

**Dyslexia assessment practice within the UK
higher education sector:**

Assessor, lecturer and student perspectives

Volume 1 of 2

**Submitted by Denise Therese Ryder
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Abstract

The formal assessment of dyslexia within the UK higher education sector is a relatively recent practice. The extant literature that there is reflects this historical observation. Missing from this body of literature, though, is any insight gained via systematic studies into the professional practice of those individuals directly responsible for identifying dyslexia in higher education students. In an academic climate where the very concept of dyslexia is being increasingly questioned, the perspectives of dyslexia assessors, together with those of other groups most closely affected by assessors' practice, constitute an important area of knowledge for all parties concerned with higher education pedagogical and disability issues. This thesis is based on results from the collection and careful analysis of such perspectives acquired through four surveys of large numbers of participants and a smaller number of interviews with practicing dyslexia assessors.

The study's findings reflect both the diversity encompassed by the dyslexia concept within the higher education sector, as well as the complex relationship that exists between dyslexia research and its operationalization into the practice of individual assessors. Whilst data from assessor participants displayed a detailed lack of consensus on one level, this analysis was overridden on another level by a general consensus amongst interviewees around the main purpose and foci of assessment. Lecturers' and non-dyslexic students' understanding of, and attitudes towards, dyslexia and dyslexic students were indirectly influenced by assessors' practice, particularly by what they invariably observed as the heterogeneity of assessed dyslexic students. Dyslexic students, in identifying their self-perceived difficulties, exemplified this diversity within the category. The study's findings, based on the informed perspectives of its relevant participants, suggest that much current higher education policy and practice around the recognition of dyslexia is based on erroneous unexamined assumptions. The thesis concludes with tentative suggestions as to how the assessment of dyslexia and subsequent provision for the learning difference could be more streamlined with both contemporary research positions and institutions' commitment to move towards greater inclusivity.

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Abbreviations

ADD	Attention Deficit Disorder
APA	American Psychological Association
BIS	Department for Business, Innovation and Skills
CTOPP	Comprehensive Test of Phonological Processing
DAST	Dyslexia Adult Screening Test
DDA	Disability Discrimination Act
DfES	Department for Education and Science
DSA	Disabled Student Allowance
EP	Educational Psychologist
ESRC	Economic and Social Research Council
HEFCE	Higher Education Funding Council England
HESA	Higher Education Statistics Agency
ICF	International Classification of Functioning
PATOSS	Professional Association of Teachers of Students with Specific Difficulties
Pre'92	University established before 1992
Post'92	University established after 1992
QAA	Quality Assurance Agency
SASC	SpLD Assessments Standards Committee
SpLD	Specific Learning Difficulties
ST	Specialist Teacher
STEC	SpLD Test Evaluation Committee
STEM	Science, Technology, Engineering and Mathematics subjects
WAIS	Weschler Adult Intelligence Test
WRAT	Wide Range Achievement Test
WRIT	Wide Range Intelligence Test
WHO	World Health Organisation

Chapter 1: Introduction

What we call the beginning is often the end. And
to make an end is to make a beginning. And the
end is where we start from

T. S Eliot

It may appear enigmatic to introduce an empirical research study with a literary allusion to the paradoxical nature of beginnings and endings. In the case of this study though, T S Eliot's poetic observation, albeit lifted out of context, serves as a succinct explanation for both the original impetus for the research as well as its theoretical starting point.

1.1 ORIGINAL IMPETUS AND PURPOSE

Personal

The original impetus for the research emerged from what, on one level, could be seen as an ending. When I retired in 2010 I had had over 20 years active experience of dyslexia: personally, as a mother of three diagnosed dyslexic sons; professionally, as a tutor, supporter and specialist teacher assessor for dyslexic individuals, initially teaching young children to read and latterly, for the last 12 years of my teaching career, assessing and supporting further and higher education students. On retirement though, instead of feeling satisfied with my relatively vast experience and knowledge of dyslexia, I found myself mentally wracked by tensions between long-held personal and professional understandings of dyslexia and increasingly confusing and contradictory messages coming from the research field.

Such tensions as those referred to above seemed difficult to reconcile. I was torn between remaining loyal to the many individuals with whom I had come into contact and in whom I had intuitively observed a qualitatively distinct category of learning difference, historically termed dyslexia, and logical, research-informed recognition of this condition's fluid dimensional nature. Additionally, although in theory politically and socially committed to equality of opportunity for all, I almost resented how, in the wake of the Widening

Participation initiative, the categorization was being assigned almost indiscriminately to increasing numbers of non-traditional students whose academic difficulties appeared to stem from either lack of ability or else past social and/or educational impoverishment. In other words, I could not let go of the historically accrued conviction that “dyslexia”, if it meant anything in the context of higher education, should be a label reserved for bright, academically able individuals. In effect, after years of confidently assuming that I knew what dyslexia was, I had begun to question the entire concept of dyslexia, and whether or not it could be reliably assessed. This realization provided not only an impetus for the research but also a strong purpose for it – that is, to attempt to find answers to my questions.

Wider concerns

Although the original impetus and purpose for the research were personal, the research was not narrowly envisaged as an exercise akin to solipsistic navel gazing. There was, at the time, much anecdotal evidence that many professional colleagues shared my personal dilemma, a situation that was only exacerbated by disquiet amongst the general public, particularly diagnosed dyslexic people, due to the media’s eagerness to make the most of what they invariably interpreted, and often misinterpreted, as controversial research findings about what was being questionably headlined as the “existence” of dyslexia. Additionally, the fact that legislative and higher education institutional disability policy and practice were based on what could be a false assumption about the categorical nature of dyslexia, pointed to an illogical and worrying gap between research and practice, one that was possibly responsible for perpetuating dubious educational policies as well as unequal and unethical distribution of public resources.

The practice of professional assessors of dyslexia, particularly those working with individuals within the higher education sector, was inextricably linked with the above-described controversy and, in some circles, discredited. The research was thus undertaken in the hope of providing some clarification of the theoretical and practice-based issues around the assessment of dyslexia in higher education students for the benefit not only of myself but also for

professional colleagues and all those affected by their practice. It was a beginning starting from an ending, built on a personal and professional past but looking forward to the production of knowledge that would add to the existing body of research and hopefully help to inform future policy and practice.

1.2 SOME CHARACTERISTIC FEATURES OF THE THESIS

Theoretical framework

The theoretical starting point for the research project was also paradoxically an ending in that it was based very much on the relevant research literature and debates pertaining to dyslexia, and the assessment of dyslexia, in higher education students that had taken place before the start of the project. The work of others, catalogued in the research literature, enabled as well as precipitated, the research. As the research progressed, data collected from participants suggested the adoption of a further conceptual framework from within which it appeared possible to understand and explain the observed tensions and contradictions between theories of dyslexia and their operationalization through professional assessment practice. This framework encompassing the nature of professional practice was also derived from the existing literature.

Gap in the existing research knowledge

A critical review of the research literature also confirmed a suspected gap in its knowledge, namely the perceptions, opinions and attitudes of those professionals who identify and diagnose dyslexia in higher education students. It was considered that these practitioners were in a privileged position to shed light on both the nature of their practice and the effectiveness of the policies to which it contributed. The absence of their informed perspectives appeared to be a regrettable omission from the existing body of research knowledge.

The approach taken, its focus and scope

The methodological approach taken was thus one that involved quantitative and qualitative collection and analysis of relevant participant perceptions on

the research issues. It was focused primarily around assessment practice within the UK higher education context and solicited the views not only of practicing assessors but also of others most affected by assessors' practice – lecturers and students both dyslexic and non-dyslexic. It aimed to procure an insight into what was happening in the field, and why, thereby providing data with which to answer the research questions that would, in turn, lead to an interpretation that might go some way towards making sense of and reconciling the theoretical and professional unresolved issues that were the original impetus for the research. The focus was very much on dyslexia assessment, as opposed to other related, and indeed frequently co-occurring, specific learning differences. These latter categorical classifications were considered only when highlighted by participants.

Vocabulary

Key conceptual terms

Key conceptual terms around which the research revolved were “dyslexia”, “disability”, “reasonable adjustments” and “inclusion”. They were purposely left undefined at the beginning of the research because their meanings, in the context of dyslexia in the higher education context, were questions to which it was hoped the research, based on participant perceptions, would supply answers. Individuals, even knowledgeable peers, inevitably comprehend words in different ways; the researcher thus used conceptual terms such as “dyslexia” in a convenient everyday unscientific way, one that allowed effortless non-contentious, albeit imprecise, communication of content to different audiences, with the assumption that each would construe their own meaning within the parameters of their individual understanding.

Political correctness

The matter of politically correct use of dyslexia and disability related vocabulary and syntax was not as easily managed. Dyslexia and disability are personally and socially sensitive subjects; the language used with which to refer to them, and to the individuals concerned, inevitably reveals a great deal about the user's attitudes and beliefs. I thus endeavoured, when speaking with my own voice, to respect the integrity and normalcy of

individuals with dyslexia by avoiding the use of medical language considered by many to pathologise them. Dyslexia, for example, was referred to as a processing “difference” rather than a “difficulty”, “disorder”, “deficit” or “impairment”. The term “identification”, to refer to the resulting analysis of the assessment process, was prioritized over “diagnosis”.

However, it was not practical to adopt a consistent stance regarding the use of vocabulary, particularly when referring to the work of other researchers. Historically, as well as currently, much of the important dyslexia research findings have come from the field of medicine, from the likes of clinical psychologists and neuroscientists, who routinely communicate their knowledge in language that conceptualizes dyslexia as a disorder: editing the language of researchers from such backgrounds would have run the risk of misinterpreting their intended meanings. Additionally, when perceived political correctness resulted in clumsy, unnecessarily wordy expressions, like the consistent reference to “persons with dyslexia” rather than the more economical “dyslexic” or “dyslexic student”, the latter terminology was used, but certainly without any intended inference of in-person defects. David Pollak (2009) in reference to the subject of language usage in the introductory chapter to a work on neurodiversity, remarked that in the field under discussion there was virtually no vocabulary which had universal support. This observation was gratefully borne in mind whilst attempting to steer a careful lexical course through the research report, one that was simultaneously sensitive to the feelings of the individuals referred to, that paid due regard to the language commonly used by the participants communicated with, and remained faithful to that used by the researchers whose work contextualizes the study.

1.3 THESIS OUTLINE

The research report is structured in a fairly traditional format. Following this introduction, Chapter 2: Review of the Literature, highlights and critically analyses the main theoretical and pedagogical themes to emerge from the research literature around dyslexia and its assessment within the UK higher education sector. Particular emphasis is placed on the debates, both

academic and social, occasioned by the research findings, and on the effect of these historical debates on current understanding and practice. The review focuses on the period starting in the final decade of the last century and culminating in the present. Although the importance of dyslexia research before 1990 is not denied, and is briefly acknowledged, it was not until this decade that political, social and educational events in the UK precipitated a research interest in dyslexic higher education students. Chapter 2 concludes with a focused statement of the research questions that were largely shaped by the controversial issues to emerge from the literature review.

Chapter 3: Methodology, contains a detailed account of the methodological approach taken, and the methods used, to answer the research questions. It provides potential readers with the essential information needed not only to effectively comprehend the thesis but also to more easily critically evaluate its rigour.

Chapters 4, 5 and 6 present the study's findings. A separate chapter is devoted to descriptive and critical analyses of the data from each of the participant groups: assessors, lecturers and students both dyslexic and non-dyslexic. Each of these chapters features liberal use of illustrative verbatim quotes from participants on each of the research questions and sub-questions, as well as cross referencing to a separate volume of appendices containing, amongst other documents, descriptively quantified tabular and graphical trends of the data.

Chapter 7: Discussion, integrates the findings from all three groups of participants. It refocuses the integrated data from some of the most significant findings into a discussion of their relevance for different aspects of the study's main research area i.e. the nature of dyslexia assessors' practice in the context of higher education. The extent to which the combined data answer the research questions is considered, as are the implications of such findings for controversial policy and practice issues. Chapter 7 also reflects on how the study's findings relate to those in the wider body of the research literature.

Chapter 8: Conclusion, winds up the study. It evaluates the overall success of the study in terms of its original personal, professional and academic aims and makes some tentative predictions concerning future conceptual and practical developments in the field.

An Appendices containing detailed copies of descriptive and statistical analyses and other relevant documents, referred to and cross referenced in the study, is compiled as a separate volume. It allows the reader to easily inspect supportive data without having to continuously leaf backwards and forwards through the main text.

CONCLUSION

This introduction to this thesis started on a personal note; it also ends on one. Assessor, lecturer and student perspectives were sought in an attempt to provide a relatively objective insight into and understanding of the current practice of dyslexia assessment and related issues in UK higher education institutions. Nevertheless, as intimated above, each step of the research process was inevitably affected by the researcher's own perspectives, particularly those dilemmic perspectives that were the original impetus for the research and which, if the researcher is honest, represented some firmly entrenched, even if uncomfortably maintained, prejudices. Sometimes it is not easy to move on and accept that things change. Words used to describe concepts and behaviour change their meanings in response to both new research knowledge and popular usage; the nature of institutions like universities, and society's understanding of their purposes, similarly develops. The "dyslexia problem" traverses the semantic and social, as well as the academic and educational conceptual domains. The study is thus also an attempt to grasp hold of and make some sense of the way and extent to which "dyslexia" has "moved on".

The following chapter introduces a detailed analysis of the study's subject matter; the thesis as a whole hopefully delivers an answer to some of the questions raised by it.

Chapter 2: Review of the Literature

Acquire new knowledge whilst thinking over the old, and you may become a teacher of others

Confucius

One of the difficulties about any “new” knowledge of dyslexia, its assessment and related issues, is that the new knowledge, instead of superseding the “old”, has tended to coexist alongside it, leading to simultaneous multiple and often confusing understandings. The following attempt to meaningfully integrate these multiple understandings, within a focused historical context, illustrates not only the complex and shifting nature of the dyslexia concept but also defines the starting point for the study. The extant knowledge, and the academic, pedagogical and social debates that have emanated from it, are here organized into four sections: adult dyslexia, assessment, disability and inclusion.

2.1 ADULT DYSLEXIA

The search for parsimony, usually a strength in matters of science, [has] proved a profound error in the uni-dimensional explanations given to dyslexia over its history.

Maryanne Wolf (2014)

Words and labels can take on a life of their own. They readily become loaded with ideology while the concepts they refer to may be perfectly non-contentious. This is true for the term dyslexia, but the common ground between different ideas can be hard to see.

Uta Frith (1999)

Whilst some members of the dyslexia research community strive for scientific parsimony in the understanding and use of the term “dyslexia”, others, as the above epigrams make clear, welcome the existence of multiple understandings and/or are able to see the common ground between them.

Research into adult dyslexia, particularly that subgroup of it devoted to the identification and assessment of higher education students in the UK, has generally eschewed scientific parsimony for the broader complex

understandings intimated in the above quotations. A critical investigation of the history of such research from the 1990s until the present helps to explain how and why this path has shaped current understandings of dyslexia, its assessment and related issues in the higher education context.

Informal practitioner knowledge

In the last decade of the twentieth century there was a consensus amongst the research community concerning a dearth of literature about adult developmental dyslexia (Beaton et al., 1997; Everatt, 1997; Snowling, Nation, Moxham, Gallagher, & Frith, 1997). Nevertheless, much qualitative informal knowledge was being accrued and disseminated by practitioners working with dyslexic adults. Screening measures based on this knowledge, the *Adult Checklist* (Chasty, 1987), revised by Vinegrad (1994) and Everatt and Smythe (2001), were developed in response to a perceived need. All versions consist of a series of questions based on behavioural characteristics that researchers and practitioners had observed as being typical of dyslexic adults. The Adult Dyslexia Association was set up in 1991 to offer support and advice for dyslexic adults in a range of sectors, and in 1993 chartered psychologists David McLoughlin and colleagues established one of the first specialist services for dyslexic adults, the Adult Dyslexia and Skills Development Centre. It was rapidly followed, in 1994, by the publication *Adult Dyslexia: Assessment, Counselling and Training* (McLoughlin, Fitzgibbon and Young, 1994) based on the then-known research theories of dyslexia combined with the authors' own experiential and professional learning gained from their dyslexic adult clients.

Educational practitioners, too, were starting to collect, disseminate and publish detailed qualitative knowledge about adult dyslexia gained from their work with individuals that they recognised as being dyslexic. Notable amongst these practitioner researchers were two who worked with a range of learners across both the adult basic skills and university sectors: Cynthia Klein and colleagues at the London Language and Literacy Unit (LLLU) at Southbank University, who together developed recognised practitioner expertise in diagnosing and teaching dyslexic students and training specialist

teachers (Morgan & Klein, 2000), and Margaret Herrington, who led a research project on adult learners for Leicestershire Adult Basic Education Service in 1982-1990, a HEFCE funded project with dyslexic students at Leicester in 1992-1994, and continued her observations at Nottingham University from 1995 – 2002 (Herrington, 2005).

Divergence between the clinical and statistical approaches

Practitioners, such as those cited above, were developing a conceptual understanding of adult dyslexia based on their professional training and background, but more importantly, one that was enormously influenced by what they learnt from the dyslexic people with whom they worked on a daily basis. Together, such practitioners were able to identify a range of observable behavioural and affective characteristics that were consistently manifested in dyslexic adults. In commenting on the relevance of this practitioner knowledge McLoughlin & Leather (2013) voice the opinion that such practitioner knowledge is often ahead of science, with the latter providing a *post-hoc* rationale for the former. Scientists, they add, sometimes have insufficient exposure to those they are researching and writing about. Such a view is reiterated by Miles & Miles (1999) in reference to the value of informed observation and case studies:

Without informal observation and case studies there is a risk that research may lack what is called “ecological validity”, that is, it may lead to conclusions that may be indisputable within the narrow confines of the psychology laboratory but have little relevance or importance in the outside world

Miles and Miles, 1999, p.16.

Divergence between the clinical and statistical approaches to defining the concept of adult dyslexia was apparent in the relevant literature at the end of the twentieth century (Beaton et al., 1997) and remains a characteristic theme in much of the current research literature. Adherents of the clinical approach base much emphasis on professional intuition and experience, and often refer to the “feel” of individual cases of dyslexia (McLoughlin et al.

1994; Frith, 1999; Miles, 2006). Those devoted to the statistical approach tend to be more reliant on objective evidence gleaned from reputable psychometric tests, for example, Turner (1996); Beech and Singleton (1997); Stanovich (1999). The early informal and qualitative knowledge about adult dyslexia, accrued by clinicians and practitioners such as those mentioned above, was deemed unacceptable when used alone to identify adult dyslexic students. Singleton (1999) exemplified one then-popular example, Krupka & Klein (1995), as being typical of that lacking in “objective and professionally acceptable evidence”, and thus “inadequate” (p.96). In practice, most assessors, from the end of the last century up until the present, use a combination of clinical and statistical approaches to identify dyslexic adults, but the tension between the two approaches remains, as the introduction to this review intimates, and the ensuing paragraphs will demonstrate.

Dyslexic higher education students

Concurrent interest in a specific subset of dyslexic adults, dyslexic higher education students, was given impetus by a number of contemporary political, social and educational initiatives. Student numbers were increasing rapidly in the wake of the increase in higher education institutions after 1992, and as a result of New Labour’s aim to have 50% of school leavers in higher education by 2010. As student numbers increased, so did the recognition of instances of unsatisfactory standards of literacy and study skills (Beaton et al., 1997). Numbers of students either declaring themselves dyslexic or seeking an assessment for such categorization increased disproportionately (Singleton, 1999). Dyslexia had been recognised as a legal and educational disability, and the Disability Discrimination Act 1995, recommendations of the Dearing Report 1997 and subsequent Higher Education Funding Council England (HEFCE) dedicated disability funding to institutions, and individually to eligible students (Disabled Students Allowance DSAs), all led to an urgent need for some agreement amongst researchers and professionals as to how dyslexic students could be reliably and consistently identified and supported.

