2.</b> Do you feel the model would provide effective support for dyslexic students studying in Higher Education?	Yes but all models can look good on paper - it may be different in practice.	It would go a long way towards it.	Yes, but there is so much more detail involved in the actual process.
<b>Question 3.</b> Do you consider the model encompasses;		*More explicit provision for course design/assessment + teaching methods needed.	
An accessible learning environment,		*	Yes.
An inclusive learning environment,		*	Yes + No - A truly inclusive environment would mean a student NOT having to declare dyslexia!
Issues relating to Widening Participation.	It seems to incorporate all the points but this is hypothetical - it may be different when put into practice.	*	Yes - via UCAS. But What about non-UGS? We use the same type of coding system and offer of support on our PG forms too.
<b>Question 4.</b> Are there elements of this model, which reflect the support offered at your particular institution?	Yes, we offer IT training, tutor support and liaison between school/academic staff.	Yes all.	About 85% of the model reflects our support.

**Table 11: Questionnaire Questions**

<b>Respondents 4 - 6</b>	<b>4.</b>	<b>5.</b>	<b>6.</b>
<b>Question 1.</b> Which elements of the model do you feel reflect 'good practice'?	Clear links with admissions and dyslexia co-ordinator on to staff at department level.	Most of it. Do students requesting support who are not assessed as being dyslexic still get - option to tape/accessible resources/TextHELP?	Awareness training / work with students at admission/ appropriate assessment.
<b>Question 2.</b> Do you feel the model would provide effective support for dyslexic students studying in Higher Education?	Yes.	Students already assessed as dyslexic seem to miss out on the specific/general study skills if wanted, although this would presumably be addressed in the 'in-house dyslexia support'.	What about learning and teaching input?
<b>Question 3.</b> Do you consider the model encompasses;			
An accessible learning environment,	I think so, not entirely sure of what you mean by this.	Yes.	Only some support towards it.
An inclusive learning environment,	As above - overall yes.	Yes, although at times the teaching could be addressed and changed to secure more inclusiveness.	NO - these are add ons. Inclusive learning needs to come through course design and delivery and I don't think this is addressed.
Issues relating to Widening Participation.	Not all applicants/students come through UCAS.	Yes.	Only addresses dyslexia not other issues.
<b>Question 4.</b> Are there elements of this model, which reflect the support offered at your particular institution?	Yes - Library representative, admissions link with dyslexia co-ordinator.	Yes from my understanding of the model it is very similar.	All except IT tuition/ Provision of lecture notes depends on lecturer.

**Table 12: Free Comment Section**

Respondent 1.	Respondent 2.	Respondent 3.	Respondent 4.	Respondent 5.	Respondent 6.
The process can be a long process for any model.	Awareness training must move forward to include debate on strategies for reducing barriers to learning in teaching and assessment.	What about non-UK students? What if there is no dyslexia co-ordinator? What if there is no departmental representative? It is a very brief model of the process involved, but a valid one, more detail may be useful, dependent on the intended 'audience'.	Overall the model is good but as always with these things students don't fit into categories and system so readily-especially true of students appearing with 'poor' Ed Psych reports or reports written by learning support teachers rather than educational psychologists- students then expect same level of support as received at school and don't appreciate why they need re-assessment or formal assessment.	Some of the titles in the boxes seem to be explained or self explanatory and others need more explanation for those perhaps who do not work in this area - e.g. what is in-house dyslexia support?	Whilst there is a dept' rep' - what about support/provision of lecture notes from individual lecturers. Not only training but advice and support to individuals including info on individual students learning needs.

**Detailed review of respondents' comments.**

Question 1. Which elements of the model do you feel reflect 'good practice'?

Respondent one felt that it was important to process the client as promptly as possible. Respondent two marked the following elements of the model as reflecting good practice: admissions-close links with dyslexia co-ordinator, screening measures, dyslexia assessment, departmental representative, specific and general study skills, in-house dyslexia support, provision of lecture notes, awareness training across institution, library representative, option to tape record lectures, accessible resources, and computing facilities. Respondent three regarded all the elements of the model to reflect good practice. Respondent four commented on the need for close links between admissions/dyslexia co-ordinator and staff at department level. Respondent five noted that most of the elements reflected good practice and

Respondent six identified: close links with admissions and dyslexia co-ordinator, screening measures and dyslexia assessment, dyslexia support co-ordinator delivering awareness training across institutions as being those elements reflecting good practice.

Question 2. Do you feel the model would provide effective support for dyslexic students studying in Higher Education?

Respondent one answered yes to the above question but commented that 'all models can look good on paper - it may be different in practice'. Respondent two felt that the model would go a long way towards providing effective support. Respondent three, similar to respondent one's comment, noted that more detail would be involved in the actual process. Respondent four answered yes to the above question. Respondent five commented that 'students already assessed as dyslexic seem to miss out on the specific/general study skills, although this would presumably be addressed in the in-house dyslexia support'. Respondent six raised the issue of learning and teaching input.

Question 3 Do you consider the model encompasses:

- An accessible learning environment
- An inclusive learning environment
- Issues relating to widening participation

Respondent one commented that although the model seemed to address all the points raised in question three, in practice the outcome might be different. Respondent two felt that more explicit provision for course design, assessment and teaching methods were needed. Respondents one and two therefore gave an overall comment to the three sections in question three.