Lack of consensus about the nature of dyslexia in higher education

Unsurprisingly, due largely to the professional tensions previously highlighted, such agreement was not easily obtained. In the editorial of a special edition of *Journal of Research in Reading* devoted to the problem, the authors questioned whether or not researchers and clinicians attached to their own definitions of dyslexia, like the petulant Humpty Dumpty, would ever grow up and recognise the need for some consensus (Beaton et al., 1997). Singleton (1999), in the preface to a HEFCE funded report on dyslexia in higher education, alluded to the “fireworks” and “inevitable battles” that ensued in “[t]he process of reaching agreement between fourteen very experienced individuals each with their own different professional and personal perspectives on this often contentious subject” (Singleton, 1999, p.13).

One of the main problems was, that due to the much-lamented paucity of relevant knowledge (Beaton et al., 1997), there was at the time no definition of adult dyslexia, agreed or otherwise. Such a definition would need to reflect knowledge of the field at the particular time (Siegel & Smythe, 2006), as well as be contextualised to the higher education sector, and suitable for the purpose for which it was intended to serve (Miles, E. 1995; Miles and Miles, 1996). The literature thus devoted itself to fulfilling these criteria by building on what little adult research findings there were, extrapolating on existing theories and knowledge of child dyslexia, and by working on what were partly unfounded assumptions about how dyslexia might present in university students.

Dyslexia is a syndrome

One of the almost universally accepted theoretical issues, representing a continuity with U.K. child dyslexia studies at the time, was that dyslexia was a syndrome condition with a neurological basis, “a distinct group of symptoms and signs which, associated together, formed a characteristic clinical picture or entity” (Critchley, 1978, as cited in Miles, 2006). Miles, (1993) described it as an unusual balance of skills. Reading and spelling, he maintained, were just two of these skills, and that to equate dyslexia with poor reading alone (as was starting to happen on the other side of the Atlantic) was tantamount

to using “a highfalutin term to describe the obvious” (Miles, 2006, p.64). Everatt (1997) in research with a sample of dyslexic and non-dyslexic university students aimed at identifying reliable indicators of adult dyslexia, chose to explore a “constellation” of skills, including spelling, comprehension, creativity and spatial skills. Rack (1997) in a case series study of 28 adults assessed by him at the Dyslexia Institute between September 1994 and November 1995, came to the conclusion that adult dyslexia was best described as a broadly conceptualised developmental syndrome – one in which “a pattern of relative inefficiencies in memory and information-handling skills and weaknesses in phonological processing skills is most often seen” (p.75). Singleton (1999), reporting on behalf of the National Working Party on Dyslexia in Higher Education, summarised his colleagues’ position thus:

Dyslexia is properly defined as a syndrome: a collection of associated characteristics that vary in degree and from person to person. These characteristics encompass not only distinctive clusters of problems but sometimes also distinctive talents . . . [t]he syndrome of dyslexia is now widely recognised as being a specific learning disability of neurological origin that does not imply low intelligence or poor educational potential, and which is independent of race and social background.

Singleton, 1999, p.25.

Frith (1999) credits the development and acceptance of the concept of dyslexia as a syndrome with a neurological basis as having had enormous impact on both theory and practice. Like Wolf (2014), quoted in one of the epigrams to this review, Frith sees no paradox in there being more than one version of dyslexia. Referring to the three level conceptual model developed by Morton & Frith (1995) she claims that the idea of dyslexia as a syndrome holds the solution to, for example, the lack of agreement about the very definition of dyslexia that has bedeviled research. In the same article, Frith uses the syndrome concept, and the interactive model developed from it, to demonstrate, for example, how the absence of reading difficulties can be compatible with dyslexia, while on the other hand the presence of reading difficulties may have nothing to do with dyslexia.

This theoretical concept of a syndrome, embraced by the above cited adult dyslexia researchers at the end of the last century, has had, and continues to have, a powerful influence on assessment theory and practice in the higher education context (see, for example, SpLd Working Group 2005/DfES Guidelines; McLoughlin and Leather, 2013). Whilst definitions of dyslexia aimed at identifying children, such as that produced by the British Psychological Society (BPS) in 1999, and the one that emanated from the Rose Review in 2009, have increasingly focused on difficulties in word reading and spelling acquisition, those devoted to the identification of the condition in higher education students look to the heterogeneous, wider and often more subtle persisting effects of early literacy difficulties, based, usually, on a premise of a difference in neurological functioning. This syndrome concept of adult dyslexia appears to suit both the context and purpose of higher education identification in much the same way as the focus on reading skills acquisition suits the educational context and purpose of most child identification.

Literacy skills

The assumption of “compensation”

An understandable yet empirically unfounded assumption about the higher education dyslexic student was that he or she would be compensated, and thus more difficult than a child dyslexic to identify. Beaton et al., (1997) regarded the recognition of dyslexia in otherwise literate adults as a fundamental problem, as did Singleton (1999), who feared that the compensatory strategies of some students might mask their underlying cognitive difficulties to such an extent that they would be ineligible for accommodations and DSA support. Rack (1997) reiterated these concerns, seeing adult compensation as one of the main complicated and specific issues arising when assessing adults. It was surmised, by these and other researchers and clinicians, that many dyslexic students, having managed to get to university, would have average or better literacy skills, and have developed a whole range of coping strategies (Singleton, 1999; Fitzgibbon and O’Conner 2002; McLoughlin and Leather, 2013). Standardised attainment tests, it was argued, would be too easy and thus not sensitive

enough for this group of dyslexics (as, it was subsequently shown, were many assessments of underlying cognitive processes when used with highly intelligent students (Frith, 1999; Ramus & Ahissar, 2012).

Difficulties with the use and interpretation of standardised attainment and psychometric tests will be discussed further on in this review. Pertinent to the assumption of compensation, though, was the contradictory recognition that not all higher education students assessed or informally recognised as dyslexic were “literate” in the expected way. In the same paragraph as they posited the problem of recognising dyslexia in literate adults, Beaton et al. (1997) refer to observations of a noticeable increase in literacy and related problems amongst students due to a dramatic growth in student numbers. Singleton worried that the then preoccupation with “graduateness” would bar talented individuals from a university education. He quotes, by way of illustration, from the conclusion of a 1996 discussion paper produced by the Higher Education Quality Council (HEQC):

There seem to be irresistible arguments that no-one should graduate who lacks such ancillary skills; . . . [the ability to write in grammatically acceptable and correctly spelt English (or Welsh), a certain level of numeracy, a range of general knowledge, a basic familiarity with information technology, and so on] . . . but there is anecdotal evidence that this can occur. If this is so, it is to be condemned – and should be remedied – not least because the absence of such ancillary attributes must impede the exercise of those higher-level qualities that are regarded as central to degree study.

HEQC, 1996. Para. 15.

Singleton’s ensuing comment on the above proposition was that if it were to be implemented, it would probably have the effect of banning most, or all, students with dyslexia from higher education. History has shown his concerns to be groundless, but the tension between quality and access, exhibited in the above-cited document, has not abated (Riddell et al., 2006; Soler, 2009). Nevertheless, the assumption of all dyslexic higher education students being even superficially literate appears to have been empirically

unfounded, even according to the observations of those who propounded it. This is witnessed in a conceptual blurring of the distinction between “dyslexia” and “reading disability” evident in both research and assessment practice.

Research evidence of dyslexic students' literacy skills

Empirical, as opposed to informal observational, evidence of the literacy skills of dyslexic students in higher education, is somewhat piecemeal. Such studies as there are tend to be small scale and use samples that are not only unrepresentative but also based on widely differing selection criteria. They also serve to illustrate the conceptual blurring, even at the higher education level, between “dyslexia” and “reading disability”. For example, Hanley (1997), in a study examining reading and spelling impairments in undergraduate students at Liverpool University, categorised his 33 dyslexic students on the basis of them scoring at least 2 standard deviations below the mean on both the Nelson's (1983) National Adult Reading Test (NART) and the Schonell spelling test; not surprisingly, the dyslexic group came out with significantly lower scores than the 12 controls on each assessment of literacy. The design of the study made no provision for any dyslexic students with literacy skills above the mean on the standardised tests used.

Three different studies conducted by researchers at the University of York between 1997 and 2013 provide further illustration of lack of conceptual clarity as well as the pitfalls inherent in generalising the empirical findings, in this case dyslexic students' reading attainment skills, from relatively small “scientific” studies. The first (Snowling, Nation, Moxham, Gallagher & Frith, 1997) aimed to examine and compare the phonological skills of 14 dyslexic and 19 non-dyslexic students. The groups were matched for age and a measure of non-verbal ability. As the focus of the study was phonological processing skills rather than reading *per se*, the dyslexic group was recruited on the basis of self-referral as being reading disabled. Like in the above cited study, it was thus not an unexpected finding that the reading standard score mean for the dyslexic group on the Wide Range Achievement Test Revised (WRAT-R) was a low 84.5 (range 63-107), and on the spelling version of the WRAT-R that the mean was 73.5 (range 48-103). Again, the design of the

study precluded any chance of finding that many “compensated” dyslexics in higher education had average or better literacy attainment skills and, additionally, that they also had persistent problems with phonological processing. A later study (Hatcher, Snowling, & Griffiths, 2002) also compared the cognitive skills of a group of dyslexic with non-dyslexic students. In this study, though, the individuals in the groups were matched for measures of verbal and non-verbal ability (average or better), and no attempt appears to have been made to select the dyslexics on the basis of poor reading. As a result the mean standard scores for the dyslexic group on both the WRAT-R reading and spelling assessments appear to be significantly higher: reading 104.96 (SD 6.7) and spelling 96.48 (SD 10.35). Mean literacy scores for the dyslexic group were still significantly lower than those for the matched control group - reading 114.72 (SD 5.1); spelling 113.14 (SD 6.76) - but, in contrast to the previous study, the scores of the dyslexics in the Hatcher et al. (2002) study were all comfortably within average limits, and with differences of 20 standard score points, almost certainly significantly different to those recorded in the earlier study. A third study (Warmington, Stothard, & Snowling, 2013) used selection criteria different again for the dyslexic sample group. This study used a group of 20 dyslexic students and 106 controls to obtain validation data for the York Adult Assessment Revised (YAA-R). One criterion for the dyslexic group was that they had obtained a standard score of 100 or less on all assessments of literacy. Thus, expectedly, standardised mean scores for the dyslexic group on the WRAT-3 reading and spelling assessments were below 100: reading 93.65 (SD 10.32) and spelling 92.35(SD 11.37).

Although the main purpose of the above three cited York studies was not an exploration of dyslexic students’ reading and spelling attainment skills, the authors of two of the studies did appear to make the assumption that typical dyslexic students would be those that scored on the lower side of average on standardised tests of attainment, in other words, that they would have relatively poor reading and spelling skills. Such assumptions, especially when they result in statistical “facts” recorded in published journals, can give a distorted view of the literacy skills of higher education dyslexic students, and

are perhaps a less informative source of knowledge than the qualitative informal observations of considerable heterogeneity made by experienced practitioners. In these informal observations dyslexia, at the individual level, is not always conflated with reading disability. Unfortunately, there have been as yet no large-scale population studies that would give a clearer, more accurate picture of the literacy skills of assessed dyslexic higher education students across all UK institutions in the sector. Such research, based on secondary use of data generated by such large longitudinal studies as the Millennium Cohort Study is thus desirable.

Differentiating dyslexia from poor reading

The confused conceptual assumption that the literacy skills of dyslexic students would be both compensated, on the one hand, and inferior to their non-dyslexic peers, on the other, is reflected in the concern expressed, at the end of the last century, that dyslexia would be equated with poor reading, that non-dyslexic students with less than ideal literacy skills would be identified as dyslexic. Beaton et al. (1997) allude to those amongst the widening student population whose reading problems might be symptomatic of a more general learning problem. Singleton (1999) refers disparagingly to the “diffuse category” frequently referred to as “learning disabilities” in the United States, and worries that “the concept of dyslexia [could] all too easily become diluted so that it [encompassed] any sort of difficulty with literacy or learning” (p.20). He continued:

It is often a small step from there to the assumption that all difficulties with literacy or studying are essentially of neurological origin, with the result that possible environmental, cultural and educational causes of learning problems may be neglected”

Singleton, 1999, p.20.

In the higher education context the concept of dyslexia, as opposed to that which underpins the current policy in UK maintained schools, has typically been regarded, at least in theory, as more than a collection of behavioural symptoms. The syndrome of characteristic behavioural signs, chief among them being problems with some aspects of literacy skills, is considered

diagnostically inaccurate without professionally interpreted evidence linking the cognitive and behavioural levels of functioning. Frith (1999), referring to the three-level framework model of dyslexia mentioned above, asserts that behavioural measures must be seen as the outcome of the interaction of a great many factors, not all of them necessarily related to dyslexia. Dyslexic, as opposed to non-dyslexic difficulties, represent the interaction of neurological, cognitive and behavioural factors, all of which can be exacerbated or ameliorated by environmental factors. Acknowledging the difficult task of disentangling dyslexic from non-dyslexic difficulties, Farmer, Riddick and Sterling (2002) stress the importance of what they term the “positive”, as opposed to just the traditional exclusionary environmental, cultural and educational factors, that can present as part of the dyslexic student’s profile. It has been the search for these “positive” factors that has generated much of the empirical research into adult dyslexia at the cognitive level.

Positive cognitive processing indicators

Phonological

Over the last 40 years, the predominant positive factor implicated in theories of developmental dyslexia has been phonological processing skills (Swanson & Hsieh, 2009; Callens, Tops, Stevens, & Brysbaert, 2014; Ramus & Ahissar, 2012):

Poor performance of dyslexic individuals has been consistently demonstrated in three broad areas involving phonology: *phonological awareness* (explicitly attending to, judging, and manipulating speech sounds), *verbal short-term and working memory* (short-term storage, manipulation, and repetition of words or pseudo words), and *rapid automatized naming* (RAN) (speeded retrieval naming of lists of digits, colours or objects)

Ramus and Ahissar, 2012, p.106.

A series of systematic statistical research studies, as opposed to observations from clinical and practitioner experience, has sought to demonstrate the persistence into adulthood of deficits in these skills. Three of the early oft-cited examples from the United States (Felton, Naylor and Wood, 1990, Bruck, 1992; Pennington, Orden, Smith, Green, & Haith, 1990) are

credited with being amongst the first to do so. All three studies chose their subjects on the basis of a diagnosis of specific as opposed to general reading difficulties. Felton et al. (1990) used a sample of 115 adults with a childhood history of dyslexia. They found that, independent of current reading ability, measures of non-word reading, phonological awareness and rapid naming, served as indicators of a childhood history of reading disability, even after controlling for intelligence and socioeconomic status. Bruck (1992) found evidence of poor phonological awareness skills in college students with a childhood diagnosis of dyslexia, regardless of age or reading level. All adults with dyslexia in her study showed weaknesses in performing phonological awareness tasks, regardless of the level at which they had compensated for earlier reading difficulties. Pennington et al., (1990) used objective evidence of specific (based on clinical assessment or familiar background) poor reading and spelling skills to select their dyslexic adult samples. Compared to both chronological age and reading age matched control groups, the dyslexics performed significantly worse on non-word reading and pig-Latin phoneme awareness tests, leading the researchers to conclude that the literacy difficulties of adult dyslexics, like their child counterparts, remained underpinned by deficient phonological skills, and that such measured deficits allowed discrimination between these individuals and their non-dyslexic peers.

Gottardo, Siegel, & Stanovich, (1997) used a variety of phonological, linguistic, memory and cognitive experimental tasks to examine whether the patterns of interrelationships in reading disabled adults mirrored those found in children. The Canadian population sample consisted of a control group of 49 adults with word recognition skills at or above the 30th percentile on the WRAT-R word recognition test, and 26 poor readers with scores on the same test at or below 25th percentile. All participants had nonverbal IQ scores within the average range. These researchers, too, found that phonological processing skills, measured by a variety of tasks, were a consistent and unique predictor of reading weaknesses in adults, even when controlling for other measures of verbal ability.

Wilson and Lesaux (2001) also found that apparently compensated dyslexic university students experienced persistent difficulties with phonological processing, compared to age and reading level matched controls, regardless of their reading level, but questioned the interpretation that could be ascribed to the results of adult studies of different design in which the participant selection and sample characteristics lacked consistency. As was illustrated above in reference to researched knowledge concerning the literacy attainment skills of dyslexic students, the findings of studies purporting to demonstrate phonological processing differences between dyslexic students and non-dyslexic students need to be interpreted with caution. For example, Felton et al. (1990) and Bruck (1992) included compensated readers, whereas Pennington et al., (1990) and Gottardo et al., (2007) restricted their samples to poor readers. Felton and colleagues used a mixture of student and non-student dyslexic participants, as did Pennington and his colleagues. Gottardo and colleagues used “reading disabled adults”. The Bruck study and Wilson and Lesaux’s study both confined their participant selection to documented dyslexic students.

If poor performance on phonological processing tasks is to reliably and consistently discriminate between dyslexic and non-dyslexic poor readers, between genuine dyslexics and those same age students with poor reading symptomatic of a more general learning problem (Beaton et al. 1997), or who fall into the diffuse category of “learning disabilities” (Singleton, 1999), then it needs to be shown experimentally how these two groups differ on these tasks, if they differ at all. Empirical evidence that might clarify this important point was missing at the end of the last century:

[W]e know of no evidence as yet which compares the phonological skills of dyslexics with those of other poor readers in the adult population in order to see whether there is a qualitative or quantitative difference in the phonological deficits which dyslexics experience.

Beaton et al., 1997, p.3.

Research conducted with children has confirmed that phonological processing tasks do not discriminate between dyslexic and other poor readers (Stanovich, 2005; Siegel, 1992; Fletcher et al., 1994), and there is much persuasive neurological evidence to suggest that the relationship between literacy skills and performance on phonological processing skills is bi-directional (Eden et al., 2004); relatively small scale studies with inconsistent sampling strategies, such as those cited above, still have not succeeded in addressing this important issue in the identification of dyslexia in higher education.

Inconsistencies in sample selection, together with the use of different tasks to assess aspects of phonological processing, have also contributed to inconsistent findings about the discriminatory power of different aspects of phonological processing, as well as about the discriminatory power of the tests used to measure them. Farmer, Riddick and Sterling (2002) draw attention to some of these inconsistent findings in their discussion of the positive indicators of adult dyslexia. For example, Bruck (1992) and Hanley (1997) found that adult dyslexics, unlike their child counterparts, had little difficulty with counting syllables or phonemes, whereas Pennington et al. (1990) and Gottardo et al. (1997) found that the harder pig-Latin task was an effective discriminator. Hanley (1997), Rack (1997) and Hatcher et al. (2002) found a difficult spoonerism task similarly effective in identifying adult difficulties with phonological awareness. Both these “harder” tasks load heavily onto short-term and working memory skills, as well as the targeted skill of phonological awareness (Ramus and Szenkovits, 2008). The widely used non-word reading task also needs to be carefully constructed for adults so as to maximise discriminability (Farmer et al. 2002; Ramus & Ahissar, 2012). The digit span task, used to assess short-term memory, has been found to lack discriminatory power between dyslexic and non-dyslexic students. Hanley (1997) and Hatcher et al. (2002) both found little difference in digit span between dyslexics and controls, and Pennington et al. (1990) found that it discriminated between clinical samples of dyslexic adults and non-dyslexic adults, but not between a familiar dyslexic sample and controls. Pennington and colleagues also found that the routinely used rapid

automised-naming task did not discriminate between the dyslexic and non-dyslexic adults in their study. Such examples of inconsistent findings led Wilson & Lesaux, (2001) to comment:

The examination of phonological processing in young adults has not led to a clear understanding of which aspects of phonological processing may be most detrimental to success for college students with dyslexia.

Wilson & Lesaux, 2001, p395.

Another problem in relying on poor performance on phonological processing tasks to identify adult dyslexia is that such tests are subject to interpretative pit-falls (Frith, 1999; Ramus & Ahissar, 2012). Their labels are deceptive; there is always a difference between what the tests measure and what they intend to measure. Frith illustrates this point with the example of an individual's performance on a phoneme deletion phonological awareness test. To start with, she argues, the general ability factor "g" influences all test results. In addition, practice in alphabetic literacy can assist an individual in being able to delete the initial or final sound from a word. So too can a good visual memory, which can allow the individual to over-ride the phonological aspect of the skill being assessed. Conversely, poor performance on such a test could be the result of environmental factors such as poor reading instruction, attention difficulties or lack of motivation. The score always needs interpretation – interpretation heavily reliant on clinical intuition. Whilst such "tests do well in discriminating groups, specificity in individual cases remains to be established" (ibid.p.207).