- *An accessible learning environment- answers from respondents three-six*

Respondent three felt that the model provided an accessible learning environment. Respondent four commented that they thought the model provided an accessible learning environment however added that they were not entirely sure what that meant. Respondent five felt that the model provided an accessible learning

environment and Respondent six felt that the model provided only some support towards an accessible learning environment.

- *An inclusive learning environment - answers from respondents three-six*

Respondent three raised an interesting point regarding inclusive learning environments, and commented that a 'truly inclusive environment would mean a student NOT having to declare dyslexia!' Respondent four felt that overall the model provided an inclusive learning environment in terms of their understanding of the question. Respondent five commented yes but noted that 'teaching could be addressed and changed to secure more inclusiveness'. Respondent five did not feel that the model provided an inclusive learning environment and commented that this needed to come via course design and delivery, which they did not feel was addressed in the model.

- *Issues relating to Widening Participation - answers from respondents three-six*

Respondent three commented that issues relating to widening participation were covered with respect to those students coming through the UCAS system but not for those students entering university for post-graduate courses. Likewise Respondent four raised this issue. Respondent five felt the model incorporated issues relating to widening participation and Respondent six noted that it only addressed widening participation issues for dyslexic students.

Question 4. Are there elements of this model, which reflect the support offered at your particular institution?

Respondent one noted that their institution offered IT training, tutor support and liaison between school/academic staff. Respondent two noted that all elements of the model reflected support at their institution. Respondent three commented that the model reflected 85% of the support offered at their institution. Respondent four answered yes and mentioned library representative and admissions links with the dyslexia co-ordinator. Respondent five felt that from their understanding of the model support at their institution was similar. Respondent six noted all elements apart from IT tuition and commented that provision of lecture notes depended on individual lecturers.



## Free comment section

The free comment section raised some extremely interesting and useful feedback from respondents. Respondent one commented on the time scale involved in the support process for dyslexic students, irrespective of the model used. Respondent two raised the issue of awareness training and the need to move toward a debate on strategies, which reduce barriers in learning and teaching assessment. Respondent three felt that although brief the model was a valid one and suggested that more detail would be useful for those outside the field. Furthermore they raised the issue of non-UK students and the difficulties arising should there be no dyslexia co-ordinator/departmental representative. Respondent four felt that overall the model was good, however commented that in practice not all students would fit into the categories, particularly those students with less than adequate psychological assessments. Furthermore, this respondent raised the issue of unrealistic expectations of support provision for those dyslexic students who may have received a high level of support previously, together with the complexities involved, should further assessment be required in order to attain DSA (Disabled Student Allowance). Respondent five felt that some of the titles in the model required further explanation, for those unfamiliar with the area. Whilst noting the existence of the department representative, Respondent six raised the issue of availability of lecture notes from individual lecturers and the availability of not *only* training but also advice and support to individuals including information on individual students' learning needs.

### **Summary of findings from peer review study**

Certainly, the responses generated from the peer review questionnaire suggest overall that respondents felt the model reflected 'good practice'. Furthermore, respondents felt that the model would provide effective support for dyslexic students in Higher Education, however caution was raised as clearly on paper a model may look useful, but the efficacy of the model would need to be investigated in practice.

Overall respondents felt that the model encompassed an accessible learning environment, however one respondent felt that it provided only some support towards it, this is a valid point. Certainly there are elements of the model which purport to encompass an accessible learning environment, however I fully appreciate that cross institutional awareness training on accessible learning environments is a complex issue. One can suggest close links with key members across departments/administrators and providers of support however this process is time consuming and until accessibility is addressed on a

global basis, the model could rightly be described as providing *some* support towards an accessible learning environment.

When asked if the model encompassed an inclusive learning environment, in essence respondents felt that it did, however, interesting observations were generated from this question. Namely, Respondents commented on the need for departments to offer teaching environments that encompassed inclusive environments, via course design and delivery. Furthermore one respondent, commented that 'truly inclusive learning environment would mean a student NOT having to declare dyslexia.'

In terms of the model's efficacy with regard to issues relating to widening participation, in general respondents felt that the model encompassed these issues, however invaluable comments were made with regard to those students who do not enter University via UCAS, namely Post-Graduates/International students. Certainly this is an area worthy of comment and the model would need to be adapted to incorporate these issues.

When asked if there were elements of the model that reflected the support offered at their particular institution, respondents generally answered yes. Again useful feedback was generated from this question, one respondent noted that although lecture notes were available this was at the discretion of individual lectures. Hence the need for the implementation of awareness training to emphasise the need for availability of lecture notes by many dyslexic students, clearly if this was the case then all students would benefit.

The free comment section revealed thoughtful feedback from respondents. Issues raised included the time scale involved in the support process for dyslexic students, irrespective of the model used. The provision of in-house dyslexia/general study skills support would address this in part, ensuring that students had access to support upon request, furthermore the availability of specialist software would afford students speedier access to support. Although brief the model was regarded as a valid one and it was suggested that more detail would be useful for those outside the field. The issue of availability of lecture notes from individual lecturers was also raised and again this fits in to the need for awareness training across departments. In addition, availability of not *only* training but also provision of advice and support to individuals including information on individual students' learning needs was raised. Essentially the comments centred on a need to move toward a debate on strategies, which

reduce barriers in learning and teaching assessment, this being a specific comment raised by respondent two.

Overall the responses from those working in the area of dyslexia support were very encouraging and suggested ways forward for enhancing developing the model, namely:

- Inclusion of policy measures to support Post-Graduate/International students
- Greater emphasis on links across all areas to ensure an inclusive learning environment
- More detail for those outside the field

Certainly, due to the on-going nature of the research carried out within this thesis, these elements could be introduced into the model and this is clearly something to be developed in further research. It also seems important to acknowledge that any model would in essence be 'organic' in that it would need to adapt to the needs of the service user (in this case dyslexic students in Higher Education), offering a fruitful future research agenda.

## **Chapter 10: Reflections on the Thesis**

### **Why Study the Experience of Dyslexic Students in Higher Education?**

The 'why' element of my research, i.e. why is this question important to the study of dyslexia, understandably occupied much thought throughout the duration of my PhD. It is only in this last stage, however, that I have come to realise that a sound understanding of 'why' my question was important to ask, is pivotal to a comprehensive and ethical research agenda, and hopefully my research question has taken on a more luminous quality. Had someone asked me why my question was worthy of in-depth research, I would, I hope, have known implicitly, however, my ability to voice this understanding was alarmingly vague. Upon reflection, my research sought to gather and listen to dyslexic students' personal accounts of what it is like to study in higher education, together with their individual appraisal of the support they had received. I then applied these accounts by formulating a questionnaire to explore further the experience of dyslexic individuals studying in higher education in the UK, to gather information on a larger scale. To this end, the case studies were an attempt to get close to participants' narratives and to encompass their realities in subsequent studies within the thesis. Therefore, qualitative enquiry was employed in the first instance in order to intuit possible questions for later quantitative inquiry in the subsequent questionnaires (studies three and four).

### **Studies one and two**

The initial starting point for the thesis was an autobiographical account of my experience within Higher Education both as a dyslexic student and as a student advisor (see chapter 2). This generated the development of the case studies that sought to gather and listen to dyslexic students' personal accounts of what it is like to study in higher education.

## **Researcher and Participant Relationship (case studies)**

The second study draws upon the experiences of dyslexic students throughout part of their undergraduate studies. Clearly, this was a situation already experienced by myself; however, the aim of the guidance sessions was to offer an arena in which to voice concerns and issues which the participants felt reflected their experience, free from judgement by myself. I was, nevertheless, continually aware of my own dyslexia and the impact that my comments might have had, in relation to studying in higher education as a dyslexic student, within the guidance sessions. Therefore, whilst I endeavoured to provide a setting which encompassed mutual relationships, I was ever aware that my experience at times blended into the talk, and acknowledged therefore, that a clear reflexive stance was needed throughout my methodology and write-up.

Whilst I wanted to be honest and open with the participants, I also wanted to hear their stories; therefore treading a fine line between providing a safe environment and one which reflected the participants' experience throughout. Hence, my approach was very broad; veering away from terminology such as failure, weakness, struggling, and encouraging participants to offer their own account. My counselling supervisor offered valuable advice throughout the sessions and raised my awareness many times, encouraging me to de-centre, to reflect on the sessions from the participants' point of view. Perhaps the most fundamental thing I learned in this instance was that we never know what *that* feels like; we only have our own representation of a shared situation and this is something I strive to remember always.

## **Qualitative Enquiry: Carrying out the Study**

The guidance support sessions, which formed the basis of the qualitative study (Study Two), took place over a twelve-month period. The subsequent transcription and analysis occupied three years. Indeed, although attempting to stay within a framework, I found the analysis of qualitative data to be a very lengthy process, occupying much reflexivity and re-evaluation and remaining somewhat elusive in the initial stages. At the beginning of my research, versed in the more quantitative methodologies, which I had employed throughout my undergraduate degree, I knew little of the procedures involved in completing qualitative research. Initially and wholly naively, I envisaged that I would 'pick-out' those elements of the transcripts that were relevant to the research, remaining oblivious with regard to the

justifications behind my filtering of the data. My initial thoughts were that I would *do* grounded theory (Henwood and Pidgeon, 1992) on my data; however, with hindsight, even then I knew little of what that entailed. I was very grateful therefore, when I came upon a method of qualitative enquiry that, to all intents and purposes, provided a framework within which to analyse the gathered data.

I embarked on analysis of the transcripts using IPA (Interpretative Phenomenological Analysis) (Smith, 1999). Employing this particular mode of analysis gave me a starting point that enabled me to begin working with my transcripts; this, in itself, was very reassuring.

The first stage was to read through the transcripts in depth several times. This gave me the opportunity to re-live the sessions and to note down any particular statements which stood out or ran through the data. The next point of analysis was to note down significant statements within the transcripts. This process was a very cyclical one in that I first approached each of the participants' transcripts in this way and then went through each of the transcripts again looking for common themes which ran across all the participants accounts – therefore generating major themes. However, upon completion of all the steps, and the generation of both individual participant tables containing themes and overall tables containing themes across participants, I felt, to all intents and purposes, none the wiser. Whilst the employment of IPA had allowed me to work with the data, I still felt that I had not analysed the data *per se*, I was alarmingly aware that I did not fully understand the rationale behind employing such a methodology. This led me to do further reading on the philosophical underpinnings of this type of qualitative enquiry, something I felt was crucial if I was to offer an explanation of the findings of Study Two. I embarked on a review of symbolic interactionism, following a discussion with one of my supervisors, Paula Nicolson; the more I read, the more I felt that this type of framework did justice to the data I had gathered. Underlying this philosophy is the belief that self is constructed by society; in this instance, the construction of the dyslexic students' identity and their resulting experience in higher education seem inextricably linked to both peer and academic appraisal of their literacy skills.