In recent years, Ramus and colleagues have questioned some of the theoretical concepts that have underpinned the phonological processing deficit theory of dyslexia (Ramus & Szenkovits, 2008; Ramus & Ahissar, 2012). Based on extensive studies with both English and French university students, these authors found that although dyslexic students generally performed significantly worse than matched controls on versions of the classic triad of phonological processing tasks, their phonological representations were actually intact and normal, and that the reason for their

poor scores was more to do with conscious access to these representations (which also showed up in timed access to repeated sequences), and short term memory deficits. Ramus and colleagues, like Frith (1999), thus maintain that more attention should be paid to what poor, and conversely, normal performance on such tasks actually means (Ramus & Ahissar, 2012). In reference to a pseudo-word repetition task, for example, Ramus and colleagues demonstrated that their adult dyslexic participants had no difficulty repeating such words of between one and three syllables, indicating no problems with phonological perception or representations, as such. It was only when longer pseudo-words or sequences were introduced, demanding more short-term memory load, that the dyslexics' performances fell short of the controls. They have hypothesised that for adults, in contrast, possibly, to young children, the processing deficit is not with degraded phonological representations but with rapid access to these representations, and with short-term memory. Such an observation could account for some of the inconsistent findings, cited above. If tests used were too easy for adults, or else did not actually assess the specific skill assumed, then any conclusions drawn from them concerning the nature of processing deficits would be unreliable. Ramus and Ahissar (2012) regard being able to explain cases of normal as well as poor performance in experimental tasks investigating the nature of cognitive deficits in dyslexia as a challenge for any proper theory of dyslexia. Their hypothesis of a dyslexic deficit in access to phonological representations, as opposed to what were assumed to be degraded phonological representations, reconceptualises one of the main causal theories of dyslexia, and thus the basis on which much identification, at the experimental and statistical level, is justified.

In addition to the criticism already levelled at identifying dyslexic students on the basis of phonological processing tests yet to be researched as being discriminatory between dyslexic adults and others with poor literacy skills, is the research finding that not all dyslexic students have measured phonological deficits. Hanley (1997) found a small number of dyslexic students whose phonological skills were not significantly impaired, as did Rack (1997). Research with children is finding this phenomenon to be

increasingly the case (Wolf & Bowers, 1999; Carroll, Mundy, & Cunningham, 2014); Moats (2016) in an account of a plenary address to the 65th Annual Conference of the International Dyslexia Association opined the diagnostic dependence on tests of phonological processing as one of the still popular dyslexia myths. She pointed out that 25% to 30% of students who have trouble learning to read do just fine on direct measures of phonological awareness, and urged the dyslexia research community not to hang their diagnostic hats on tests of phonological awareness.

Adult studies of dyslexia processing skills commonly focus on group rather than individual deficits. An exception is that of Ramus et al., (2003). In a study that aimed to assess the presence of phonological, visual, auditory and/or cerebellar deficits in each of 16 dyslexic students, Ramus and colleagues found that all 16 of them had significant problems with phonological processing, but admitted that the sample was small, and that their results did not preclude the existence of reading impaired people where the problem is not phonological. Studies focussing on group differences have often commented on observed heterogeneity (Felton et al., 1990) and, where measures of standard deviation and range have been reported, illustrate that the performance of at least some dyslexics on phonological processing tasks is as good as, if not better than, some of the controls. For example, Wilson and Lesaux (2001) report dyslexic group scores for number of correct spoonerism items as: mean 8.74; SD 3.25; range 0-12; and for matched controls as: mean 10.68; SD 2.68; range 1-12 (p.398). The dyslexic and control group scores reported for the other phonological tasks in this study have similarly overlapping ranges.

The hypothesised core nature of phonological processing in the context of adult dyslexia identification is thus undergoing a developing conceptual reinterpretation. Ramus and Ahissah (2012) define “phonology” as referring to “the mental representation and processing of speech sounds, both in perception and in production” (p.106). The “processing”, they maintain, encompasses speed of access to phonological representations as well as aspects of memory. Elliott & Grigorenko, (2014) appear to reinforce this

observation, and implicitly assert the confusion to which it can give rise, when they comment:

[M]uch depends on the breadth of the use of the term 'phonological' and the extent to which it includes a variety of cognitive processes such as working memory and rapid naming
Elliott & Grigorenko, 2014, p.48.

Working memory

Other researchers and practitioners regard an over-emphasis on phonology and phonological deficits in the identification of adult dyslexia as too focused on literacy. In an implicit reference to the “reading disability”/“dyslexia syndrome” conceptual controversy, the adult practitioners McLoughlin, Leather & Stringer (2002) and McLoughlin & Leather (2013) concede that there is considerable evidence to support the notion that problems in phonological processing undermine the development of reading skills, and that they persist into the adult years, even amongst people who have reached age appropriate levels in reading. However, they argue that the phonological deficit theory needs to explain its impact on areas of functioning other than literacy, with which dyslexic people commonly report difficulties. In the experience of these and other adult practitioners (Morgan & Klein, 2000; Herrington, 2001; Reid and Kirk, 2001) dyslexic adults manifest difficulties with broader aspects of functioning such as organisation, including planning and time keeping, concentration and dealing with distractions, memory and written expression, which are often of more concern to them than accurate and/or fluent reading and spelling. Accordingly, McLoughlin and colleagues have for some years based their practice in assessment, counselling, teaching practice and training on the assumption that all the behavioural difficulties experienced by dyslexic people stem from an inefficiency in working memory (McLoughlin & Leather, 2013).

Empirical evidence of working memory deficits in dyslexic adults has been hampered somewhat by conceptual difficulties inherent in separating phonological processing skills from working memory skills, and by test design challenges. Reference has already been made to the findings of Ramus and

Ahissah (2012) regarding the importance of the recognition of memory load in the interpretation of adult performance on traditional tests of phonological processing. Snowling et al., (1991) opine that it is extremely difficult, even in the most tightly controlled laboratory experiments, to divorce phonological memory entirely from other phonological processes. Their opinion is reiterated by the researchers Smith-Spark, Fisk, Fawcett, & Nicolson, (2003) and Smith-Spark & Fisk, (2007), and by Elliott and Grgorenko (2014) in their reference to Fletcher et al., (2007) about the difficulty of conceiving of any measure of phonological awareness that does not involve some component of verbal working memory.

Nevertheless, due partly to the informal observation of the range of behavioural problems of adult dyslexics that appear to transcend the phonological domain, Smith-Sharp and colleagues (Smith-Sharp et al., 2003; Smith-Sharp & Fisk, 2007) conducted two studies focused on the short-term and working memory deficits of a sample of dyslexic students. Using the Baddeley conceptual model of working memory, they aimed to investigate whether the observed problems of dyslexic students might be attributable to inefficiencies of central executive functioning that were independent of phonological processing. Findings from the first of these studies with 12 high functioning dyslexic and 16 age and IQ matched controls were inconclusive. The groups, as expected, differed significantly on verbal span and letter updating tasks, but on visuo-spatial tasks, without the confounding effect of phonological processing, there were no significant differences. It was only under the most taxing conditions, as the working memory task became increasingly harder, that the analysis showed significant differences between the two groups. The researchers were thus able to hypothesise that the high functioning dyslexic students in their sample might be impaired in efficient working memory only under high processing demands, due to a deficit in executive functioning. A follow-up study (Smith-Sharp & Fisk, 2007) offered support for this hypothesis. This study used 22 adult dyslexic students and 22 age and IQ matched controls and compared their performance on carefully designed short-term and working memory tasks in both the phonological and visuo-spatial domains. They found that the dyslexic group

had significantly lower scores on all the phonological tasks, as well as on the spatial working memory tasks that drew heavily on central executive functioning. These results allowed the researchers to conclude that not only did the working memory deficits of dyslexic individuals extend into adulthood, but also that they were not confined to the phonological domain. In other words, dyslexic adults had impairments in the modality-free central executive that would explain their observed difficulties with non-literacy tasks such as planning, problem solving and concentrating, all skills that in study and everyday life draw heavily on working memory.

McLoughlin and colleagues, as cited above, base their conceptual understanding of adult dyslexia not only on scientific theory and empirical evidence, but also on what they learn from the dyslexic people they work with on a daily basis. These practitioners maintain that specific difficulties with working memory provide a comprehensible explanation for dyslexic adults for problems encountered with holding onto information provided by the senses in the short term, entering information for effective storage and retrieval in long-term memory, enabling the finding of information from long-term memory on demand, and allowing all three of the above to happen at the same time (McLoughlin et al., 2002). Working memory deficits are also heavily implicated in both the automatization deficit hypothesis (Nicholson & Fawcett, 1990) and the procedural learning deficit theory of dyslexia currently propounded by the same researchers (Nicholson and Fawcett, 2008).

The recognition of working memory deficits in dyslexic adults is consistent with the wider syndrome concept of dyslexia (as opposed to the narrower “reading disability” concept), which has historically been adopted by those seeking to understand the manifestation of dyslexia in the higher education context. As such it has become an important positive indicator of dyslexia in higher education students, particularly in those “compensated” individuals “who have few problems with reading but have all kinds of other problems” (Cooke, 2001, p.49). Empirical and observational evidence supporting its relevance, as well as the presence of one of its strongest proponents, David McLoughlin, on the Singleton Review (1999), on the membership of the

SpLD Working Group 2005/DfES Guidelines and, until recently, on the SpLD Assessments Standards Committee (SASC), have resulted in assessment of working memory difficulties being mandatory good practice in the identification of dyslexia in higher education students (DfES Guidelines, 2005).

Sensory and motor processing

Other processing skills not confined to the language domain have been heavily researched in an attempt to understand both the causes and diagnostic indicators of dyslexia that differentiate between groups of dyslexics and matched controls. Ramus et al. (2003), comment on the “astonishing variety” (p.105) of such research:

The dyslexia literature looks as if any new task investigated in dyslexia and control individuals were likely to show significantly poorer performance in the dyslexic.

Ramus et al., 2003, p.105.

Three of the main categories of this research will be covered briefly in this review. All three mentioned below have made important contributions to the understanding of cognitive processing in general, and dyslexia in particular, and have generated much literature, including some devoted to empirical findings from research with adult student dyslexics. However, much of the findings lack consensus, possibly due to variations in sample selection, task design and task difficulty, as well as to natural group heterogeneity (Stoodley, Fawcett, Nicolson, & Stein, 2006; Needle, Fawcett, & Nicolson, 2006). Most of them also lack significant practical implications for clinical identification and assessment (Elliott & Grigorenko, 2014).

Auditory skills

Studies have shown that some dyslexic adults have difficulties in perceiving short or rapidly varying sounds. For example, Hari & Kiesilä, (1996), using a sample of 20 dyslexic adults and 20 controls, found that the dyslexic adults seemed to have a deficit in the processing of rapid sound sequences. Whilst such findings might discriminate between dyslexic and non-dyslexic groups in

the laboratory, and enrich the theoretical understanding of observed difficulties in literacy skills, they entail the use of sophisticated assessment equipment not normally available to the clinical practitioner working with dyslexic adults.

Visual skills, including scotopic sensitivity syndrome

Impaired visual processing skills have long been regarded as a major cause of dyslexia. Historically they were implicated in the descriptive term “word blindness”, and continue to play an important role in the public’s understanding of dyslexic reading difficulties. Systematic research into the role of different complex visual processing deficits in dyslexic individuals has to date produced no firm conclusions beyond the observation that they appear to be part of the cognitive profile of some, but by no means all, individuals who exhibit dyslexic-type difficulties (Elliott & Grigorenko, 2014). For example, Ramus et al., (2003) (discussed in more detail below) found that in their extensively detailed study of a group of 16 dyslexic students, only 5 displayed any of the commonly researched visual processing deficits. Nevertheless, possibly because of the role that visual memory is assumed to play in the efficient acquisition of grapheme knowledge, word recognition and spelling skills, and despite the problems inherent in assessing visual memory skills in their pure form (Smith-Sharp et al., 2003; Smith-Sharp & Fisk, 2007), current higher education dyslexia assessment practice routinely looks for deficits in an individual’s visual memory processing skills, regarding evidence of such deficits, where they exist, as a contributory factor towards observed behavioural difficulties.

More controversially, dyslexic students’ self-reported experience of certain types of visual discomfort and distortion whilst reading has been commonly accepted as another behavioural characteristic typical of the dyslexia syndrome (Grant, 2004; Singleton & Trotter, 2005; Singleton & Henderson, 2006). Screening for visual stress, scotopic sensitivity syndrome or Meares-Irlen syndrome is routinely carried out by many dyslexia assessors. Additionally, it is endorsed by the 2005 Guidelines, as well as by Student Finance England (SFE), as is evidenced by its preparedness to finance for

DSA applicants commercial assessment following screening, as well as coloured overlays and a contribution towards tinted lenses and the frames necessary to support them (Student Loans Company, 2015). Whilst it is accepted that visual discomfort and distortion when reading are not experienced exclusively by dyslexic individuals (Singleton, 2009), that dyslexia and visual stress are separate conditions (Kriss & Evans, 2005; Singleton & Henderson, 2007), there is still a belief that visual stress is more prevalent in dyslexic individuals (Grant, 2004; Singleton & Trotter, 2005; Singleton & Henderson, 2006). Regardless of the accuracy of this position, though, respected research findings have discredited claims for the effectiveness of coloured overlays and tinted lenses in being able to alleviate visual discomfort and improve reading accuracy, fluency and comprehension. A study carried out by Henderson, Tsogka & Snowling (2013) with 16 dyslexic undergraduate students and 26 controls, for example, concluded that coloured overlays were not useful as a means of identifying or treating visual stress as a remediation for reading difficulties. The researchers found that although the overlays improved the reading fluency of both groups on the jumbled words Wilkins Reading Rate Test (WRRT) in the short term, the improvement was not sustained over time. Furthermore, the benefit in reading rate with an overlay did not extend to reading connected text or to comprehension, questioning the practical value of coloured overlays as a remediation for undergraduate reading difficulties. Such findings, together with others included in systematic reviews in 2008 and 2014, led to an editorial in the British Medical Journal (Henderson, Taylor, Barrett & Griffiths (2014) expressing the view that the use of coloured filters did not lead to a clear improvement in reading ability or symptoms of visual stress in people with reading disability. A similar position had been taken by The American Academy of Pediatrics in 2009, as cited in Elliott and Grigorenko (2014).

The continued practice of some dyslexia assessors in the higher education context of screening for and strongly recommending coloured filters, despite convincing scientific evidence for their ineffectiveness, has serious implications for the responsible use of scarce educational resources. Fifty-six percent of the dyslexic students in the Henderson et al., (2013) study had

previously been provided with coloured overlays, and many others are still being financed by Student Finance England to have expensive assessments and to purchase lenses of dubious benefit.

Visual stress, then, cannot be taken as a positive behavioural indicator of the dyslexia syndrome, or one that can discriminate between dyslexic and non-dyslexic students. At best it appears to be a frequently self-reported co-occurring characteristic for which treatments that science has shown to be of dubious effectiveness are unethically prescribed.

Motor skills

Motor skills, particularly those associated with postural stability and balance, have been researched as possible indicators of difference between dyslexic and non-dyslexic groups. On the findings of such research Fawcett and Nicolson (1998) have included a simple postural stability test (a test of resistance to postural disturbance) in the *Dyslexia Adult Screening Test (DAST)*. Nevertheless, empirical findings concerning the usefulness of such tests of motor stability in discriminating between dyslexic and non dyslexic adults, at the group level, have not been encouraging, and at the individual level they have displayed considerable heterogeneity, even amongst the controls (Needle et al., 2006). Stoodley, et al., (2006) compared the performance of 28 dyslexic students and 28 age and IQ matched controls on a battery of pointing and balancing measures. They found no group significant differences on any of the balancing tasks, prompting them to hypothesise that the tasks might have lacked discriminatory power in being too easy for intelligent adults. In a follow up study, Needle et al., (2006), redesigned some of the tasks to make them harder and less amenable to participants' use of compensatory strategies. This time, 17 dyslexic students and university staff members and 20 age and IQ matched controls were compared on a heel-to-toe standing ability task, and "dual tasks" where the subjects had to balance, as above, whilst undertaking secondary cognitive tasks, such as counting and omission Choice Reaction Tests of different tones at different speeds. There were significant group differences on the dual tasks, with 24% - 82% of the dyslexics showing balance impairment,

depending on the criterion chosen. However, there was also considerable heterogeneity at the individual level, amongst the controls as well as the dyslexic group. The authors concluded that this needed further investigation.

Whilst motor difficulties with coordination, balance and stability observed in some dyslexic individuals are plausibly explained, at the neurological level, by theories of mild cerebellar abnormality (Nicolson & Fawcett, 1990), the presence of these behavioural indicators in individuals with other supposedly discrete developmental conditions, such as Attention Deficit Disorder (ADD) and dyspraxia, decrease their usefulness as discriminatory indicators of dyslexia in clinical settings, even if the necessary sophisticated equipment were available to assess them. Nevertheless, as the authors of the above study surmise (providing one is prepared to overlook some of the far from convincing findings):

A key feature of testing balance is that it does appear to give a novel split between groups who otherwise score at similar levels on a range of literacy tasks. In short, balance testing has theoretical significance and it may have diagnostic significance

Needle et al., 2006, p.993.

Single or multiple cognitive processing deficits

Miles (2006) suggested that dyslexia was a “disjunctive concept” (p.141): there were different ways of being dyslexic. Rack’s study of a series of cases of dyslexic adults (Rack, 1997) led him to express much the same view i.e. that there was a need to investigate possible sub-groups of adult dyslexia, and that concentrating on phonological difficulties alone might be scientifically premature. In an attempt to explore this concept, Ramus et al., (2003) used an extensive battery of psychometric, phonological, auditory, visual and cerebellar tests with a sample of 16 dyslexic and 16 control university students. The tasks that the researchers used were versions of those, which, according to the literature, most consistently showed differences between dyslexics and controls. The aim of the study was to assess the leading theories of developmental dyslexia that underpinned attempts, such as those described in preceding paragraphs, above, to

generate empirical evidence to differentiate between dyslexic and non-dyslexic adults. The researchers wanted to gauge the extent to which different proposed processing deficits were associated or could be dissociated, with dyslexia. They found much heterogeneity. All 16 of the dyslexic students had significant phonological processing difficulties: 5 had just phonological deficits; 5 had phonological and auditory deficits; 2 had phonological, auditory and visual deficits; 3 had phonological, auditory, visual and cerebellar deficits; and 1 had phonological and cerebellar deficits. To complicate the picture even further, there was also considerable heterogeneity within each category of processing deficit. For example, across the battery of five different types of auditory perception tasks, “there was no regularity whatsoever in the nature of the auditory deficits that dyslexics have” (p.885).

The warning by Rack (1997) about scientific prematurity in the understanding and thus identification of dyslexia seems to have been apt. Although research-supported explanations at the neurological level (discussed below) are starting to clarify, at least at the conceptual level, much of the observed complexity surrounding the identification of dyslexia, it is perhaps pertinent to note that heterogeneity in behavioural symptoms consistent with a syndrome concept (whether the symptoms be defining characteristics or simply frequently co-occurring ones) is currently acknowledged as typical of dyslexia (Hulme & Snowling, 2009; Nicolson and Fawcett, 2008); even the seemingly strict phonological definition attributed to Rose, (2009) makes reference to co-occurring difficulties. Ramus et al. (2003) purposely set out to study the characteristic symptoms of dyslexia at the individual level. Their results point to the potential limitations of assessment instruments based on the findings of studies focused on group differences and correlations between measures.

Affective disorders

In line with a wider conceptualisation of dyslexia, and with the way in which it manifests itself at the behavioural level, a comparatively higher incidence of affective disorders, such as stress, high anxiety and low self esteem, has been regarded as characteristic of dyslexic, as opposed to non-dyslexic,

students. Rack (1997) describes these characteristics of low self-esteem and low perceived self-efficacy as secondary symptoms, or consequences, of dyslexia, due partly to the cumulative effects of failures during schooling. In their publication *Dyslexia and Stress (1995)*, Miles and Varma set out to “increase people’s awareness of the stresses that dyslexics undergo and to encourage reflection on ways in which these stresses can be avoided” (p.ix). Whilst hoping that the future would bring systematic comparisons between dyslexics and non-dyslexics in respect of stress levels, with the aid of psychological measures, the authors’ intention in publishing their series of vignettes from people who were themselves dyslexic, or related to those who were, was to put the notion of stress in dyslexia “on the map”, and show that it was a topic for further investigation.

The need for stress and related conditions to be a topic for further investigation was reiterated by Riddick, (1996) when she pointed to the contrast between how dyslexic cognitive deficits are traditionally examined in the experimental setting and how they actually express themselves on a day to day basis outside of clinical settings. Informal observations in the literature made by researchers and practitioners provide ample qualitative evidence of these secondary characteristics of processing deficits and resulting literacy difficulties. Singleton (1999) makes concerned reference to the social and emotional factors that have been identified “as the indicative behavioural correlates of dyslexia” (p.29) and to the cumulative effect of tiredness, necessitated by additional effort at every level, which he argued should not be underestimated. Fawcett (2004) further emphasises the additional stress on high achieving dyslexic students, particularly on those compensated individuals who try to hide their difficulties by simply working longer hours. Morgan and Klein (2000) attest to “deep scars” which dent the self-esteem of many adult dyslexics, and Herrington (2001) points to the levels of anxiety that need to be recognised in the support context. Cooper (2009), taking more of a political stance, refers to how dealing with barriers to learning can lead to stress that “is rarely acknowledged in Assessment of Need reports or indeed in the support systems in HE” (p.71).

Informal observation and qualitative evidence of a heightened incidence of affective disorders in dyslexic higher education students has been subjected to the systematic comparison with psychological measures, as called for by Miles and Varma (1995). The first of these systematic surveys, Riddick, Sterling, Farmer, & Morgan, (1999), aimed to investigate the personal well-being and educational experiences of a group of dyslexics attending an English university. Sixteen dyslexic students and 16 matched controls completed a questionnaire gathering information on past and present educational histories, and two published inventories, one measuring culture-free self-esteem and the other measuring state and trait anxiety. In addition, the dyslexic participants took part in structured interviews. The dyslexic group had significantly lower overall self-esteem, but did not, in this study, differ significantly from the controls in anxiety levels. They did, though, report themselves as feeling more anxious and less competent in their written work at school than the controls and rated themselves at university as less competent both in their written work and in their academic achievements.

Carroll & Iles, (2006) in a second systematic study, used a similar sample of 16 dyslexic and 16 non-dyslexic students, and aimed to extend and clarify the findings of Riddick et al. (1999) concerning the potential vulnerability of dyslexic students to heightened anxiety. They did this by altering the study design to include what they hypothesized would be a “manipulated stressful environment” for the dyslexic group i.e. a timed reading test. Participants were warned that they would be given a reading test immediately after completion of a state anxiety measure. These researchers found that the dyslexic group, which scored significantly worse on the reading test, also had significantly higher levels of state anxiety, as well as comparatively heightened levels of academic and social trait anxiety. They thus concluded that dyslexic students in higher education show anxiety levels that are well above what is shown by students without learning difficulties, and that this anxiety is not limited to academic tasks, but extends to many social situations. Additionally, the researchers found that both state and trait anxiety, in this study, correlated highly with reading rates.

The two studies cited above both focused on group level responses to measures of self-esteem and anxiety. As the reported statistical results for each study make clear, not all the students in the dyslexic groups had heightened anxiety or lowered self-esteem, and not all the non-dyslexics were without heightened anxiety or low self-esteem. Rather, individuals in the dyslexic group simply were at significantly greater risk of these affective disorders. Riddick et al., (1999) in reference to the three control students with low self-esteem in their study, admitted that a multiplicity of interactional factors could contribute towards low self-esteem. Nevertheless, the results of both studies suggest that there may be a number of risk factors in the lives of dyslexic students over and above those normally encountered by other students that serve to lower the dyslexics' self-esteem (Riddick et al., 1999) and raise their anxiety levels (Carroll & Iles, 2006).

McLoughlin and Leather (2013) assert that at the common sense level, the heightened risk of dyslexic adults being vulnerable to affective characteristics is easy to understand:

[B]eing put down, misunderstood and years of underachievement do little to enhance confidence or promote positive self esteem
McLoughlin & Leather, 2013. p. 26.

However, the above practitioners provide a further explanation at the level of cognitive functioning. Referring to scientific models of memory function, particularly working memory, they cite research tracing a relationship between working memory, stress and depression. The relationship between executive functions and emotion is thought to be bidirectional, operating in an interactive manner. They illustrate the workings of this theoretical model by suggesting that an imbalance in the working memory system and accessing negative episodes might put dyslexic people more at risk of experiencing depression. Other dyslexia researchers, for example, Fawcett (2004), connect the affective conditions observed in dyslexic students to differences in brain organization and processing mechanisms, and explain how the additional effort and time involved in learning and automatizing new skills can result in breakdown under stress.

Whatever the causal explanation might be, the informal observation of, and empirical evidence for, heightened occurrence of affective disorders in dyslexic university students have led to recommendations that such characteristics of the conditions be recognized formally. Singleton (1999) suggested that dyslexic students may need counseling support as symptoms such as anger, depression and anxiety may be misattributed to general life difficulties and personality traits. The two systematic studies cited above (Riddick et al., 1999; Carroll & Iles, 2006) both conclude with recommendations that dyslexic students be routinely assessed for, and supported with, affective disorders.

Strengths, specificity and discrepancy

Historically, dyslexia has been associated with both intelligence and talent. One of the first documented and oft cited cases of developmental dyslexia is that of a young boy called Percy who was described by the schoolmaster who taught him as having the potential to be the smartest lad in the school if only the instruction were entirely oral (Miles, 1999). Percy, it is implied, had obvious intellectual strengths inexplicably at odds with his inability to learn to read and write. His problems with literacy, in other words, were specific and perceptibly discrepant with his ability in other areas. They were notable and puzzling for their incongruity and unexpectedness.

Strengths, specificity and discrepancy, in keeping with the historical understanding of dyslexia, have all been regarded as characteristics of the syndrome concept of dyslexia, described by Miles (1993) as an unusual balance of skills. At the end of the last century, it was generally assumed that the dyslexic higher education student would possess all three closely related attributes. Much publicity had been given to the talents displayed by famous people who were purportedly dyslexic. Davis (1997) had popularly promulgated the idea that dyslexia was a gift that enabled those with it to visualize in creative or different ways. West (1997) cited numerous innovative people, such as Michael Faraday, Albert Einstein, William Butler Yeats, Robert Maxwell and Winston Churchill, and attributed their genius to

their dyslexic powers of being able to look at things in a different way. Accordingly, Singleton (1997), when describing the dyslexia syndrome, affirmed that it consisted of “a collection of associated characteristics that . . . encompass not only distinctive clusters of problems but sometimes distinctive talents” (p.25). Implicit in this conceptualization of dyslexia, like that of Percy’s described above, were notions of specificity and discrepancy that also would be observed in dyslexic higher education students.

Concurrently, on the other side of the Atlantic dyslexia had started to undergo a conceptual revolution. Prominent researchers, redesigning “dyslexia” as a “reading disability” (and nothing more) (Nicolson 2001), were vehemently denying the relevance of intelligence and discrepancy to identification, as well as most of the other characteristics of the syndrome (Siegel, 1992; Stanovich, 1994). Miles (1999) dismissed the arguments between the adherents of these two different conceptions of dyslexia as irrelevant, since in his view they were arguing at cross-purposes. The literature on the identification of higher education students at the end of the last century, and the beginning of the present one, appears to have done the same. Beaton et al., (1997) express unease at assuming, given the widening student population, that all higher education students would be intelligent just because they had been accepted for a course of study. It would be necessary to assess their IQ in order to differentiate between dyslexics and those whose reading problems were symptomatic of a more general learning problem. Thus, Singleton (1999) included as the second point in the guidelines of evidence required for a diagnostic assessment:

[A] significant discrepancy between the abilities assessed in [reading writing and spelling] and the level of those abilities that would reasonably be expected of the student, based on the student’s general intellectual ability and other relevant factors, using wherever possible, up-to-date standardized tests and professionally established procedures and having due regard to regression effects.

Singleton, 1999, p.97.

Farmer et al., (2002) also argue for the necessity of some measure of general ability to discriminate between dyslexic students and others with a range of academic problems. It appears to lurk beneath the declarative/procedural learning discrepancy theory that forms the basis of Nicholson and Fawcett's recent research (Nicholson & Fawcett, 2008). A fuller critical analysis of the discrepancy concept of dyslexia will be provided in the assessment section of this review. Suffice it to comment, for the present, that in the context of dyslexia identification in higher education, the discrepancy concept, with the accompanying notions of specificity and talent, is still regarded as relevant in the minds and practice of most practitioners, even if it is not as explicitly stated as it was by Singleton (1999) in the guidelines produced by the National Working Party. McLoughlin and Leather (2013), for instance, emulate Miles in dismissing objections to the measurement of intelligence as being too tied up with the focus on the relationship between global IQ and reading, declaring that if one takes a broader view, then the issue is quite clear: a comprehensive measure of intellectual ability is necessary to establish potential and to eliminate general learning problems. The most recent guidelines for the assessment of dyslexia in higher education, those produced by the 2005 DfES Working Party, appear to steer a cautious and somewhat ambiguous course on the matter, stating that "although a discrepancy between underlying ability and attainment in literacy skills is not a diagnostic criterion, where such discrepancies do exist, it provides further supporting evidence [of dyslexia]" (p.8). Furthermore, the guidelines' endorsement of some sort of discrepancy is hinted at in their definition's description of "a combinations of abilities and difficulties" which, after citation of a list of possible difficulties and weaknesses, could include "visuo-spatial skills, creative thinking and intuitive understanding [which] are less likely to be impaired and indeed may be outstanding" (DfES, 2005, p.5).

Unfortunately, despite the very real observation of a link between dyslexia and heightened visuo-spatial and creative skills in some dyslexic adults, the literature contains little empirical research on the topic. Singleton (1999) concedes that these talents are very difficult to evaluate using conventional examination procedures. Everatt (1997) in a small-scale study compared

dyslexic and non-dyslexic students on measures of visuo-spatial ability and creativity. His results did not present consistent evidence of enhanced talents amongst his sample group of dyslexics compared to the controls. Bacon & Handley (2014) found statistical significance in the different mean scores between 35 dyslexic and 35 matched control students on tests of visual memory and reasoning, concluding that dyslexic students used heightened visual perceptual skills as compensatory strategies for less efficient verbal reasoning skills. Attree, Turner, & Cowell (2009) used a novel test to examine possible differences in the visuo-spatial abilities of 12 dyslexic and 12 non-dyslexic adolescent boys. They found that although there was little difference between the groups' performances on BAS 11 tests of spatial skills, that the dyslexic group obtained statistically higher scores on a computerised pseudo real-life test of visuo-spatial reasoning. More recently, neuroscience researchers and practitioners Eide & Eide, (2011) claim to have an explanation for such enhanced visuo-spatial skills based on empirical evidence from studies of brain structure. Citing the successful dyslexic entrepreneurs Sir Richard Branson, Sir Alan Sugar and Sir Norman Foster, these researchers hypothesise that the "dyslexic advantage" displayed by these individuals and others like them is connected with their different brain structure and function, brains that predispose to "larger axons that [form] physically longer-distance connections" (p.39) between and among different areas of the brain. They comment:

Trying to understand what dyslexia is all about while overlooking the talents that mature individuals with dyslexia characteristically display is like trying to understand what it is like to be a caterpillar while ignoring the fact that caterpillars grow up to be butterflies

Eide and Eide, 2011, p. xvi.

Cooper (2009) also resorts to a poetic simile, albeit a less prosaic one, to emphasise the importance of the positive aspects of dyslexia:

[T]rying to understand the nature of dyslexia by examining the apparent weaknesses, or difficulties, is like trying to understand the nature of left-handedness by examining the weaknesses, or difficulties, that such individuals have with using their right hand.

This tells us very little about the nature of being left-handed

Cooper, 2009, p.65.

Many current researchers are uneasy about the popularly held assumption that dyslexia is a “gift”. Moats (2016) regards it as one of the “romantic” ideas debunked by the facts. She argues that “our best science indicates that print recognition ability and most other visual-spatial, concept-formation, problem-solving and creative abilities are dissociated”. In other words, the talents of some dyslexic people exist separately from, not because of, their language-based reading, spelling, or writing problems. Nevertheless, considerable strengths and talents, alongside some potentially disabling challenges, remain a well-entrenched part of the academic as well as the popular conception of dyslexia in the higher education context.

Biological evidence

Neurological

In the 1990s, when researchers were urgently searching for evidence that would reliably and consistently identify dyslexic higher education students, and differentiate them from non-dyslexic students with similar behavioural characteristics (Beaton et al., 1997), it was assumed, without doubt, that dyslexia was a syndrome with a neurological basis (Singleton, 1999). In the intervening years, technological advances have enabled ongoing research broadly aimed at providing empirical evidence for this assertion. Such research, at times appearing to mirror the over-worn metaphor of the blind men and the elephant (Wolf, 2008) has focused on structural, biochemical and functional differences between inconsistently categorized (Elliott & Grigorenko, 2014) dyslexic and non-dyslexic brains, as well as on genetic differences between similarly differentiated groups of readers. The results, whilst providing a wealth of interesting and important insights into how different brains appear to function, particularly for specifically targeted reading skills, have also emphasized the sheer complexity of the processes involved. Elliott and Grigorenko (2014) attest to the ever accumulating and often diverse and contradictory findings that point to a complex “multicomponential reading pathway” (p.91). Wolf (2008) concurs, and warns:

[The research] is hardly finished. At best it is thought provoking; at worst, it is misleading . . . the seeming impermeability [of brain images] gives the illusion of truth, when, in fact, they are simply our best interpretation of statistical averages on the number of subjects we have to date.

Wolf, 2008, p.186.

In their critical review of the research literature on the neurobiological basis of reading disability/dyslexia, Elliott and Grigorenko (2014) conclude that as yet findings from the field are unable to inform diagnosis or intervention. Dorothy Bishop, in one of her frequent online blogs, is as equally matter of fact about the uselessness of such knowledge for classroom practitioners:

Suppose I find out that the left angular gyros becomes more active as children learn to read. What is a teacher supposed to do with that information?

BishopBlog, 2014a.

More specifically, with regards to the identification of dyslexia in higher education students, Elliott and Grigorenko (2014) also draw attention to the limitations of brain research in being typically focused solely on reading and reading related skills, as opposed to on the broader syndrome concept of dyslexia. In addition, they point out that the “reading disability” and “dyslexia” sample groups used in neurological research tend to be chosen on the basis of varying definitions of these two categories, largely dependent on researcher preference. The research’s collective findings, even when they appear to more or less converge, are thus yet unable to resolve conceptual dilemmas as to what dyslexia is: to some extent the blind men are still examining the elephant.

Nevertheless, despite the limitations of research on the structural and functional differences of the dyslexic brain - however its behavioural correlates are defined - and current inapplicability of its findings for identification of dyslexia, some of the knowledge gained from this neurological research has had an enlightening and positive impact on dyslexia assessors’ understanding of, and attitudes towards, their practice.

Three studies conducted with adults serve to provide illustrative proof of this, as well as being examples of the kind of research that often provides a *post hoc* rationale for practitioner knowledge gained from professional observation and experience (McLoughlin & Leather, 2013).

The first of the above mentioned studies, Shaywitz et al., (2003), used functional magnetic resonance imaging (fMRI) to scan three different groups of 18-22 year olds whilst they read pseudo-words and real words: persistently poor readers, compensated poor readers who had, in adulthood, attained normal levels of accuracy, and non-impaired readers. One aim of the study was to see if there were any factors distinguishing the compensated from the persistently poor readers that might account for their different outcomes. The researchers found that, compared to the persistently poor readers and the non-impaired readers, the “compensated” readers used more right hemisphere regions and under-activated the left posterior regions used by the other two groups. In other words, the compensated readers had made up for what was probably their brains’ genetically predisposed inability to use the normal circuitry for reading (Wolf, 2008) by using a different, albeit less efficient circuitry. Visual confirmation of this plausibly less efficient circuitry helps to make sense of both practitioner observation and psychological confirmation of impaired fluency often characteristic of adult readers who have managed to overcome childhood struggles with accuracy. Indeed, Shaywitz and colleagues noted that although the reading skills of their compensated group were indistinguishable from those of the non-impaired group in terms of accuracy and comprehension, the fluency of the former group was still comparatively impaired. Ramus (2006), in reference to the observed compensatory plasticity of some dyslexic brains, comments:

But for all the hype about brain plasticity and reorganization, dyslexics . . . remain significantly impaired, demonstrating that no other brain area does the job as well as the optimal one.

Ramus, 2006, p.8.

Eide and Eide (2011), in an implied reference to a broader conceptual understanding of the dyslexic brain, make a similar observation about the

effect of the tendency of some dyslexic brains to reorganise themselves for reading:

While reading instruction changes certain brain features, it doesn't change all the things that make dyslexic brains different from non-dyslexic ones.

Eide & Eide, 2011, p.xvii.

Empirical data from imaging studies, such as that by Shaywitz and colleagues, described above, enriches practitioner assessors' understanding of observed adult dyslexics' behavioural characteristics in that it provides a plausible, if not definitive, explanation for them. It also has the effect of increasing confidence in the use of diagnostic tests targeted at providing evidence of indicators such as impaired fluency in otherwise seemingly literate students.

The neurological study conducted by Shaywitz and colleagues went beyond simply establishing that compensated poor readers and persistently poor readers were making use of different brain circuitry. The researchers looked for factors that might explain why one group of individuals might be able to compensate for assumed neurological differences and another not. They found that the compensated readers, despite sharing similar family socioeconomic backgrounds and comparable reading skills in junior school, had higher measured cognitive ability, both in early childhood and adulthood. They thus hypothesized, in line with much current mainstream opinion (Hulme & Snowling, 2009; Swanson & Hsieh, 2009) that higher cognitive ability was a compensatory factor that allowed the recovered readers to minimize, in part, the consequences of their phonological deficit. Again, whilst none of this knowledge is directly useful for the identification of dyslexic students in higher education, it does enrich the assessor's understanding of, and attitude towards, the complexity of the ways in which dyslexia can present in such students. Such knowledge, in turn, cannot but influence their practice.

A second illustrative study (Eden et al., 2004) investigated the functional brain changes in a group of phonologically impaired poor readers after targeted phonological training, compared to that of a matched control group which did not receive the training. They found that the performance improvements in the tutored group were associated with changes in brain function broadly similar to those found in other studies of compensated dyslexics (Elliott and Grigorenko, 2014), namely increased activity in those left hemisphere regions engaged by normal readers, and compensatory activity in the right peri-sylvian cortex. Although it is difficult to make valid comparisons with the Shaywitz study, due to the different design and purpose of each, it is interesting that the Eden study, like the former, found that although improvements in phonological skills generalized to reading accuracy, secondary reading skills like fluency were unaffected. Brain plasticity, as a correlate of reading skill, is complex, showing that dyslexics' tendency to co-opt compensatory right hemisphere structures for reading is only partially effective, as has been noted above. This finding, in more than one study, helps practitioners make sense of what they observe at the behavioural and cognitive levels of functioning. Additionally, it suggests the need for more long-term studies in which individuals are subjected to years of intense exposure to text, in order to see whether the old adage "practice makes perfect", the Matthew Effect (Stanovich, 1986), improves behavioural performance in reading skills other than accuracy and phonological processing, and what physiological effects this might have in the brains of adults who initially found difficulty in the acquisition of literacy skills, compared to adults who did not find the acquisition of such skills difficult.

Data from a third study, yet to be published (Gimenez et al. under preparation) was used in a presentation at the International Dyslexia Association (IDA) 2013 Annual Conference by developmental and cognitive neuroscientist Fumiko Hoeft (Hoeft, 2013). This data was obtained from large samples of children rather than adults, but it appeared to support the findings of the Shaywitz study with regards to the qualitative difference in brain functioning between compensated readers with better than average IQs (like many dyslexic higher education students), uncompensated IQ discrepant

poor readers, and typical readers. Neuroimaging in this study found little difference in the brain functioning for reading between IQ/reading discrepant poor readers and poor readers without an IQ/reading discrepancy. However, it did find significant differences in the activation patterns of both the above groups, and IQ and reading age matched controls, when compared to IQ discrepant typical readers. They found that IQ discrepancy influenced typical (compensated) readers' activation patterns in much the same way that Shaywitz et al. (2003) hypothesized that higher cognitive ability influenced their compensated group of readers i.e. they found that these readers displayed dysfunction in some left areas of the brain, and hyperactivation in areas of the right side of the brain not normally used for reading. This latter functional difference was attributed to a compensatory strategy.