Therefore, what we are dealing with, observing and interacting with, is the 'whatness' of an experience; an exploration of a situation and the feelings and thoughts that are held by the individual at that time. For instance, upon reflecting on my own experience when requested to leave my PGCE course I am aware that, at that time, I felt devastated and a failure and, unfortunately, I did not have the

confidence to challenge the system. Now, I would approach a similar predicament in a different way and would feel it my obligation to educate those involved. So, my experience is transient and changes over time; this, of course, makes an all-too-illusory phenomenon like dyslexia ever more complex! The important thing to keep in mind is that, although we experience life in a subjective or objective way, the two are not mutually exclusive; they envelope one another and thus warrant careful consideration when interpreting the meaning we bring to our experience.

### **Reviewing the findings generated from the case studies (study two)**

Certainly the case studies generated a rich source of data which proved invaluable, enabling me to develop an understanding of those issues which participants raised and also permitting me to formulate the items for the questionnaire. Essentially, when looking at the themes collectively it was the participants' need to develop an understanding of their particular learning style, which became apparent.

In terms of the theme looking for a reason, by participants looking back on previous education and also their experience within higher education. Thus, the findings confirmed the need for a support system, which affords access to practitioners with sound knowledge of these issues, to provide dyslexic students with suitable guidance and support mechanisms. Thereby encouraging them to understand their particular strengths and develop a sound appraisal of their academic capabilities, dispelling any negative assumptions previously held.

Within the theme of social comparison it was apparent that participants regularly made comparisons with peers. Undoubtedly this is a very complex issue, there are clearly those students who set high standards for themselves who may hold unrealistic views of what it is like not to be dyslexic. Perhaps one of the most important implications to be generated from this particular theme was the need to offer support that enables dyslexic students to form realistic appraisals of their learning differences. An interesting outcome of the diversity within this theme was between Richard, Clare, John and, Deborah. Richard, Clare and John all felt that others did not struggle in the way they did when completing course assignments, this had profound effects in terms of motivation and hindered them considerably. Deborah however viewed her learning style as 'different' but recognised that her peers also struggled at times with the production of written work. What is interesting is the level of awareness that each of the participants demonstrated and Deborah

displayed a sound understanding of her learning style. Essentially the findings generated from this particular theme therefore confirm the need for information both on a generic level and individual level to be offered to students following the assessment process. Unfortunately, Clare, John and Richard did not feel that they had been offered or had acquired an understanding of dyslexia both on a general level and in forming an appraisal of the impact of dyslexia on their individual learning.

The theme low self-esteem demonstrated the need for participants to move away from a negative appraisal of ability. For Clare and John in particular this feeling of low self worth was extremely debilitating. Indeed, all participants at one stage or another throughout the guidance sessions expressed that at times they felt they could no longer continue with their course. The implications of this particular finding warrant concern. In terms of addressing these issues it seems appropriate that not only guidance support be available, but equally so that awareness training be disseminated across all areas of academic institutions to ensure that appropriate/inclusive teaching methods are employed. Clearly this is a complex issue and one which warrants considerable further research, in terms of those elements which would create an accessible learning environment. Nevertheless the research proved invaluable in terms of flagging up these tenuous issues.

The final theme to emerge was that of need for appropriate support which proved very different for each of the participants. For Clare it was the resistance she met from her department in terms of implementing the support recommended in her assessment of need which caused her concern, clearly this left her feeling very frustrated. Again the implications of this particular finding suggest the need for awareness training to academic departments as paramount. Richard felt that the support he had been allocated, post-graduate study skills mentor, scribe in examinations and study skills support were ineffective as he was so far behind in his work. In terms of the allocation of a scribe, Richard felt that his examination scripts suffered, as he was only able to dictate a limited amount even when additional time was allowed. Clearly this suggests that on-going review of students progress is fundamental. John although feeling that the support offered was quite useful, felt that he was being a drain on the support services within his university. Deborah talked about the ineffectiveness of support she had encountered together with patronising attitudes. Undoubtedly, the findings reflect the complexities involved in providing suitable support and were invaluable in formulating both the items for the questionnaire together with the preliminary model of dyslexia support.



## **Reviewing the findings generated from the Questionnaire (study three)**

As with the findings from the case studies, the results of the questionnaire provided invaluable information with regard to the experience/attitudes of those dyslexic students who took part in the study. Essentially, respondents felt they had a clear understanding of dyslexia and identified with the need to become independent in their studies. Overall, respondents agreed that they received more than just a label, e.g. an explanation of dyslexia, however this does cause concern for a minority of respondents, who did not. Again the findings justify the fundamental need for any support model to offer guidance/information to dyslexic students following assessment. Over a third of respondents reported weak short-term memory as the most annoying consequence of dyslexia; just under two thirds finding it difficult to manage their time effectively, indicative of poor organisational skills. Once more these findings verify the need for students to access specialist support which develops sound organisational/study skills.