Such findings regarding the significance of cognitive ability and the potential disabling cognitive effects of neurological compensation for literacy dependent skills have important implications for the conceptual understanding of dyslexia in the higher education context. The researchers in the above mentioned study concluded that IQ-discrepant typical readers in schools might benefit from being regarded as a separate population from non-discrepant typical readers. In the higher education context, insights from such studies heighten understanding of the presenting difficulties of seemingly high functioning dyslexic individuals, and possibly add some credence to the consideration of these difficulties as being interpreted as a disability, in the medical sense, deserving of additional provision. Such matters, together with the importance of cognitive ability and discrepancy in the identification of dyslexia in higher education, will be discussed further in ensuing sections of this review.

Genetics

If empirical evidence in the literature from neuroscientific research on dyslexia is of little practical significance to the assessment of dyslexia in higher education students, then that resulting from genetic research into reading disability and dyslexia is even more peripheral in its practical utility. What consensus there is, is pivotal around the opinion that there is not yet, or

ever likely to be, a simple genetic marker for dyslexia (Wolf, 2008; Ramus 2006; Asbury and Plomin, 2014; Elliott and Grigorenko, 2014). Dyslexia, like many other human traits, is hypothesized as being influenced by many genes and many environments, each with a tiny effect (Asbury & Plomin, 2014). The last cited authors estimate the individual differences found in reading and writing skills, for example, to be over 60% heritable, but with their behavioural expression subject to genetic and environmental influences in complex ways. The seeming complexity of genetic underpinnings of dyslexia has prompted Elliott and Grigorenko (2014) to wryly comment:

Recognition of such complexity . . . represents an important counter to overly simplistic and unrealistic expectations that a simple genetic account could materialize . . . Currently we are unable to progress beyond a recognition that reading disability has a genetic component, or even an understanding of some specifics of these components, to a knowledge base capable of informing differential diagnosis and individualized forms of intervention.

Elliott and Grigorenko, 2014, p.121-122.

Wolf (2008), in reference to knowledge about dyslexia gained from neurological research to date, warned that such research has hardly finished, and that at best it was thought provoking and at worst misleading; the same could be said of dyslexia research at the genetic level. Like all knowledge pertaining to assessors' practice, the broad findings concerning the probable multi-genetic etiology of dyslexia are thought provoking in helping to explain the observed heterogeneity of dyslexia's behavioural manifestations, as well as its tendency to often co-occur with other recognized developmental disorders.

Perspectives emanating from non-empirical research

The current conceptual understanding of adult dyslexia has also been affected by some influential non-empirically derived themes in the literature. Such themes are those that have emerged from social theorizing in what is often referred to as the critical literature. Many of the themes so far discussed in this review have originated from empirical research based on an

assumption that dyslexia is a medical condition, a way of processing information that deviates from the norm due to abnormal, and usually undesirable, neurological correlates. Such an assumption is implicit in the vocabulary used to describe the condition: “deficit”, “difficulty”, “disorder”, “dysfunction”, “disability”, “impairment”, “abnormality”, “inefficiency”, “weaknesses”, “suffer” and “symptoms”. Whilst the use of such negative vocabulary is perhaps understandable considering the historical development of the concept, and not necessarily indicative of the researcher’s attitude towards the condition (Frith 1999), it has evoked the ire of many critical social theorists, as well as inflaming the sensitivities of some individuals identified as dyslexic. Illich et al. (1997) in a work entitled “Disabling Professions” criticize the “experts”, such as cognitive research psychologists, for medicalising society and for the power that they have to disable and disempower those that they identify as needing their help. Illich’s contemporary, Michel Foucault, has produced a body of influential critical sociological writings expressing much the same ideas, pointing to the way in which social institutions, such as universities that possess certain types of knowledge, are able to powerfully control the lives of individuals. More recently, what are seen as elitist academic attitudes towards normalcy have even been equated with everyday eugenics (Madriaga, Hanson, Kay, & Walker, 2011). Hacking (2007), whilst taking a less condemnatory and more impartial view, theorizes that such individuals so “medicalised” or socially constructed, eventually tend to rebel and reclaim their identity. Such a tendency is illustrated in the literature extolling some versions of the social theory of disability, in which dyslexic individuals are seen as simply different or neuro-diverse, in a positive way, and disabled only by the social constructions of society, like universities, that place undue emphasis on literacy skills (Cooper, 2009). The last cited author, himself dyslexic, defiantly affirms:

Dyslexia is not something that has happened to me, it is intrinsic to what I am. Take away the ‘dyslexia’ and I would no longer be me. I am ‘dyslexic’ not ‘a person with dyslexia’; it means much more than having difficulty with literacy. In recognizing my

dyslexic identity, it becomes empowering and I would not choose to be other than 'dyslexic'.

Cooper, 2009, p.64.

Alongside the literature that depicts the tendency of some theorists, practitioners and dyslexic individuals to actively reject the historical and predominant "medical" concept of dyslexia, is that typical of New Literacy Studies (Soler, 2010) that closely align literacy learning and attainment with socio-cultural factors. Such theorists question the social justice implications of, for example, differentiating between dyslexic poor readers and common garden poor readers (Kelman & Lester, 1997; Stanovich, 2005; Elliott & Grigorenko, 2014), particularly when one of the reasons for doing so is the uneven allocation of educational resources which prioritise the needs of dyslexic individuals (identified in "pseudoscientific" ways) (Stanovich, 2005) over those with other types of literacy and general learning needs. The ideas and arguments of these theorists sit comfortably with current theories of the complex genetic/environmental etiology of human traits (Asbury & Plomin, 2014) and with the almost universal acceptance, at least amongst researchers, of the continuous distribution of such traits (Shaywitz, Escobar, Shaywitz, Fletcher, & Makuch, 1992; Snowling, 2005). Their theories have been very influential in shaping the inclusive definitions of dyslexia now used in U.K mainstream schools for the purposes of determining the allocation of additional resources, as well as the attitudes of many dyslexia assessors working in the higher education sector. Riddell et al. (2004), in reference to the research methodology used in their ESRC-funded project investigating the impact of widening access policies for disabled students in higher education, critically considered whether categories such as dyslexia were actually distinct from others such as socially disadvantaged groups. The review of developmental dyslexia in adults (Rice & Brooks, 2004) came to much the same conclusion, as does a recent Equality Analysis document from the Department for Business, Innovation and Skills (BIS/14/1108). Aimed at justifying the Government's decision to make changes to the funding available to disabled students through the Disabled Students Allowance (DSA), this document specifically stresses the Government's intention to reformulate funding strategies to advance equality of opportunity

between people who share protected characteristics, such as disabled dyslexics, and those who do not, such as disadvantaged students from low income backgrounds.

Perceptions of dyslexia like those promulgated by social theorists are currently as much a part of the condition's conceptualization as are those formed on the basis of more traditional psychological and educational research. As such they cannot be ignored in any attempt to understand the complexities inherent in the definition, assessment and differential provision made for people so affected. Roberts (2012) in advocating the usefulness of the World Health Organisation's International Classification of Functioning (ICF) bio-psycho-social framework for analysing disability (WHO, 2001), points out that one category of the framework, the environmental factor, has as a subcategory attitudes and beliefs, which include those of the professionals who identify and diagnose dyslexia. The significance of this observation, together with its effect on dyslexia assessment practice in the UK higher education context, is discussed in more detail in the assessment section of this chapter, as well as in the appropriate findings and discussion chapters.

Current definition

Current conceptualisation of what dyslexia is and how it is identified in higher education students has been shaped by the multiple and shifting understandings illustrated in the foregoing critical analysis of the relevant research literature. The result is succinctly mirrored in the descriptive definition included for guidance in the SpLD Working Group 2005-DfES Guidelines for assessors:

Dyslexia is a combination of abilities and difficulties; the difficulties affect the learning process in aspects of literacy and sometimes numeracy. Coping with required reading is generally seen as the biggest challenge at Higher Education level due in part to difficulty in skimming and scanning written material. A student may also have an inability to express his/her ideas clearly in written form and in a style appropriate to the level of study.

Marked and persistent weaknesses may be identified in working memory, speed of processing, sequencing skills, auditory and/or visual perception, spoken language and motor skills. Visuo-spatial skills, creative thinking and intuitive understanding are less likely to be impaired and indeed may be outstanding. Enabling or assistive technology is often found to be beneficial.

SpLD Working Group 2005-DfES Guidelines p.5.

The SpLD Working Group 2005 definition in effect cleverly summarises, in an inclusive non-contentious way, all the current knowledge and opinions, as outlined in this review, of how dyslexia might manifest itself in higher education students. “A combination of abilities and difficulties” recognizes the syndrome nature of the concept, and the repeated use of the auxiliary verb “may” acknowledges the heterogeneity of its manifestations. Examples of relevant functional difficulties are cited, and the compensated nature of some dyslexics’ literacy skills is deftly accommodated by the phrase “aspects of literacy”, which could include fluency and/or comprehension rather than just accuracy. Possible marked and persistent weaknesses in all, or some, of the empirically researched processing skills are mentioned, whilst the historical discrepancy concept is implicitly retained, in its broadest sense, in the assertion that “visuo-spatial skills, creative thinking and intuitive understanding may be outstanding”. By avoiding any reference to causal factors the definition judiciously sidesteps any objections to it on the basis of social injustice; in theory, so-minded assessors could use it, like the BPS (1999) definition, to identify any individual with poor literacy or study skills as dyslexic. In practice, the 2005 Guidelines, and their subsequent updates, include supplementary addenda and diagnostic criteria that assessors are strongly encouraged to observe. Table 30 (next page) summarises the main researched-derived clinical features that are currently considered by dyslexia assessors, together with examples of key assessment tools used to assess them. Nevertheless, the usefulness to practitioners of the 2005 definition, the additional guidelines that accompany it, and the prescribed assessment format outlining the essential diagnostic criteria and tests, in helping them to “reliably and consistently” identify dyslexic students, are not without their limitations, as will be demonstrated in the following sections of this review.

Table 30: Key clinical features considered, and examples of assessment tools used, in the assessment of dyslexia in higher education students

Clinical features	Key assessment tools routinely used
BACKGROUND INFORMATION	
Referral information; family, developmental, educational and language history; relevant medical information; summaries of previous assessment reports; student's perceptions of his/her difficulties and motivation for assessment, previous educational support, examination access arrangements.	
ATTAINMENTS IN LITERACY	
<p>Reading</p> <ul style="list-style-type: none"> • Single Word • Non-word • Text • Comprehension 	<p><i>Wide Range Achievement Test 4 (WRAT4)</i> <i>Test of Word Reading Efficiency - Second Edition (TOWRE-2)</i> <i>Wechsler Individual Achievement Test - Second UK Edition (WIAT-II UK)</i></p> <p><i>Test of Word Reading Efficiency - Second Edition (TOWRE-2)</i></p> <p><i>The Adult Reading Test (ART)</i> <i>Gray Oral Reading Test Fifth Edition (GORT-5)</i> <i>Gray Silent Reading Test (GSRT)</i> <i>Spadafore Diagnostic Reading Test (SDRT)</i></p> <p><i>Wechsler Individual Achievement Test Second UK Edition for Teachers (WIAT- II UK -T)</i> <i>Spadafore Diagnostic Reading Test (SDRT)</i> <i>The Adult Reading Test (ART)</i></p>
<p>Spelling</p>	<p><i>Wide Range Achievement Test 4 (WRAT4)</i> <i>Wechsler Individual Achievement Test - Second UK Edition (WIAT-II UK)</i></p>
<p>Writing</p>	<p><i>Timed non-standardised free writing</i> <i>Detailed Assessment of Speed of Handwriting (DASH 17+)</i></p>
UNDERLYING ABILITY	
<p>Verbal & Non-verbal Underlying Abilities</p>	<p><i>Wide Range Intelligence Test (WRIT)</i> <i>Wechsler Adult Intelligence Scale - Fourth UK Edition (WAIS-IV UK)</i></p>
COGNITIVE PROCESSING	
<p>Working Memory</p>	<p><i>Wechsler Memory Scale - Fourth UK Edition (WMS-IV UK)</i> <i>The Test of Memory and Learning 2nd Edition (TOMAL2)</i></p>
<p>Phonological Processing</p> <ul style="list-style-type: none"> • Phonological Awareness • Processing speed 	<p><i>Comprehensive Test of Phonological Processing 2nd. Edition (CTOPP-2)</i> <i>Symbol Digit Modalities Test (SDMT)</i> <i>Subtests from Wechsler Adult Intelligence Scale - Fourth UK Edition (WAIS-IV UK)</i></p>
OTHER RELEVANT INFORMATION	

For more detailed account of clinical features examined and range/description of tests used see SpLD Test Evaluation Committee (STEC) (2014) *Suitable tests for the assessment of specific learning difficulties in higher education*. Available from: www.sasc.org.uk

Summary

In the context of dyslexia research on higher education students, the meaning ascribed to the term “dyslexia” appears to have emerged as anything but parsimonious; instead it embraces a recognizable syndrome of cognitive processing differences assumed to have a biological origin but which might be exacerbated or ameliorated by a variety of environmental influences and/or other cognitive abilities. Whilst this understanding of dyslexia is theoretically consistent with a synthesis of most known research knowledge in the area of adult dyslexia, in practice it inevitably causes problems for professional assessors charged with the important task of operationalizing it for formal identification, for educators not privy to the complexity and finer nuances of the condition, and for legislators unable to cope with such multifarious nuances. Some of these problems emerge in the following exposition and discussion of the literature and ensuing debates pertaining to formal assessment of dyslexic higher education students.

2.2: ASSESSMENT

Dyslexia assessment practice in the HE context has attracted much criticism both from within the research community and without it. This section of the literature review charts and analyses some of the historical and contemporary debates that have provided the background and source for such criticism, as well as the problems faced by the conscientious professionals who formally identify dyslexia.

Definitional issues

No universally accepted definition

The starting point of much criticism leveled at dyslexia assessment practices is the lack of a “universally accepted definition that is not imprecise, amorphous or difficult to operationalize” (Elliott & Grigorenko, 2014, p.5). Without this, argue the same authors, we cannot be sure that assessments are measuring the same thing, and as a result there are likely to be serious doubts about any resulting diagnosis or classification. Rice and Brooks (2004) in their comprehensive research review of developmental dyslexia in

adults, gave an example of an identified 26 different definitions that encouraged them to come to the conclusion:

There are many definitions of dyslexia but no consensus . . .
dyslexia is not one thing but many, in so far as it serves as a
conceptual clearing house for a number of reading skills
deficits and difficulties, with a number of causes.

Rice & Brooks, 2004, p.11.

Such criticisms made by eminent researchers are perhaps an example of scientific impatience with the imprecise, common everyday use of language, and with the deference typically shown by many in the dyslexia field to the concept's shifting historical meanings. In a critical review of the Rice Report, Siegel & Smythe (2006) accuse the main author of being "highly selective" in carrying out the research, and of "manipulating the reader" by ignoring "critical definitional issues" (p. 69). Such definitional issues, they remind Rice and Brooks, have been addressed in a number of significant publications, and relate to the historical progression of definitions and research. As research progresses, it is inevitable that definitions will change to accommodate new findings. Rice and Brooks, Siegel and Smythe imply, should have been aware of this issue. Furthermore, the authors of the Rice Report are chastised for "inconsistently advancing the notion that dyslexia is only a phonological deficit" (p. 70), seeming to ignore

[W]hat much of the researchers and practitioners know which is
that there are many causes and consequences of dyslexia, and
that dyslexia should not be modelled on the lines of classical
concepts, but should use what Wittgenstein refers to as family
resemblances, with a network of overlapping and criss-crossing
similarities.

Siegel & Smythe, 2006, p.70.

Miles and Miles (1999) dismiss critical wrangling over the absence of a single all-purpose definition as inappropriate. They argue that in framing definitions of dyslexia it is necessary to take into account the purposes that they are intended to serve. A definition operationally useful for research, for example,

will justifiably be different from one which focuses on teaching needs or which attempts to specify a dyslexic person's rights or entitlements in the education system or law. They refer sceptics to the Morton and Frith (1995) interactive model to help them to make sense of the overall picture.

Whether or not they choose to accept them, dyslexia researchers and academics are undoubtedly aware of the "nuanced understandings" (Wolf, 2014) connected with the dyslexia concept. Unfortunately, less academically privileged individuals, including many educationalists, policy makers and members of the general public, are understandably less enlightened and frequently confused. Such a state of affairs is exemplified by an article in the Times Higher Education Supplement in which the journalist refers to dyslexia as "the most amorphous and ambiguous of disabilities" (Bunting, 2004), and quotes, in the same article, a professor of biochemistry from a Russell Group university opining that dyslexia assessment, and the educational psychologists who diagnose it, are "really quite wishy-washy".

DfES Guidelines 2005 definition

The definition of dyslexia provided by the 2005 DfES Guidelines is based, as has already been demonstrated, on current research findings. It is, though, not easy to operationalize for the purpose of assessment. The working party responsible for the Guidelines does acknowledge this fact. In reference to its behavioural definitions of the different specific learning difficulties (SpLDs), the Guidelines (2005) acknowledge the presence of "many working definitions putting an emphasis on the differing aspects of the condition" (p.5). Similarly, a recent update of the Guidelines' test recommendations from the SpLD Assessment Standards Committee (SASC, 2014) states: "it is recognised that there are various theoretical models, hence tests do not reflect any school of thought" (p.1). Price & Skinner (2007), the lead author of which was a member of the SpLD Guidelines (2005) working party, confirm that despite universal lack of agreement a clear definition of dyslexia is needed to enable the assessor to identify whether or not a person is dyslexic. Furthermore, they concede: "to some extent, the definition encompasses [the assessor's] beliefs and conceptions. Definitions grow out of personal

experiences and knowledge” (p.2). Jones & Kindersley (2014), in the most recent Professional Association of Teachers of Students with Specific Difficulties (PATOSS) guide to dyslexia assessment, also acknowledge the “wide range of definitions and descriptions, alongside a selection of alternate causal models” (p.7), but nevertheless reiterate that assessors must have a clear definition of dyslexia to use as a benchmark against assessment data. These authors, like Miles and Miles (1999), recommend the Morton & Frith (1995) causal modeling framework as both a theoretical justification for different definitions of dyslexia and as an illuminating aid to understanding of the links between apparently competing theories of dyslexia.

Dorothy Bishop, in another of her plain speaking blogs, asserts that few scientists would attempt to defend the notion that dyslexia is a special condition that forms a distinct syndrome. She reminds readers that there is no diagnostic biomarker, the condition is defined purely in terms of behaviours, different disorders overlap, and there is no clear boundary between disorder and normality (BishopBlog, 2014b). Most scientists, as stated above, have a “nuanced understanding of the multi-faceted phenomenon that is dyslexia”, or at least the awareness of such a position held by others. It appears that those who set the professional guidelines for assessors of dyslexia in higher education also have this understanding, and that it allows them to accommodate practice that draws upon a non-uniform set of theoretical models highly influenced by individual knowledge, professional experience, background and preference, resulting in assessments that, strictly speaking, might not “measure” the same thing.

Importance of diagnostic consistency and reliability

If one accepts the inclusive syndrome concept of dyslexia, and carefully interprets both the qualitative and quantitative assessment evidence using the Morton and Frith (1995) three-layer model, then it is inevitable that dyslexia assessments carried out by different professionals on different individuals will not measure exactly the same thing. Assessments conducted by professionals adopting this position render some of the conceptual issues

around consistency and reliability irrelevant. There are many ways to be dyslexic (Miles, 1993; Wolf, 2014), not all of them “measurable” in the strict scientific sense. It could be argued that such assessments are simply focusing on different manifestations of the syndrome. However, if one adopts an alternate position and demands that the term “dyslexia” denotes more exacting, less inclusive criteria, then issues of consistency and reliability of diagnoses are important. Ultimately, though, whether or not it matters if the outcomes of assessment are consistent and reliable across different individuals categorized with the dyslexia label depends very much on the purpose for which the assessment is carried out, and the use to which the diagnosis is put.

Purpose of dyslexia assessment in HE

Functional purpose

The literature expounds two different purposes for dyslexia assessment in higher education. The first can be broadly described as functional and is ideally centered primarily on understanding contextual academic difficulties that a student is encountering and suggesting a way forward for that student. In the latest PATOSS assessment guide, Jones and Kindersley (2014) refer to the process as being analogically similar to one of exploration, making a jig-saw puzzle or piecing together a detective story, with the added proviso that the activity should always be an active and collaborative one between the assessor, the student being assessed, and other involved persons, with a view towards promoting the best interests of the assessed student. This functional, as opposed to categorical diagnostic, purpose of assessment is similarly endorsed by the British Psychological Society (BPS) guidelines:

The purpose of the assessment is to generate understanding of what is happening, who is concerned, why there is a problem and what can be done to make a difference to the situation.

BPS, 2002, p.23.

The increased academic and personal organisational demands of higher education mean that many students’ difficulties are revealed for the first time

at university. Functional assessment can usefully identify their cognitive strengths and weakness and help pinpoint strategies that hopefully enable the individual to move forward, either independently or with additional support. Sometimes a label like “dyslexia” is useful in helping the individual, and others around him or her, to understand their difficulties (Riddick, 2000) but the purpose of the assessment is not to label, but to understand:

The most important aims [of a dyslexia assessment] are those of clarifying strengths and weaknesses and of determining an individual's needs in the light of his abilities and the stage that he has reached in his education.

Miles & Miles, 1999, p.122.

If the purpose of the assessment is educationally functional in the sense outlined above, then it probably does not matter if the assessment is always measuring the same difficulties, or even if the label is always denoting the same thing. The label simply conveniently and economically signifies one or more of several serious processing difficulties indicative of a behaviourally recognised syndrome.

Categorical labeling purpose

The purpose of formal psychological assessment of higher education students, however, is rarely focused solely on understanding or identification of needs. “Needs”, a coded word, invariably implies additional funding with which to provide for them (Norwich, 2009). Dyslexia has been a registered disability since 1970, under the *Chronically Sick and Disabled Persons Act* (Singleton, 1999). In 1993 the Disabled Students Allowance (DSA) was introduced, entitling some dyslexic students in higher education to special funds to pay for the additional materials and support necessitated by their disability. In 2005, the Disability Discrimination Act (DDA) Part 4 (HMSO, 2005) made it a legal requirement that higher education institutions anticipate the needs of disabled students (to which category dyslexic students legally belonged) and make reasonable adjustments for them. The Equality Act (2010) has continued to endorse these requirements. However, as Pollak (2009) wryly observes, concessions are made only to the certified. To qualify

for reasonable adjustments, and for the financially lucrative DSA package, dyslexic students need medical-psychological type evidence of a specific learning disability (SLC, 2012; 2016). Thus the second and most sought-after purpose of dyslexia assessment in the higher education sector, and the one that gives rise to most criticism, is a clear diagnostic label (Jones & Kindersley, 2014; SASC, 2015).

Historical problems developing acceptable assessment models

The route to providing a clear diagnostic label has been, and still is, fraught with difficulties. The Singleton Review (1999) uncovered unacceptable variation in both the methods and standards of dyslexia diagnostic assessments used for access to DSAs and reasonable adjustments. Part of the working party's remit was to produce national guidelines on identification of dyslexic students. Their task, described by Singleton as "complex and often controversial" involved deciding who would be qualified to carry out diagnostic assessments, and what evidence the resulting document should contain. The results, detailed in Chapter 8 of the report, read very much as a methodological compromise. Despite fretting about the shortage of knowledgeable and experienced professionals to conduct the assessments, and the lack of suitable psychometric tests standardised on a population of the appropriate age and background, Singleton's team came up with an assessment format based on established procedures that prioritized the use of "up-to-date standardized tests and professionally established procedures" (p.97), despite the fact that such up-to-date standardized tests, or the research knowledge of adult dyslexia to underpin them, did not, at the time, exist. Singleton argued, by way of justification, that "it would be hopelessly unrealistic to put the job of dyslexia identification 'on hold' until all the various scientific issues [were] resolved" (p.86) and, having dismissed out of hand the informal subjective methods of assessment used by some experienced specialist teachers as lacking an objective yardstick of measurement, proceeded to pragmatically, but inconsistently, recommend that "informal procedures may help the diagnosis, and may be essential in those areas where there are no suitable standardized tests available" (p.98).

Fortunately, since the publication of the SpLD Working Group 2005/DfES Guidelines, the setting up of the SpLD Assessments Standards Committee (SASC) and its sub-committee, the SpLD Test Evaluation Committee (STEC), the shortage of suitably trained assessors, the standard and uniform format and content of assessment reports, as well as the availability of psychometric tests standardized on the appropriate age group, have all improved. Nevertheless, criticism of diagnostic categorical assessment itself, both in the research literature and by other interested parties, has not abated.

Categorization of a continuous distribution

One such criticism of assessment resulting in categorical diagnosis centers on a gap between research findings and practice. Stanovich (1999; 2005), for example, strongly criticizes the dyslexia research field for failing to ensure that practice keeps abreast with research, for allowing the introduction, into the law and professional practice, of psychometric and theoretical errors that have been superseded by subsequent scientific advances. The concept of dyslexia as a discrete category rather than a continuously distributed set of characteristics is a case in point. The dimensional nature of dyslexia is a well established and accepted research finding. Davis (2008) uses Ian Hacking's contrasting categories of 'indifferent' and 'interactive' kinds to argue philosophically, with the aid of empirical examples, that there is nothing "essentialist" about learner categories such as dyslexia. Empirical research has repeatedly supported this conceptual argument. Human traits, such as reading skills and the cognitive processes thought to underpin them are continuously distributed (Hulme & Snowling, 2009; Pennington & Bishop, 2009; Shaywitz et al., 1992):

Neither disorders of reading accuracy (dyslexia) nor of reading comprehension (reading comprehension impairment) lend themselves to categorical diagnosis.

Snowling & Hulme, 2011, p.2.

The DfES Guidelines (2005) recognize that dyslexia difficulties will vary from person to person in degree and range. Yet disability legislation linked to funding and reasonable adjustments, (presumably influenced by some

respected professionals or lobbying groups whose voices get prioritized over others) (Soler, 2010), requires of assessors that they classify dimensional difficulties into recognised diagnostic categories. Stuebing et al., (2002) lament that emerging research knowledge is not the basis for classification in law; the lawyers Kelman and Lister (1997) comment more cynically: “the law does not allow for judgements that learning difficulties are invariably on a continuum” (p.6). This legal “error”, in the absence of any tight prescriptive objective diagnostic criteria, inevitably results in arbitrary and subjectively assigned categorical labels:

Dyslexia is not an all-or-none phenomenon, but like hypertension, occurs in degrees. The variability inherent in the diagnosis of dyslexia can be both quantified and predicted with the use of the normal-distribution model.

Shaywitz et al., 1992, p.145.

Tests normed on US populations

The requirement to impose a categorical label on a set of continuously distributed behavioural characteristics is not the only feature of categorical diagnosis at odds with current research findings. Established difficulties with the psychometric tests commonly used to identify “positive indicators” of dyslexia, such as discriminatory power, standardization sample, validity and specificity in individual cases, have already been discussed in the first section of this chapter (pp.18-30). Amongst these regularly criticized features of psychometric tests, issues around standardization are of particular concern for the diagnostic assessment of U.K. higher education students. Unlike in 1999, when Singleton and his working party were attempting to establish guidelines, tests have now been developed that have been standardized on suitably large samples of adults. However, even a cursory glance at the most recently approved list (STEC, 2014) reveals that the majority of these tests are standardized on American, rather than British, populations.

Three small scale studies using psychometric tests developed for, and standardized on, population samples from different English speaking cultures,

illustrate the diagnostic errors that can result from relying on such tools which, superficially, might exhibit the allure of objectivity and statistical reliability. Hatcher et al., (2002) used the Brown ADD Scales questionnaire (Brown, 1996) as part of a battery of tests aimed at distinguishing dyslexic from non-dyslexic students in researching and developing the York Adult Assessment (YAA). The scales reputedly give useful measures of attention and memory skills, hypothesized, in this study, to be quantitatively and qualitatively different between groups of dyslexic and non-dyslexic students. The researchers found, to their surprise, that both the dyslexic and control group mean total scores fell well into the clinical range, indicating a possible diagnosis of ADD for both groups. They concluded that this result was “interesting” but that the “data led us to doubt the appropriateness of the norms for U.K. students” (p.128). A follow-on study, Warmington et al. (2012), which collected data to revise the YAA, and which also used the Brown ADD scales, also found that both group means fell into the clinical range (according to published norms, a total Z score above 55 is thought to indicate a diagnosis of “ADD highly probable”). Although in each study the group means of dyslexics and controls were significantly different, the group mean for the 2002 control group was 60, and for the 2013 study 55.55, suggesting that at least some individuals in these “normal” groups might have attention and concentration problems. These findings serve as just one example of how tests standardized on samples from different cultural backgrounds may have poor discriminatory power and reliability at the individual, as opposed to the group, level when used normatively to assess the skills of British students.

Another example of the potential problems inherent with using an assessment tool developed in one cultural context to assess students in another is illustrated by the results of a validation study carried out by Canadian researchers, Harrison & Nichols (2005). These researchers used the UK normed Dyslexia Adult Screening Test (DAST) (Nicholson and Fawcett, 1998) with a group of 117 carefully diagnosed specific learning difficulties (SLD) students and 121 comparison students with no history of SLDs, to evaluate the screening test’s usefulness in identifying Canadian students at risk of dyslexia. They found that when used with Canadian

students the DAST lacked both the sensitivity and specificity claimed for it by Nicholson and Fawcett (1997). The UK developers of the test reported a true positive rate of 94% and false positive rate of 0% (Nicholson & Fawcett, 1997); the Canadian study found a true positive rate of 74% (30/117 students misidentified as not being highly at risk) and a false positive rate of 16% (19/121 students with no known SLD identified as highly at risk). Furthermore, the Canadian results revealed some astonishing differences between the two cultural cohorts on some of the DAST subtests. In the UK standardization only 5% of the non-dyslexics scored “highly at risk” on the Phonemic Segmentation subtest, and 8% on the Postural Stability subtest; in the Canadian study 40% of the non-SLD group had scores indicative of high risk of dyslexia on Phonemic Segmentation and 52% on Postural Stability.

A study carried out in Australia (Chanock, Farchione, Paulusz, Freeman, & Lo Giudice, 2010) using the UK normed York Adult Assessment (YAA) found the reliability and thus usefulness of this dyslexia screening tool for their students similarly affected by the nature of the population on which it was normed. This study used a group of 23 dyslexic students and 50 controls from two Australian universities. It was not possible for the authors to reliably compare the results obtained in their study with those obtained by the York researchers, as they made some changes to the York assessment tool (with the permission of Margaret Snowling (Chanock et al. 2010) to make it more culturally acceptable for Australian students. Nevertheless, some of their general findings provide further illustration of how norms derived from one seemingly similar, albeit nationally different, sample group can be inappropriate and lead to possible erroneous diagnoses. For example, the Australians found that the YAA précis test was useless in discriminating between their groups, as almost none of their students, dyslexic or not, had any idea of how to summarize a reading. In addition, they found that, unlike for the UK non-dyslexic students, speed and accuracy were not correlated in the performances of their non-dyslexic students. Although the groups were differentiated in terms of accuracy, there was no clear difference in the time taken by the Australian dyslexics and non-dyslexics to read, perform spoonerisms or to write. The Australian researchers did not know how to

account for the slower pace of Australian students, but its existence would certainly confuse some of the YAA's diagnostic criteria and no doubt weaken the rationale for requesting additional time in examinations for dyslexics – one of the reasons that the YAA was being trialed.

The three examples, taken from the literature devoted to dyslexia assessment and screening in the higher education sector, serve to illustrate the potential difficulties encountered by UK assessors in being forced to rely on psychometric tests standardized on American populations. As the practitioners McLoughlin and Leather (2013) observe: “some tests do not travel well” (p.68).

Intelligence testing and discrepancy concepts

Ability/attainment discrepancy model

The use made of intelligence testing in the categorical assessment of dyslexia in higher education students is another contentious issue, and one that has divided some researchers and practitioners. The literature abounds with much criticism of this practice in the context of the ability/attainment discrepancy model historically used to identify dyslexic poor readers and to differentiate them from ordinary poor readers (Gibbs & Elliott, 2010; Siegel, 1992; Stanovich, 2005). Such criticism is based on both scientific and socio-cultural ethical grounds (see last cited authors for reviews) and has contributed effectively to the demise of the practice in the identification of struggling readers in UK maintained schools for the purposes of additional provision.

However, as indicated above, most criticism of intelligence testing in the context of the ability/discrepancy model is based on the narrowly conceived understanding of dyslexia as no more than reading disability at the basic level of word reading. In the higher education context, in contrast, where dyslexia is more commonly conceived of as a syndrome, many regard intelligence testing as part of an assessment for a suspected learning-difficulty disability as conceptually desirable as well as ethically defensible. The manifestations of dyslexia change throughout the life span (Frith, 1999)

and, as a result, as this review has endeavoured to outline, poor reading and provision for its remediation are no longer the main foci of dyslexia assessment in higher education. In an environment where students are expected to have above average intellectual abilities, the syndrome of strengths and weakness that is the main focus of dyslexia assessment in this context is not easily detached from consideration of an individual's general ability – or, at least, from some of the sub-skills that are assumed to contribute towards the concept of general ability.

IQ test conceptually desirable

In higher education, rightly or wrongly, dyslexia is still conceived of as a specific learning difficulty in individuals with average or above average intelligence. Not surprisingly, then, the abandonment of low IQ as an exclusionary criterion has not gained wide acceptance (Elbeheri & Everatt, 2009). The DfES Guidelines (2005) and their most recent update (SASC, 2015), like those recommended by the Singleton Review (1999), require formal diagnostic reports to contain evidence from an approved assessment of underlying abilities. Furthermore, they do not rule out considerations of an ability/attainment discrepancy, obtained statistically with due regard to regression tendencies, or at least by an examination of confidence levels based, where possible, on co-normed tests (Jones & Kindersley, 2014; SASC, 2015). Such a discrepancy, in keeping with the syndrome concept, can be used as one piece of evidence in a more comprehensive diagnostic profile that includes a background history with observational and standardized evidence from literacy attainment and cognitive processing tests. As cited earlier:

Although a discrepancy between underlying ability and attainment in literacy skills is not a diagnostic criterion . . . where such discrepancies do exist, they provide further supporting evidence.

SpLD Working Group 2005-DfES Guidelines, p.8.

The discrepancy concept has been widely criticized. Research by Proctor and Prevatt (2003), for example, demonstrates the lack of agreement in

diagnostic outcomes that can result from using discrepancy models that employ different criteria in measuring discrepancy. Using evidence from 170 clinically referred university students the researchers found that agreement in diagnostic outcomes between the different models varied between 48% and 70%. Furthermore, even when different models diagnosed similar numbers, the same students were not diagnosed across different models. Research such as this has no doubt influenced the above recommendation that discrepancies be used cautiously.

Reference has already been made in this review (p.50) to opinions regarding the perceived necessity of IQ assessment to rule out non-specific more general learning problems before considering a diagnosis of dyslexia. It is not an unreasonable assumption that, unlike young children learning to read, higher education students – especially those claiming disability statuses – should be intellectually able. Frith (1999) emphasizes: “it is cultural factors that shape the clinical picture and time course of dyslexia . . . [and] determine the degree of handicap that the disorder may impose on the sufferer” (p.210). Miles & Miles (1999) make much the same point when they exhort assessors to consider whether, given his or her other abilities, an individual has the literacy skills sufficient enough to enable him or her to cope with their particular stage of education. Intellectual abilities, measured in the traditional way with a battery of tests such as those of the Weschler Adult Intelligence Scale (WAIS), are usually assumed to be important prerequisites for successful participation in higher education, and are part of the institutions’ cultural context. Although not synonymous with achievement, IQ or underlying ability is regarded as the best single behavioural predictor of achievement that we have (Asbury & Plomin, 2014). The DfES Guidelines 2005, taking a view of assessment not solely for categorical diagnostic purposes, accordingly state:

Gathering information about underlying ability is an important component of assessment. The assessment of verbal and non-verbal abilities throws light on the extent to which students are likely to be able to develop compensatory strategies, and informs specialist teaching intervention. The effect of SpLD on a student’s

learning can be evaluated more effectively when underlying ability is taken into account.

SpLD Working Group 2005-DfES Guidelines p. 9.

. .

Empirical research at the neurophysiological level, as outlined elsewhere in this review (pp.54-57) has also emphasized the importance of good cognitive ability as a protective factor in enabling otherwise learning impaired individuals to compensate for initial literacy difficulties, albeit often at a cost to processing efficiency. Additionally, it needs to be borne in mind by assessors of dyslexia in higher education students, that the underlying general ability factor “g”, especially when it is high, will affect the scores, and thus the interpretation of, all psychometric tests (Frith, 1999).

Farmer et al. (2002), in defending the inclusion of IQ tests in dyslexia assessment of higher education students, argue that cognitive ability tests give some idea of a person’s ability to form concepts and abstract patterns of similarities and differences, skills that underpin reading ability. They maintain that reading ability, like other academic attainment, is generally correlated with intelligence, despite the fact that the correlation is not perfect. Stanovich (1999) also - perhaps inadvertently since in the context he is actually attempting to decry the excessive focus on “IQ fetishism” – illustrates the use to which some of the verbal subtests of IQ tests can be put by declaring that they simply estimate “how much a poor reader would get from written text if their deficient decoding skills were to be remedied” (p.355). Even Elliott and Grigorenko (2014) concede that a measurement of intelligence is important for educational planning, as distinct from a justification for differential identification of struggling readers:

One of the most confused understandings of the dyslexia debate results from a failure to grasp that there is a major difference between undertaking cognitive assessment to inform decisions regarding the intellectual content and challenge of a broad range of curricular activities, and its use in relation to the widely-discredited IQ-reading discrepancy diagnosis.

Elliott and Grigorenko, 2014, p.179-180.

It remains unclear whether or not the above-cited authors would object to IQ tests being used to differentiate those intellectually able individuals in higher education with specific difficulties not necessarily with reading accuracy from intellectually less able individuals whose academic difficulties, for whatever reason, appear more general. One can tentatively conclude that they would not object, providing the difficulties of said able individuals were not classified categorically as “dyslexia” – an instance of what Miles and Miles (1999) refer to as arguing at cross purposes, failing to concede that a disagreement may be based on a semantic rather than a conceptual difference.

Interestingly, in the United States where the term “dyslexia” is more commonly confined to “reading disability” regardless of ability, a new category “Twice Exceptional” (2e), endorsed on the website of the International Dyslexia Association (IDA), has emerged to identify and describe those learning disabled bright individuals for whom formally the dyslexia label was reserved and who are now thought to be in danger of being overlooked for specialist provision. Gifted dyslexics, individuals with dyslexia as well as superior skills in another cognitive domain (Gilger, 2015) are being differentiated from non-gifted “reading disabled” dyslexics, and a discrepancy approach to assessment, including an intelligence test, considered the best form of identification for these individuals, as well as the most likely to yield the kind of information that enables intervention to address both the giftedness and the dyslexia (Assouline, 2015). Such practices may appear to be nothing but a sensible and responsible use of psychometric testing to identify and best provide for individual complex educational needs, but the very recognition of such a category is redolent of a former, once almost universally accepted understanding of dyslexia, as well as the understanding widely attributed to the concept in the current context of higher education. A cynic might be tempted to allude to a rose by any other name smelling just as sweet, or, in the case of “Twice Exceptional”, even better.