A most unsatisfactory finding was that over half of the respondents felt that their lecturers did not understand what dyslexia was, this clearly warrants concern when looking at issues surrounding advocacy, e.g. informing tutors of appropriate teaching/learning methods-different learning styles. The implication of this particular finding being a fundamental need for awareness training across academic departments in particular, and institutions on a whole. Hence the questionnaire generated evidence confirming the need for support services, which offer guidance that enables students to form an understanding/awareness of their dyslexia, if they are to develop and enhance their academic performance and feel confident in their ability to convey their particular learning needs to tutors/lecturers.

Respondents reported a lack of/delay in receiving support following their assessment of need, which demonstrates a need for a model that offers access to support for students irrespective of their DSA status. Furthermore respondents reported limited access to IT training in the use of specialist software equipment, recommended in their assessment of need report. Hence the need for sound follow up support if students are to benefit from recommendations and in turn develop their study skills.

Therefore the findings generated from the questionnaire provided valuable information both in terms of extending the findings of Study Two and in generating the preliminary model of dyslexia support.

### **Reviewing the Findings generated from the Peer Review**

The peer review study, undoubtedly provided invaluable information from those in the field and affirmed that the preliminary model developed from the findings of the research reflected 'good practice'. Although, respondents felt that the model would provide effective support for dyslexic students in Higher Education, caution was raised. Respondents noted that on paper any model may look useful, but primarily the most important point is the efficacy of the model in practice (see following section on directions for further research). Reassuringly, respondents felt that the model encompassed an accessible learning environment, however a valid point raised was that the model could only go some way to this and essentially it would need to be addressed via course design and assessment by academic departments. Therefore suggesting the need for cross-institutional awareness training on accessible learning environments. This matter was also raised with regard to offering inclusive learning environments and the need for departments to offer teaching methods that encompassed inclusive learning, via course design and delivery. Issues were also raised with regard to widening participation and the need to include those students who do not necessarily enter university via the UCAS process, namely post-graduates and international students.

The free comment section revealed useful feedback from respondents. Issues raised included the time scale involved in the support process for dyslexic students, irrespective of the model used. Although brief, the model was regarded as a valid one, essentially the comments centred on a need to move toward a debate on strategies, which reduce barriers in learning and teaching assessment.

### **Limitations**

The case studies carried out looked in-depth at first and second year students and it would have been useful to follow participants throughout their courses. Due to the complexities involved in carrying out longitudinal research it was only possible to gain access to participants over a period of twelve months. In part, this was

addressed in study three (questionnaire) in that responses were generated from dyslexic students across: first, second, third and fourth/final year students.

The questionnaire produced a rich data set that further developed the themes generated in the case studies, I chose to analyse the responses in light of the themes developed in study two; the justification for this being that the items were developed through exhaustive qualitative analysis. Certainly, it would have been useful to perform some high-order analysis of the data to discern a pattern. Whilst this would have afforded a deeper understanding of the questionnaire responses, the analysis performed identified a sound and in-depth appreciation of the respondents views. I shall address this issue further in the following section: directions for further research.

### **Directions for further research**

Certainly, due to the on-going nature of the research carried out within this thesis, the preliminary model could be developed in a number of areas, clearly this is something to be developed in further research. As stated previously in the above section (limitations) it would be beneficial to carry out further analysis on the data set derived from the questionnaire study (study three). To this end further research in the form of factor analysis would be useful to determine any patterns which emerged from the data set.

Certainly the nature of research within this thesis is 'organic' in that observations derived from the studies provide information which can be fed into the system. In order to develop the preliminary model further, those concerns raised by respondents in study four would need to be incorporated in to the model. Clearly, this is a useful further research agenda to be developed.

Another area of research to be developed, which arose throughout the studies was the need to gather information on teaching methods which reflect accessible/inclusive learning. I would hope that the preliminary model developed throughout this thesis goes some way to addressing these issues. Further research would inevitably assist in developing/enhancing the model in light of the findings generated throughout the thesis.

## Conclusions to the thesis

The findings generated throughout the thesis have provided a sound understanding of the issues involved in providing appropriate support to dyslexic students, studying in higher education. In this sense the generation of these findings has afforded me the opportunity to carry out research which serves to enhance practice, policy and pedagogy. Thus, enabling further areas of research to be identified in providing suitable support to dyslexic individuals studying in Higher Education in the UK. What is most interesting is the development of support services throughout the duration of this research; developments which reflect the findings of this particular piece of research. It is most encouraging to witness these changes in support and one would hope that progress continues within the field. Certainly, there is clearly a long way to go before it could be said that the majority of institutions in Higher Education provide inclusive/accessible learning environments. However policy measures certainly appear to be geared towards informing and developing practice, particularly with introduction and implementation of accessible learning requirements outlined in the Special Educational Needs and Disabilities Act (2002). To this end the thesis offers a sound contribution to our understanding of the experience of dyslexic students in Higher Education in the UK and suggests ways forward both in terms of suitable support mechanisms, together with suggestions for further research.

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# Appendices

## Appendix 1. Consent forms

### The University of Sheffield

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#### Department of Psychology

Psychology Building, Western Bank, Sheffield S10 2TP, UK

Department Chairman	Professor J P Frisby	National International Fax	Sheffield (0114) 2768555 +44114 2768555 Sheffield (0114) 2766515
Dyslexia Research Group	Dr. Rod Nicolson Dr. Angela Fawcett	Tel. Direct	0114 2226504
Guidance/ Support	Wendy Carter	Tel.Direct	0114 2226513

#### **CONFIDENTIALITY**

Confidentiality means that what you discuss with your **Guidance Support Worker** will be kept private.