Dyslexia profiles based on subtest discrepancies

Although a discrepancy between ability and literacy attainment is not a sole

determinant of dyslexia diagnosis in higher education assessment practice, the generally accepted syndrome model of the concept, as one of a combination of abilities and difficulties, has resulted in the notion of discrepancy being retained in a broader sense. Price and Skinner (2007) explain that “a looser definition of discrepancy is now adhered to” (p.2) and suggest that the notion of “difference” is perhaps more appropriate. Such differences are typically assessed by comparing the results obtained by the person being assessed on the different IQ sub-tests, and/or on processing indexes worked out from these tests (Miles and Miles, 1999). The last cited authors, along with countless others, maintain that there emerges from such sub-test analyses a recognizable dyslexia profile, based on researched theoretical models, which is “uneven” (Miles, 1993), “spiky” (Grant, 2010), and usefully highlights the individual’s pattern of strengths and weaknesses (Miles & Miles, 1999; Price & Skinner, 2007; Jones & Kindersley, 2014). Such profiles typically show dyslexic individuals with differential weaknesses in the subtests reliant on memory, like that of the classic Arithmetic, Coding, Information, Digit Span (ACID) profile (although religious use of this is no longer approved) (Elbeheri & Everatt, 2009; Elliott & Grigorenko, 2014), or on statistically derived working memory or processing speed indexes (Grant, 2010). The categorical diagnosis is then largely influenced, but not completely determined, by this profile, which may include additional results from psychometric tests not necessarily co-normed with the IQ test used. Jones and Kindersley (2014), for example, illustrate with consideration of a hypothetical “flat” profile:

If results from the cognitive assessment, including underlying ability, working memory, processing speed and phonological skills, are reasonably balanced, and attainment measures are broadly in line with these, there would be insufficient evidence for a specific learning difficulty

Jones and Kindersley (2014), p.85.

In other words, a “flat” profile would probably not result in a diagnosis of dyslexia: differences or discrepancies (in the broad sense of the term) are needed.

Whether used to estimate overall ability, suitability for chosen course, identify specific strengths or dyslexic weaknesses, the IQ test is seen as an important tool in the assessment of dyslexia in higher education students. Additionally, many practitioner assessors believe that currently there is nothing reliable to replace it (Elbeheri & Everatt, 2009).

Voices of caution and dissension

However, the literature on the use and relevance of IQ testing as part of a dyslexia assessment is not without voices of caution, at one extreme, and of outright dissension, at the other.

Uncertain face validity

One theme of the cautionary voices harks back to the warning highlighted by Frith (1999) about the face validity of psychometric tests i.e. there is always a difference between what tests actually measure and what they intend to measure. Apart from needing to take into account obvious factors such as the attitude, mood and alertness of the subject at the time of testing, several researchers have drawn attention to the fact that some of the IQ's subtests tap abilities that would be impaired by being dyslexic (Thomson, 1982; Miles, 1996; Stanovich, 1999; 2005; Miles & Miles, 1999; Elbeheri & Everatt, 2009). Poor scores on any subtests that rely on aspects of memory function or processing speed, like those included in the Arithmetic, Coding, Information, Digit Span (ACID) acronym, is a case in point. Miles and Miles (1999) emphasise that this is something of which testers, and indeed all those that use test results, need to be aware. Furthermore, the last cited authors stress that "even within the same subtest there may be skills that tap both the strengths of a dyslexic and his weaknesses" (p.118). They give the example of the Arithmetic subtest from the Wechsler test, illustrating how "this calls for reasoning power, which in some dyslexics may be a strength, and an ability to remember the instructions, to work at speed, and have an immediate knowledge of multiplication tables – all of which are likely to be weaknesses" (p.118). The resulting test score may not be an accurate estimate of an individual's arithmetical ability and thus, if it were to be included as part of a

verbal ability composite measure, it would be misleading.

Bi-directional nature of reading experience and IQ

Another research-established piece of cautionary advice to assessors making use of IQ test scores is the need to remember the bidirectional nature of reading experience and IQ:

Reading less (and less well) not only may negatively affect reading development, but also may negatively influence language and IQ development.

Ferrer et al., 2010, p.99.

Callens et al. (2014), in an exploratory factor analysis of the skills of 100 Dutch dyslexic and 100 non-dyslexic first year higher education students, found that a factor grouping all subtests that tap on purely verbal skills clearly differentiated between the groups in their study, with the dyslexics scoring significantly lower on the subtests that tapped into verbal skills. Gunnell Ingesson (2006) found that the verbal ability mean score of 65 dyslexic teenagers and young adults decreased over a period of 6 years, suggesting that a likely explanation was the dyslexics' reduced reading and writing experience, relative to the controls. A quick examination of the empirical data reported in several of the studies cited in the first section of this review (Gottardo et al. 1997; Snowling et al, 1997; Ramus, 2003) illustrates that mean verbal IQ scores for dyslexic groups, where reported, tend to be lower than those for control groups. The importance of the Matthew Effect (Stanovich, 1986) on vocabulary acquisition cannot be underestimated; neither, though, can it be assumed necessary for the verbal skills of every dyslexic individual, as Ferrer et al. (2010) discovered when they compared the verbal ability of impaired readers who eventually compensated for their initial reading difficulties with that of persistently poor readers. The researchers hypothesized that the better verbal ability of the compensated group depended more on environmental inputs other than text. Inconsistent research findings on the relationship between dyslexics' verbal ability and reading experience serve as a cautionary warning against any attempt to base important decisions dependent generally on an individual's ability on the

results of IQ tests alone.

Listening comprehension attainment as a proxy for verbal IQ

One suggested possible alternative to the use of standardized IQ tests in the diagnosis of dyslexia is to use listening comprehension as a proxy for verbal ability, and to note the discrepancy between this and single word reading attainment (Elbeheri & Everatt, 2009). Such a practice has no doubt been seriously hampered by the lack of a suitably constructed and standardized test of listening comprehension for higher education students (Simmons & Singleton, 2000), but it also would depend for its reliability on the assumption that the listening comprehension skills of dyslexic students were superior to their single word, and/or reading comprehension, skills. Such an assumption is questionable, particularly at the individual level, given the empirical evidence for dyslexics' often suppressed vocabulary knowledge, as well as their difficulties with processing speed and working memory, as outlined in preceding sections of this review. Gottardo, Siegel & Stanovich (1997), for instance, found that poor readers were worse than average readers on measures of vocabulary and listening comprehension. Simmons & Singleton (2000), in a small scale study aimed at developing a suitable reading comprehension assessment for university students, found that groups matched for word reading accuracy scored similarly on measures of literal comprehension, but that the dyslexics scored significantly worse on measures of inferential comprehension. On the basis of these results the researchers concluded that dyslexics appeared to be specifically impaired in constructing inferences when processing complex text, and hypothesized that this could be explained by factors such as impaired memory, poor decoding automaticity (rather than accuracy), limited vocabulary and/or a general impairment in comprehending verbal information as a result of limited exposure to complex text. The literature appears to contain no empirical research on the target group demonstrating the superior listening, as opposed to reading, comprehension skills of dyslexics. Snowling and Hulme (2012), in a general review of reading and comprehension skills, imply that the gap between word reading and listening comprehension noted in some child dyslexics closes, and the correlation between reading comprehension

and listening comprehension increases, with age. Although the area is under-researched, it is likely that any listening comprehension assessment would be subject to the same criticisms of uncertain face validity and diagnostic specificity as have been made of psychometric tests.

Summing subtest scores to obtain a global IQ

Cautionary warnings about the use of intelligence tests as part of a dyslexia assessment, such as those illustrated above, do not, as Miles and Miles (1999) admit, establish that the whole theory and practice of intelligence testing is flawed. The danger, they maintain, lies not in the test items themselves but in summing subtest scores so as to provide a composite or 'global' IQ figure, a sentiment reiterated by McLoughlin and Leather (2013) as well as by Jones and Kindersley (2014) in the latest PATOSS official guide to assessing and reporting.

Validity of IQ tests

Other critics are much more damnatory in their criticism of the use of intelligence tests for dyslexia assessment. First and foremost, the very validity of IQ tests is questioned on the basis that they assume there is a general IQ rather than a number of different forms of intelligence (Cooper, 2004). Stanovich (1999) refers to this general IQ disparagingly as "the statistical amalgamation of a panoply of different cognitive processes" (p. 352); Sternberg (2000) prefaced a general article on the construct in the following enigmatic way:

Looked at in one way, everyone knows what intelligence is;
looked at in another way, no one does (p.3).

IQ tests are socially discriminatory

However, by far the most vehement criticism of the use of intelligence tests as part of dyslexia assessment is a socio-cultural political one (Siegel, 1995; Cooper, 2004; Rice & Brooks, 2004; Stanovich, 2005). In a Times Higher Education piece Cooper (2004) castigated the Disabled Student Allowance Specific Learning Difficulties Working Group for clinging to the wreckage of

the old psychometric discrepancy model and intending to allow IQ tests to be used to diagnose dyslexia. He claimed that this proposal would increase discrimination against dyslexics from lower socioeconomic groups, as some of the subtests of IQ tests do not assess “innate ability” but rather acquired knowledge and language skills gained through social and educational advantage. Cooper’s objection to the use of IQ tests is implicit in the critical writings of some social theorists, like Macdonald (2009), who argues that dyslexics from lower social groups endure more disabling barriers in higher education than those from middle or upper social groups, a finding also reported by the authors of the ESRC funded project (Riddell & Weedon, 2006) who observe, in relation to dyslexia and social class, “those with the greatest class-based resources at their disposal are likely to be most successful in risk-avoidance and diffusion” (p70).

Sub-test profiling scientifically unsupported

It is not only the general use of IQ tests for dyslexia assessment that is criticised. Their current use for discrepancy diagnoses based on subtest profiling and for the identification of individual strengths and weaknesses also comes under fire in the literature for a variety of conceptual and statistical reasons (O’Donnell & Miller, 2011; Proctor & Prevatt 2003; Stuebing, Fletcher, Branum-Martin & Francis, 2002; Watkins, Glutting, & Youngstrom, 2005). After an extensive historical review of subtest profiling, for example, the last cited authors express the view that “a cumulative body of research evidence has shown that neither subtest scatter nor subtest profiles demonstrate acceptable accuracy in discriminating among diagnostic groups” (p.253), concluding that subtest profile analysis can best be described as reliance on “clinical delusions, illusions, myths or folklore” (p.263). The strong condemnatory vocabulary chosen in which to couch this criticism is noticeably akin to that used by Stanovich (1999) when deriding similar practices based on the use of IQ tests in the diagnosis of dyslexia: “pseudoscientific neurology” (p.359), “unverified, virtually armchair speculation about human abilities” (p.352), “litany of vague, non-modular processing ‘diagnoses’ “ (p.352) and “muddled folk psychology” (p.352).

Dissociating cognitive processes from measurement of IQ

The above-cited examples of voices of caution and dissension concerning the use of intelligence or ability testing as part of a dyslexia assessment can be attributed to more general conceptual difficulties with the whole construct of intelligence and how it is, or can be, measured. Apart from questions and debates around what exactly intelligence is, in the first place (Sternberg, 1990, 2000; Stanovich, 1991) recognition that commonly used tests of different areas of intellectual functioning are rarely “pure” and that they cannot be dissociated from various higher level processing skills (Hulme and Snowling, 2009; Stanovich, 1999; Siegel, 1999) presents problems not only at the interpretation level but also for the whole concept of dyslexia identification based on the assumption of discrepancy between underlying reasoning abilities and processing deficits. Stanovich (1999) and Siegel (1999), for example, argue that because some of the subtests of intelligence tests put a premium on speed of response, the resulting scores obtained for verbal and perceptual reasoning will inevitably be affected by processing weaknesses, making any statistical calculation of “discrepancy” between these measured reasoning abilities and processing skills an invalid concept. Higher-order processing skills, such as short-term and working memory and rapid retrieval of learnt information, are part and parcel of the measured intelligence quotient. Most assessors realize this, as echoed in the above examples of voices of caution, and employ various statistical, observational and interpretive strategies in an attempt to counteract it. McLoughlin & Leather (2013), for example, acknowledge that the Information subtest from the WAIS measures the ability to access long-term memory as well as learnt general knowledge, and that scoring highly on timed subtests from the WAIS Perceptual Index, like Matrix Reasoning, requires good visual working memory skills. Nevertheless, the conceptual difficulties, compounded by still emerging and ever more complex models of interactive brain systems or modules (Hulme & Snowling; McLoughlin & Leather, 2013), leave most attempts to distinguish individual intelligence, or even different modes of intellectual functioning, from the processing skills that contribute towards their measurement open to critical scepticism.

In addition to being a conceptual nightmare at the level of dyslexia theory and identification, consideration of the non-pure interactive nature of tests measuring underlying abilities and processing deficits presumably can have equally contentious implications for both the rationale and fairness of the disability support offered to dyslexic students. If additional provision is provided for dyslexic students to address the effects on their academic skills of various inefficiencies with aspects of memory, then it could be argued that such provision, if effective, is academically privileging some students over others; strategies that improve or compensate for the deficit skills will invariably improve academic attainment and, presumably, intellectual ability. How the study's participants deal with such issues, as well as some of the implications of them for current policy and practice within the sector, is dealt with in both the results and discussion sections of this thesis.

Professional experience and clinical intuition

Professional knowledge and experience, and clinical judgement and intuition based on them, are acknowledged important factors that contribute to the evaluation and interpretation of psychometric and attainment evidence, as well as to categorical diagnoses (Frith, 1999; McLoughlin & Leather, 2013; Miles & Miles, 1999; Jones & Kindersley, 2014). It is perhaps this non-measurable element of assessment to which Elliott (2014) alludes when he points to the difference in conceptual understanding between many researchers, who tend to describe as dyslexic all those who struggle to decode text, and clinicians, who observe and take into account a range of additional behavioural and cognitive difficulties that co-exist with the decoding problems, or else persist when the initial problems are no longer apparent.

Issues around the face validity of psychometric and attainment tests, illustrating that “a poor score on a test can have a number of different reasons” (Frith, 1999, p.195) have already been dealt with extensively in this review. However, as valuable as professional experience may be in allowing the assessor to “get the feel of what typical dyslexic persons of different ages are like” (Miles & Miles, p.17), and thus to perceptively observe behavioural

characteristics and evaluate the contribution of environmental factors not explicitly measured by the tests, such resulting professional judgement will nearly always be highly subjective and inevitably vary from one assessor to the next:

[A]ssessment involves judgement about the evidence, which is not value free, and there remains no guarantee that two assessors will always agree who is, or is not, dyslexic.

Cooper, 2009, p.73.

Roberts (2010), already cited in this review, adds a further perspective to the critical discourse concerning the subjectivity of dyslexia assessments, in pointing out that assessors' personal attitudes and beliefs about such relevant issues as disability, equal opportunities, and accommodations will also inform the diagnostic process.

There is little research evidence demonstrating the occurrence of different diagnostic outcomes resulting from the assessment of the same individual by different professionals. Kelman and Lester (1997) cite some studies in the United States that illustrate how the subjective element of assessment practices can give rise to inconsistent and misdiagnoses. In the UK, Russell, Norwich and Gwernan-Jones (2012) conducted a study in which a 6-year-old child was independently assessed by 4 different professionals, resulting in four very different "labels" based on very imprecise definitions of the categories specified. In the higher education context, there are many anecdotal reports of students seeking, and gaining, different diagnostic outcomes from more than one assessor, but no systematic research around the issue.

DfES Guidelines definition encourages inconsistent diagnoses

The much criticized subjective nature of dyslexia assessment (Elliott & Grigorenko, 2014) is perhaps exacerbated, in the higher education context, by the inclusive behavioural nature of the definition given by the 2005 DfES Guidelines (see pp.48-49). Frith (1999) opines that to define dyslexia at a single level of explanation (as do the DfES 2005 Guidelines) will always lead to paradoxes, such as regarding poor literacy skills as both an indication of

dyslexia and not an indication of dyslexia. She maintains, along with the working party members responsible for the 2005 Guidelines and the authors of the Patoss Guide that to avoid paradoxical stances “we have to grasp the nettle of definition by admitting a theory-driven approach” (p.209) – theories connecting behavioural manifestations to environmentally influenced cognitive and biological causes. The problem is, though, as has already been pointed out in this review (pp.52-53), that the inclusive, strictly behavioural definition given in the 2005 Guidelines enables individuals to choose their own theory-driven approach. For example, this can, and probably does, lead to vastly different diagnostic emphasis being placed on environmental factors traditionally regarded as “exclusionary” i.e. inadequate intelligence, educational experience and/or sociocultural opportunities. The Guidelines 2005, despite the behavioural definition, appear to assume a neuro-developmental cause when they advise:

In some cases, persisting literacy difficulties may be entirely attributable to one or more of these [environmental] factors, in which case a diagnosis of SpLD would not be appropriate.

SpLD 2005 Guidelines, p.8.

Assessors will vary in their interpretation of “entirely attributable”, as well as the significance to be placed on this in, for example, consideration of the legal and financial benefits to the individual that currently ensue from a categorical diagnosis of dyslexia. The paradoxes inherent in behavioural characteristics alone can, as Frith (1999) alleges, lead to differing conclusions when driven by different theoretical models of dyslexia. The dyslexia diagnosis, as its critics point out, is far from objective, at least in the scientific sense. Additionally, doubts remain as to whether it does, or even can, separate out the specific learning disabled from the student who is a slow learner (Soler, 2009) or, in the words of Singleton (1999) those in the “diffuse category” frequently referred to as “learning disabilities” in the United States.

Increase in numbers of dyslexic students

HESA statistics

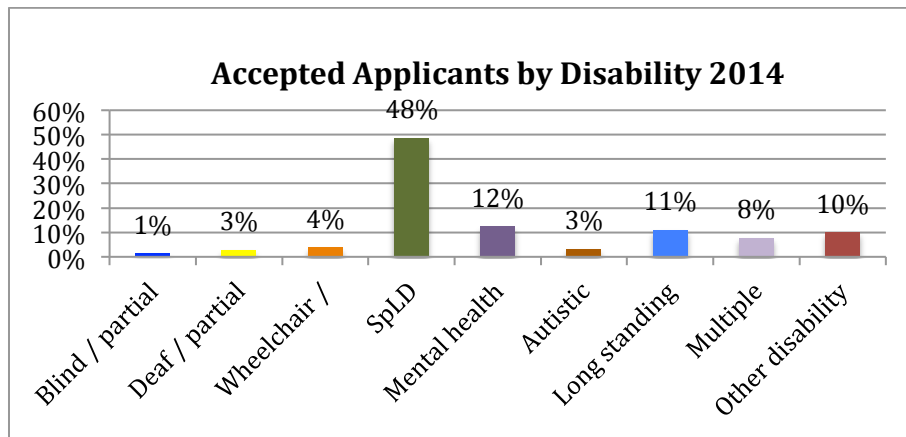
The questionable, highly subjective basis of dyslexia diagnosis (Elliott, 2014) is cited by some as one of the main explanations for the huge increase in numbers of dyslexic students in UK higher education institutions. Table 1, compiled from the Higher Education Statistical Agency (HESA) data, shows the expansion in actual numbers, alongside the proportional expansion of these numbers as percentages of disabled and total students, of all first year full and part-time undergraduate and graduate students for academic years ranging from 1994/95 to 2013/14.

Table 1: Increase in numbers of first year dyslexic students 1994-2014

YEAR	n dyslexia/SpLD	% total disabled	% total students
2013/14	37710	48.47	4.97
2011/12	37615	47.67	4.23
2009/10	32655	46.80	3.40
2007/08	27465	43.94	3.10
2005/06	21000	42.75	2.47
2003/04	18700	41.06	2.18
2001/02	13800	36.30	1.69
1999/00	8370	31.32	1.24
1997/98	5381	22.48	0.86
1995/96	3170	17.72	0.55
1994/95	2359	15.03	0.40

From HESA Free Online Data Table

Minor changes in HESA collection methods 2009/10 mean that the figures in Table 1 can be taken only as a rough estimate. Also, they do not include dyslexic students in other than the first year of their courses, or the considerable numbers who are diagnosed after the start of their courses, which, at the time of the Singleton Review (1999) was about 43%. However, even as a rough estimate, the numbers tabulated are likely to represent just the tip of the iceberg. Furthermore, Figure 1 emphasizes even more starkly than does Table 1, the proportion of dyslexic students as opposed to other categories of disabled students.