#### **Obtaining the Client's Permission to Tape Guidance Sessions**

The form below gives the Guidance Support Worker permission to tape Guidance Support Sessions. Under no circumstances will clients be referred to by name in the transcripts. The information gathered will be used to form part of the Guidance Support Workers ongoing research. Complete anonymity is assured.

If you do not feel comfortable about having the sessions recorded, please do not feel under any pressure to do so, however, our research would greatly benefit from doing so.

---

Please choose

I **DO/DO NOT** Give permission for Guidance Support Sessions to be taped.

Date..... Signature.....

Your choice does not affect your right to Guidance. Thank you.

## Appendix 2. Introductory Letter.

### The University of Sheffield

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#### Department of Psychology

Psychology Building, Western Bank, Sheffield S10 2TP, UK

Department Chairman

Professor J P Frisby

National  
International  
Fax

Sheffield (0114) 2768555  
+44114 2768555  
Sheffield (0114) 2766515

---

Dyslexia Research Group

Professor Rod Nicolson  
Dr. Angela Fawcett

Tel. Direct 0114 2226504

---

Dyslexia Support

Wendy Carter

Tel. Direct 0114 2226513

---

Date

Address

Dear

**Re. Dyslexia- Support/Guidance**

Your name has been forwarded to me by Zoe Chapman(Central Support and Welfare).

I would be most grateful if you could contact me at the above number, we can then arrange an appointment. I shall do my best to offer you a time which is convenient and should hope that we can meet within the coming week.

I look forward to hearing from you.

Yours sincerely

**Wendy Carter**  
**Dyslexia Guidance**

## Appendix 3. Guidance/Support Information.

### The University of Sheffield

#### Department of Psychology

Psychology Building, Western Bank, Sheffield S10 2TP, UK

Department Chairman	Professor J P Frisby	National International Fax	Sheffield (0114) 2768555 +44114 2768555 Sheffield (0114) 2766515
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Dyslexia Research Group	Professor. Rod Nicolson Dr. Angela Fawcett	Tel. Direct	0114 2226504
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Guidance/ Support	Wendy Carter	Tel.Direct 0114 2226513
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#### Dyslexia Guidance - Support

This is a confidential service which is backed up by the University of Sheffield Counselling Service.

Whilst there are facilities for students with dyslexia to receive an assessment of needs leading to the recommendation of study skills workshops, it is apparent that some students require additional support and guidance if they are to benefit fully from their education.

In some cases the realisation that one has a genuine difficulty is liberating in itself, however, there can also be feelings of anger and loss. One of the most vital aspects is insight into the problems dyslexia creates, in terms of general life risks, such as organisation, as well as literary skills. Whilst there are possibilities within the University for 'generalist' counselling, there is a need for 'specialist' guidance and support which addresses differences in learning style and self appreciation, which are specific to the dyslexic individual. The dyslexic's understanding of the fundamental nature of their difficulties is crucial to overcoming those difficulties (McLoughlin et al, 1994).

Dyslexia guidance and support is a service in which one to one support is offered to the student, in order that the student can work through feelings of low self esteem and lack of confidence, together with other issues relating to the individual student. The support is delivered by a tutor who is dyslexic, making this service unique of its kind.

The overall aim of the service is to enhance personal development and to encourage self reliance, to offer support which is crucial to the long term professional/academic development of the student.



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## Section 2 Representative Scale

## Representative Scale

	Representative Scale						
	1	Totally Agree 2	3	Neither Nor 4	5	Totally Disagree 6	7
<b>Q1.</b> I have a clear understanding of what dyslexia is.	1	2	3	4	5	6	7
<b>Q2.</b> The difficulty is getting things down on paper.	1	2	3	4	5	6	7
<b>Q3.</b> I value extra time in exams.	1	2	3	4	5	6	7
<b>Q4.</b> I will always be a bad speller.	1	2	3	4	5	6	7
<b>Q5.</b> I feel I am a valued group member.	1	2	3	4	5	6	7
<b>Q6.</b> I find it 'annoying' when people say I suffer from dyslexia.	1	2	3	4	5	6	7
<b>Q7.</b> It's weak short-term memory that I find the most annoying consequence of dyslexia.	1	2	3	4	5	6	7
<b>Q8.</b> Sometimes I get angry when I think about my school years.	1	2	3	4	5	6	7
<b>Q9.</b> I consider myself 'average' at written work.	1	2	3	4	5	6	7
<b>Q10.</b> I feel the support I've been offered has helped me to become an independent learner.	1	2	3	4	5	6	7
<b>Q11.</b> I prefer to use a tape recorder in lectures.	1	2	3	4	5	6	7
<b>Q12.</b> No one has explained 'dyslexia' to me.	1	2	3	4	5	6	7
<b>Q13.</b> I worry about telling future employers about my dyslexia.	1	2	3	4	5	6	7
<b>Q14.</b> My parents felt they let me down.	1	2	3	4	5	6	7
<b>Q15.</b> I feel guilty about getting all this equipment.	1	2	3	4	5	6	7



## Appendix 4. Questionnaire.

Dear Student,

I am currently carrying out a study to look at dyslexic students' experience in Higher Education. The following questionnaire should take between 10-15 minutes to complete.

I would be most grateful if you would take part in this research and would value any additional comments that you wish to include.

Should you decide to take part in this study all information will be treated in the strictest of confidence.

### How to complete this questionnaire

This questionnaire is made up of two sections. The first section is asking you about your own history.

The second section is asking you to rate how the following 45 statements relate to your own experience by circling a number on the **Representative** scale where:

**1 = totally agree**

**4 = neither agree nor disagree**

**7 = totally disagree**

*For Example:*

	Representative						
	Totally Agree		Neither Nor		Totally Disagree		
	1	2	3	4	5	6	7
Q1. I am happy with my chosen course	1	2	3	4	5	6	7

**i.e. This student does NOT agree with the above statement.**

Upon completion, please return the questionnaire in the pre-paid envelope enclosed.

Many thanks for your time.

**Representative Scale**

		Totally Agree		Neither Nor		Totally Disagree		
		1	2	3	4	5	6	7
<b>Q16.</b>	<b>I get embarrassed when reading aloud.</b>	1	2	3	4	5	6	7
<b>Q17.</b>	<b>I know that if I improve my: writing, reading and spelling, I'll still be dyslexic.</b>	1	2	3	4	5	6	7
<b>Q18.</b>	<b>I prefer NOT to tell lecturers/tutors that I'm dyslexic.</b>	1	2	3	4	5	6	7
<b>Q19.</b>	<b>I sometimes doubt my 'intelligence'.</b>	1	2	3	4	5	6	7
<b>Q20.</b>	<b>I'd say my spelling is now average.</b>	1	2	3	4	5	6	7
<b>Q21.</b>	<b>I'm not very confident about myself.</b>	1	2	3	4	5	6	7
<b>Q22.</b>	<b>It's important to me that I find ways to become independent in my work.</b>	1	2	3	4	5	6	7
<b>Q23.</b>	<b>I have to be very organised; if not everything would fall apart!</b>	1	2	3	4	5	6	7
<b>Q24.</b>	<b>I check my work thoroughly and ask a friend to read through it.</b>	1	2	3	4	5	6	7
<b>Q25.</b>	<b>I find it difficult to explain what dyslexia is.</b>	1	2	3	4	5	6	7
<b>Q26.</b>	<b>My parents didn't support me.</b>	1	2	3	4	5	6	7
<b>Q27.</b>	<b>I'd like to find 'long-term' solutions to my difficulties.</b>	1	2	3	4	5	6	7
<b>Q28.</b>	<b>I'm sure that I sometimes come across as 'a bit dippy'!</b>	1	2	3	4	5	6	7

## Representative Scale

		Totally Agree			Neither Nor		Totally Disagree	
		1	2	3	4	5	6	7
Q29.	Lecturers/tutors don't understand what dyslexia is.	1	2	3	4	5	6	7
Q30.	I feel I am just as intelligent as anyone else on my course.	1	2	3	4	5	6	7
Q31.	I feel confident using my computer.	1	2	3	4	5	6	7
Q32.	I worry that if I improve I won't get the support.	1	2	3	4	5	6	7
Q33.	I find it difficult to manage my time effectively.	1	2	3	4	5	6	7
Q34.	I tape the lectures but it's not helpful.	1	2	3	4	5	6	7
Q35.	I don't know how to get the most out of my computer.	1	2	3	4	5	6	7
Q36.	I feel confident about reading out loud.	1	2	3	4	5	6	7
Q37.	I do not feel guilty about getting equipment.	1	2	3	4	5	6	7
Q38.	I feel in control of my course work.	1	2	3	4	5	6	7
Q39.	I feel I offer future employers the same qualities as my non-dyslexic peers(fellow students).	1	2	3	4	5	6	7
Q40.	I like to be up-front about my dyslexia with lectures.	1	2	3	4	5	6	7
Q41.	I find group work very helpful.	1	2	3	4	5	6	7
Q42.	I sometimes think I should just give up the course.	1	2	3	4	5	6	7
Q43.	I feel embarrassed using a tape recorder in lectures.	1	2	3	4	5	6	7
Q44.	I don't really know what dyslexia is.	1	2	3	4	5	6	7
Q45.	I prefer to work to my own deadlines.	1	2	3	4	5	6	7



## Appendix 5. Peer Review Questionnaire

**Wendy Carter**

PhD research student - The University of Sheffield

Student Advisor - The University of Bath

### **Dear Colleague**

Presented below is a model developed throughout my PhD research, which explores the experience of dyslexic students in Higher Education. The model was developed from the analysis of four in-depth case studies, from which various themes emerged. The themes were used as the basis for a questionnaire. It would be invaluable to have feedback from those working in Higher Education with dyslexic students on the effectiveness of support systems, which are reflected in the model. The questionnaire should only take about 10-15 minutes to complete.

### **How to complete the questionnaire**

The questionnaire is made up of **three sections**.

**Section one** asks you about your professional background.

**Section two** asks you some short questions about the model.

**Section three** is a free space which gives you the opportunity to comment on any aspects of the model you feel have not been incorporated in the questionnaire.

Should you decide to take part in this study all information will of course be treated in the strictest of confidence.

If you do not have the opportunity to complete this questionnaire immediately, please send it back to me in the stamped, addressed envelope provided.

**Many thanks for your help in completing this questionnaire.**

**Section 1**

What is your job title?.....

Type of institution/ region /name of institution (optional)?

.....

Approximate number of dyslexic students registered?.....

Please list the screening tool/s employed/available at your institution?

.....

.....

Is access available for full Psychological (dyslexia) Assessment ?..... if so who carries out assessments? Please tick appropriate box.

<b>Independent Psychologist (chartered/educational)</b>	<b>In-house Psychologist (chartered/educational)</b>	<b>Individual with OCR SpLD qualification</b>	<b>Other</b>
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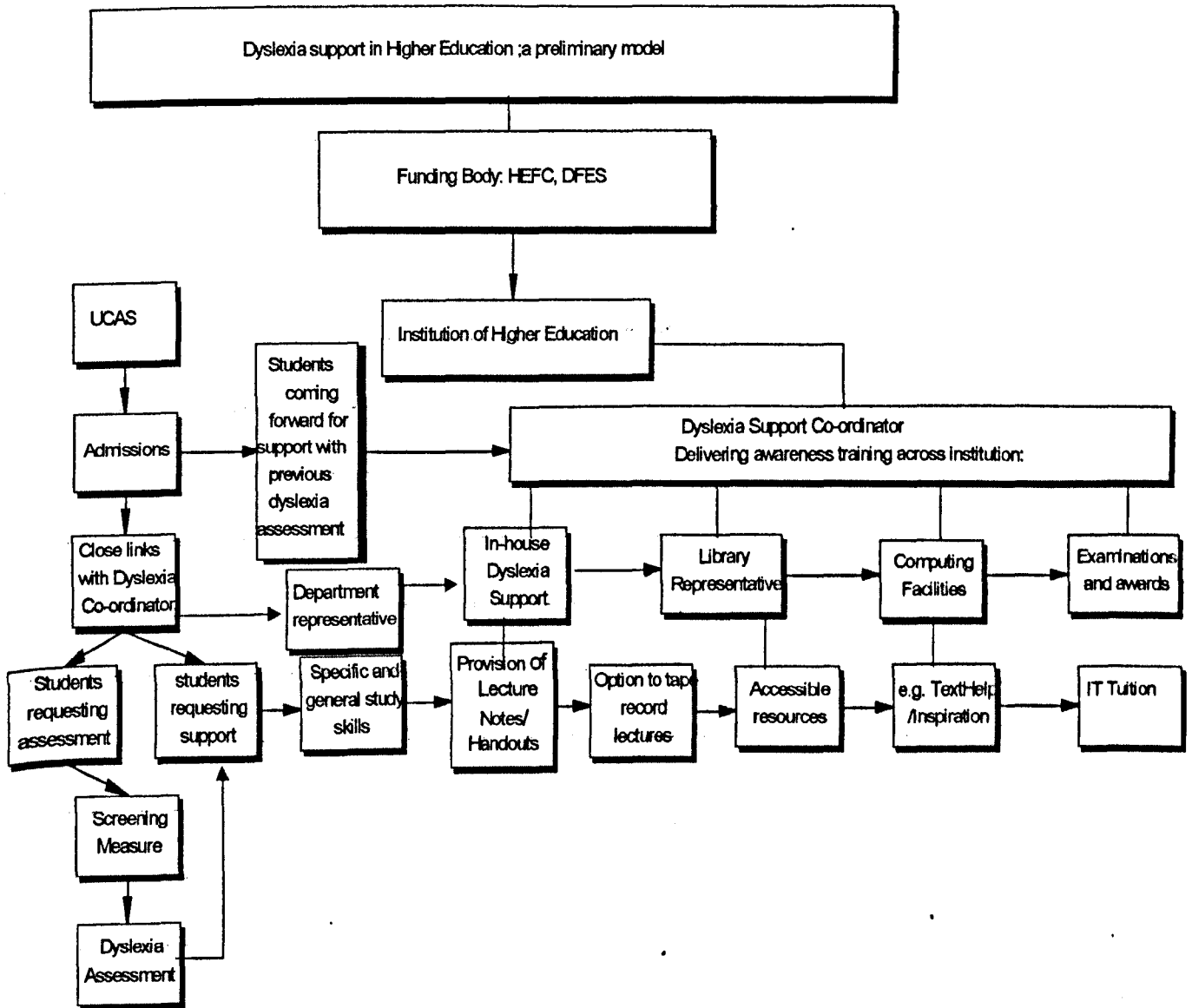
Is funding available for students requesting full Psychological (Dyslexia) Assessment?

.....

.....

## Section 2.

Please spend a few minutes perusing the model and completing the questions below. The model should be considered outside the constraints of the present system, and is offered as an alternative/complementary tool to enhance practice and suggest ways forward in shaping policy.



**Question 1.**

Which elements of the model do you feel reflect 'good practice'?

.....  
.....  
.....

**Question 2.**

Do you feel the model would provide effective support for dyslexic students studying in Higher Education?

.....  
.....  
.....

**Question 3.**

Do you consider the model encompasses;

an accessible learning environment,

.....  
.....

an inclusive learning environment,

.....  
.....

issues relating to Widening Participation.

.....  
.....



**Question 4.**

Are there elements of this model which reflect the support offered at your particular Institution?

.....  
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.....

**Section 3**  
**Free Comment**

Please use the space below to comment on any aspects of the model which you feel are not considered in the questionnaire or to add any further thoughts.

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**Many thanks for your time in completing this questionnaire.**

Wendy Carter (Student Advisor)  
Learning Support, The University of Bath, Bath, BA2 7AY  
w.carter@bath.ac.uk