From HESA Free Online Data Table

Figure 1: Accepted applicants by disability 2014

Negative explanations for the increase

Elliott (2014), in a recent press release, declared the diagnosis of increasing numbers of dyslexic students, that automatically entitles them to reasonable adjustments and additional resources, a national scandal. In another media article the same author was quoted as saying “there is a strong current of frustration in higher education that no one is tackling the problem” (Grove, 2014), a concern that was also uncovered by an Economic Social Research Council (ERSC) funded study which found that lecturers were resisting the expansion of the dyslexia category by questioning its foundation (Riddell & Weedon, 2006). One such lecturer at an Oxbridge institution (Panton, 2004), diagnosed dyslexic just before his finals, offers himself as an example of an individual included in “an expansion of the definition of dyslexia” whose “learning disability” had, before diagnosis, made little impact on his academic trajectory, since he had been predicted a first class result and been offered a place to study for an MPhil in philosophy. The same lecturer was of the opinion that the tendency to label bright students with minor literacy weaknesses as dyslexic “trivialises the experience of those who really struggle from a serious learning disability, and leads to excessive demands on special resources”.

Dishonest practices are implied in some of the criticism of increased numbers of dyslexic students. The problem (if it is one) is regarded as being exacerbated by complicit vested interests, including “students, parents,

universities and educational psychologists . . . because each party has an interest in a positive diagnosis, given the extra disability funds available” (Grove, 2014). Universities allegedly gain in being able to access more disability funding (Soler, 2009), as well as by being able to boost exam results through reasonable adjustments (Garner, 2004). As for those who assess dyslexia: “it would be a mistake to consider professional practice as a purely scientific pursuit devoid of political and personal concerns” (Elliott & Grigorenko, 2014, p.23). Advocacy groups, too, come in for their share of the responsibility. Their lobbying “has resulted in funding and policies designed to make ‘reasonable’ accommodations for students who are seen to have dyslexia” (Soler, 2009, p.45); “diagnostic fuzziness . . . is not necessarily perceived as a problem for those whose primary goal is advocacy” (Elliott & Grigorenko, p.35).

Positive explanations for the increase

Such criticism, despite its unmistakable tone of cynicism and unfounded allegation, may contain some truth. However, others offer more measured, less contentious explanations for the increase in numbers of dyslexic students. Riddell and Weedon (2006) cite institutional managerialist policies introduced in the wake of disability legislation. Premium disability funding, improved provision and support, audit demands and a duty to actively promote disability recruitment are seen as just some of these policies that have attracted more dyslexic students. John Rack (Grove, 2014) and Singleton (1999) mention the improved identification and provision in schools that would result in more dyslexics being able to progress to higher education, as well as widening access policies that have broadened the higher education intake and included among it increasing numbers of mature students whose difficulties may not have been addressed at the school level. Instead of expressing alarm at the steady increase in numbers of dyslexic students, Rack, in a response to Elliott’s comments in the media (Grove, 2014), retorted that, for the above reasons, the rise should be expected and celebrated. At just over 4% of the student body, observed Rack, the proportion was still at the bottom end of estimates of dyslexia’s prevalence in the population, a sentiment shared by Ross Cooper (Garner, 2004) who was

also of the opinion that dyslexia in higher education students was more likely to be under-diagnosed than over-diagnosed. Whether or not one should expect the population of university students to be representative of the population at large is open for debate, and further research, but it is obvious that the continually increasing numbers of dyslexic students constitutes a currently contentious issue.

Summary

Serious debates continue to exist around both the conceptual and methodological elements of dyslexia assessment in the higher education environment. If such debates are disturbing and unsettling at the level of dyslexia assessment practice, they are even more so when extended to include the uses to which a diagnosis of dyslexia can be put in the higher education context. The next section of the literature review will critically examine some of these uses.

2.3 DISABILITY PROVISION

There are considerable advantages in higher education for individuals assessed as dyslexic (Riddell & Weedon, 2006), including access to the two currently bespoke means of provision for disabled students, the Disabled Students Allowance (DSA) and reasonable adjustments. Issues around the nature of dyslexia, the validity of its assessment and the questionable disability status of all dyslexic students, have focused increasing critical attention on the appropriateness this provision.

Disability status of dyslexia

Equality Act 2010 medical model

There is much confusion in the higher education sector over the disability status of dyslexic students. It is commonly assumed by disability practitioners and higher education policy makers that all students with a dyslexia diagnosis are legally disabled, and thus entitled to statutory disability provision. Such an assumption, though, is highly questionable. Whilst it is the case that dyslexia is one of the “mental impairments” covered by the Equality

Act 2010, individuals categorized as “disabled” need to satisfy certain, albeit imprecisely defined, criteria. They need to be in possession of

[A] physical or mental impairment which has a substantial and long term adverse effect on their ability to carry out normal day-to-day activities.

EA, 2010.

Whilst “mental impairment”, “long term” (more than a year), and “normal day to day activities” (contextualized to higher education study) are relatively straightforward criteria for the dyslexia assessor to evidence, a “substantial” (more than trivial) “adverse” effect is more problematic and very much open to subjective interpretation. Riddell and Weedon (2006) commented, with regards to the same definition in Part 4 of Disability Discrimination Act 2002, that there were uncertainties about how severe dyslexia had to be before the person received legislative protection, and that a sufficient body of case law had not yet been established in order to understand how the legislation would be applied in the field of higher education. The current legislation, whilst endorsing a medical definition of disability and presupposing a binary categorical divide between disability and non-disability, is unhelpfully vague about the precise impairment-induced functional criteria that would constitute a disability. It is conceivable that the contextualized functional difficulties of many diagnosed dyslexic students do not fall into the “substantial” category, especially when the somewhat arbitrary nature of dyslexia classification is taken into account. Statutory categorical disability is as much a headache for many dyslexia assessors as is the concept of categorical dyslexia.

The American Psychiatric Association (APA), in its recent update of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* is much more prescriptive about what constitutes a Specific Learning Disorder (SLD), and thus, presumedly, evidence of a legal disability. The update, like the Equality Act 2010, is based on a medical concept of disability. SLD, into which category the behavioural characteristics of dyslexia fall, is defined as a neurodevelopmental disorder, but one in which the “mental disorder” can be separated from the “disability”, which is the “impairment [caused by the

disorder] in social, occupational, and other important areas of functioning” (APA, 2013, p. 21). Unlike the Equality Act 2010 definition, though, the DSM-5 impairment descriptors of “substantially and quantifiably below those expected for the individual’s chronological age”, and causing “significant interference with academic or occupational performance” (p.67) need to be substantiated with specific measurable “psychometric evidence from an individually administered, psychometrically sound and culturally appropriate test of academic achievement that is norm-referenced or criterion-referenced” (p.69). Furthermore, it is suggested that standard scores of 78 or less are “needed for the greatest diagnostic certainty” (p.69). The DSM-5 criteria for disability due to a disorder do recognize that “academic skills are distributed along a continuum, so there is no natural cutpoint that can be used to differentiate individuals with and without a specific learning disorder” (p69), and that clinical judgement will play a role in diagnosis, but they still aim to categorize and differentiate those with a disability and those without by explicitly defining what is meant by criteria such as “substantial” and “significant”.

The UK criteria for “substantial” and “adverse” functional effects, however, remain loosely defined, inevitably resulting in much clinical, administrative and personal identity confusion. As with the concept of dyslexia, legislative and administrative attempts to impose an arbitrary binary division on human attributes that research has long accepted as continuously distributed and contextually influenced, leave themselves open to subjective interpretation and abuse. The observed dramatic increase in numbers of dyslexic students currently accessing disability provision may be one example.

Social model of disability

It is not only the advance of scientific knowledge that has rendered problematic the operationalization of the Equality Act’s medical definition of disability. Social theorists, many of who are themselves disabled, have challenged the legitimacy of disability knowledge disseminated by the disciplinary orthodoxies of medicine, sociology and psychology (Barnes, 2007). Such theorists, informed by the lived experiences of disabled people

themselves, have shifted the causes of and emphasis on “disability” away from the individual’s in-person impairment to society’s structures that act as barriers to such an individual’s full participation. Whilst some of these theorists are reluctant to underemphasize the pain and suffering that can be caused by personal physical and mental impairments, regardless of the removal or potential removal of societal, attitudinal or environmental barriers (Healey et al., 2005; Shakespeare & Watson, 2002) others, particularly those concerned with the hidden specific learning disabilities like dyslexia, effectively reject the label of disability when applied to individuals. This rejection is partially motivated by the anger at what they perceive as the disablist language inherent in the legislative medical model. Oliver (1996) comments regrettably on the power of such language to shape meanings and create disabling socially oppressive realities for people commonly regarded as disabled. Griffin & Pollak (2009) illustrated the reality of this observation in the research that they carried out for the BRAINEHE Project. These researchers found that half of their 27 participants had adopted a medical/deficit view of their learning difference and when interviewed used expressions like “suffering”, “symptoms” and “weaknesses”. Many of them also used language indicative of low academic self-esteem, talked about academic work as an “uphill struggle” and expressed confusion, uncertainty and minimal optimism about their future. In contrast, social theorists like Cooper (2009) fling aside such language, regard dyslexia as a welcome “difference”, and place the blame for any disability resulting from it squarely onto the educational expectations and assumptions of society that mistakenly regards the early learning of literacy, good personal organization and working memory, as markers of intelligence.

The social model of disability underpins much recent UK higher education policy on disability, widening participation and social justice. It forms, for example, the bedrock of the HEFCE (2009) review of policy for disabled students, HEFCE (2015) review of provision for SpLD students, and that of the Quality Assurance Agency (QAA) Code of Practice (2010). It is also the over-riding framework for the Equality Act 2010. Yet the Act’s emphasis on the severity of an individual’s disabling functional limitations in a specific

context is contingent upon proof of a causal medical impairment. It embodies a fusion of the medical and social models of disability, a fusion that, despite its logical appeal, succeeds in creating confusion around the concept of disability. “Disability”, like “dyslexia”, involves multiple, co-existing understandings that overlap and merge one into the other.

Neurodiversity

In the area of dyslexia and other hidden specific learning differences some critical theorists have attempted to completely replace the concept of disability by the affirmative concept of neurodiversity (Pollak, 2009). Humans, it is argued, are infinitely diverse, and their “impairments” are simply examples of one of these human differences. Dyslexia, conceived of in this sense,

. . . is an experience that arises out of natural human diversity on the one hand and a world on the other where the early learning of literacy, and good personal organization and working memory is mistakenly used as a marker of intelligence”. The problem here is seeing difference incorrectly as “deficit”.

Cooper (2006). Cited in Cooper, 2009, p.9

Nothing about us without us: the dyslexic student voice

Amidst the contradictions and tensions surrounding different meanings assigned to the concept of disability in higher education it is illuminating to discover what dyslexic students themselves think about their disabled identities. One of the aims of the ESRC project (Riddell, Tinklin & Wilson, 2005) was to explore the way in which each of a cohort of 48 disabled students, including 11 dyslexic students, perceived their identity in terms of disability. Summaries of each student’s view are included in the Appendices to the Final Report. Overall, the authors found that many of the disabled students interviewed did not identify with the term “disabled”, particularly those with hidden disabilities like dyslexia. One dyslexic student, for example, commented that he found it offensive to be bracketed with wheelchair users, and most of the others were of the opinion that the label was more appropriately used for individuals with serious sensory and physical impairments. However, even though the dyslexics interviewed rejected a

disabled identity most were prepared to adopt it strategically to obtain IT equipment and examination allowances. Few had a view of disability as a political and social relational category, perhaps underlining the observation of Barnes (2006), about the gulf between the ivory towers disability discourses and those that emanate from people's lived experiences.

Griffin & Pollak (2009) also focused on the student voice in soliciting 27 individuals' views on their neurodiversity. These researchers found that although nearly half of the participants had adopted a medical/deficit view of what they perceived as their weaknesses, the other half held a "difference", more positive view which appeared to be equated with clear advantages for their self-esteem and educational aspirations. The origins of these participants' "difference" views, though, often emerged from contact with advocacy neurodiverse support groups, like the Developmental Adult Neuro-Diversity Association (DANDA), a source of influence possibly not available to participants in the earlier ESRC study.

An alternative – the bio-psycho-social model of disability

It appears that the medical concept of disability embodied in the Equality Act 2010, and used administratively to award disability protection and provision, does not sit comfortably with the science or assessment practices of dyslexia, the prevailing political framework of social inclusion, or with the experienced personal identity of most dyslexic students. It is possible that a version of the non-categorical model of functioning and disability devised by the World Health Organization, the *International Classification of Functioning, Disability and Health* (ICF) (WHO, 2001) might resolve some of the current difficulties with both dyslexia assessment and the need for any ensuing disability, or simply differentiated, provision. The way in which it could do so is highlighted in the final chapter of this study.

The Disabled Students Allowance (DSA)

One of the advantageous means of bespoke disability provision that can follow from assessment for dyslexic students in higher education is the Disabled Students Allowance (DSA). DSAs were introduced 1993. They are

intended to improve access to higher education for disabled individuals by compensating them for the additional expense that they experience on account of their disability whilst studying. Their administration exemplifies some of the tensions and contradictions around the prevailing concepts and assessment of disability and dyslexia.

Historical anomaly

Bizarrely, until recently, the 2014/2015 academic year, students accessing the “disabled” students’ allowance did not have to be disabled in terms of the Equality Act’s definition:

Eligibility for DSAs is not dependent on an applicant being registered as disabled. Nor is there any requirement or provision within the Regulations to apply the definition of disability contained in the Equality Act.

Student Loans Company, 2012, p.17

Even more bizarrely, HEFCE premium disability funding to universities was based on the number of students at their institution claiming the DSA, even though many of them might not be “disabled”. Not surprisingly, this seeming anomaly in the regulations contributed to disproportionate numbers of dyslexic students being able to access DSA support, as well as to what have been identified as some unethical practices by vested commercial interests (Soler, 2009; Grove, 2015). Riddell and Weedon (2006) commented prophetically:

The state remains vigilant to ensure that the category [disability] does not extend beyond the boundaries of what is considered affordable . . . as the proportion of students in higher education seeking a diagnosis of dyslexia expands, it is similarly conceivable that access to the category could be more tightly policed, or alternatively, the benefits associated with such a diagnosis could be restricted.

Riddell and Weedon (2006) p.71.

Recent and proposed policy changes

On 7th April 2014 the state announced that the category had expanded

beyond the boundaries of what is considered affordable, and thus access to the category would be more tightly policed and the benefits in accessing it restricted. The then Minister for Universities and Science, David Willetts, stated his intention to “modernise” DSAs. His reasons were not unreasonably peppered with references to cost: figures displaying rising numbers of applicants and rising amounts of money, “limited public funding” and “value for money”. One important policy change that the Minister announced was that from 2014/2015 new DSA applicants would need to satisfy the Equality Act’s definition of disability. He also singled out students with specific learning difficulties as a group likely to have their access to DSA curtailed unless their needs were “complex” (Willetts, 2014).

Criticism of DSA provision

DSAs have long been criticised by social theorists for allowing disabled students to get around barriers to inclusion rather than encouraging institutions to remove them (Tinklin, Riddell & Wilson, 2004), and because, in the case of dyslexia, eligibility for them is limited to individual medical impairments that exclude those with poor literacy due to social causes (Chanock, 2007). Mr Willetts’ ministerial statement of policy change, together with the draft guidance document (BIS, 2014 October 17) and Equality Impact Assessment (EIA) (BIS 2014b) that have followed it, focus on addressing some of these social inclusion issues. Mr Willetts, for example, points to the legislative duty of institutions to make anticipatory reasonable adjustments for a diverse student body, particularly for known large groups of students such as those with specific learning difficulties, and implies that this support should be mainstreamed (Willetts, 2014). The Draft Guidelines for DSA policy change refer to attempts to instigate a social model of inclusive practice (BIS 2014 October 17), and the EIA (BIS, 2014) states its intention to consider the impact of any DSA policy changes on disadvantaged groups with low family income and economic status, rather than simply consider the impact of them on a generic legally protected group (BIS, 2014). Overall, the policy changes to the DSA disability provision make it clear that it is the Government’s intention that “the learning environment in higher education should be as inclusive as possible so that individual interventions are the

exception rather than the rule” (BIS, 2014, October 17, p.6). The historic shortcomings of the legislation, together with the possible abuse that may have been made of it, might well have turned it into a metaphorical Trojan horse, for the good of all students (Healey, 2003).

It remains to be seen how effective DSA policy changes will be in persuading, and in many cases, forcing, institutions to mainstream effective fully inclusive teaching, learning and assessment practices. However, the retention of the Equality Act’s medical definition of disability focused on individuals, alongside inclusive policies firmly based on the social model, could remain an ethical and conceptual problem for dyslexia assessors if their current mode of practice remains unchanged: not only might they have to negotiate imprecise guidelines in categorising students as dyslexic, but they might also have to perform the same operation in categorising them, additionally, as disabled. It is clear that the one classification does not necessarily imply the other.

Reasonable adjustments

Legislative duty of higher education institutions

Reasonable adjustments are another area of statutory disability provision that currently follows on from dyslexia assessment. Like DSAs, eligibility for them still relies on individual assessment of disability. The Equality Act 2010 imposes a duty on higher education institutions to make anticipatory reasonable adjustments for disabled students in order to remove, where it is reasonable to do so, barriers that such students might encounter as a result of their disability. “Reasonable”, like “substantial” and “adverse”, is not explicitly defined in the legislation, but it can take into account academic and competency standards, as well as cost and effect on other students.

Reasonable adjustments to assessments for dyslexic students

Although much progress has actually been made towards mainstreaming many inclusive practices with regards to both course delivery and assessment (Fuller, Bradley, & Healey, 2004; Mortimore, 2012) most universities still offer individual assessment accommodations to students who can document a “disability” need for them. Dyslexic students, for example,

are given extra time in examinations to compensate for difficulties due to inefficient literacy and processing skills. In theory, such adjustments are intended to meet the needs of individual students rather than be available as a generic resource for a type or class of disability (QAA, 2010). In practice, adjustments to assessment that are administratively easy, like extra time and dyslexia marking policies, tend to be routinely awarded to all dyslexics in most institutions, whilst others that can be administratively difficult, and costly, like use of a word processor, separate rooms, readers, scribes, and alternative forms of assessment, are negotiated on a more individual basis.

Concerns about reasonable adjustments to academic assessments

Disability status of dyslexic students

The literature documents much disquiet amongst academic theorists, researchers and lecturers on the provision of reasonable adjustments to assessment for dyslexic students. Few question the right to accommodations of students with more obvious disabilities like blindness or cerebral palsy, but the eligibility of dyslexics, partly because of the uncertainties around what dyslexia is, and how it is assessed (Riddell and Weedon, 2006), has attracted considerable debate. The American lawyers, Kelman and Lester (1997), in a work entitled *Jumping the Queue*, clearly differentiate ethically between obvious disabilities and specific learning disabilities when they end their work by referring to the latter group as:

Claim hopping on the (ideological) backs of instances of genuine victimization by racism, sexism, able-ism, and cultural stigmatization [that] threatens the real battles against social caste at the same time that it threatens chaotic and irrational distributive politics.

Kelman & Lester, 1997, p.226.

Conceptual flaws

Less contentiously, and without similar criticism of the individuals who are allowed to use such accommodations, other critics maintain that reasonable adjustments to assessments are conceptually flawed. Davis (2009), for example, in a reference to the effect of dyslexia marking policies on the validity and reliability of written assessment, questions whether there is a

divide between a knowledge construct and understanding supposedly measured by a test, and manifestations of it. He wonders whether coherence of thinking (sometimes accommodated in the assessment of a dyslexic's writing), is likely to be an optional component of any kind of cognitive achievement. He concludes that, in this example of dyslexia marking policies, as with extra time, accommodation is modification, and that therefore the accommodated version of the assessment is unlikely to be measuring the same knowledge and skills as the un-accommodated version.

Sharp & Earle (2000) argue along similar lines. These researchers single out the unseen, three-hour written examination as an example of an assessment that is thoughtlessly modified by allowing some candidates extra time. Such an assessment typically attempts to test a candidate's knowledge of a subject, alongside their possession of certain critical and analytical skills, within a limited time, without the aid of books, discussion with others or other sources of information. The authors question whether or not an imposed time limit is a legitimate requirement of the manifestation of such knowledge and skills; if it is not, they argue, then every student should be allowed extra time. To insist, for example, that only those individuals who are dyslexic be allowed extra time is to "implicitly accept that this alternative mode of assessment is compensatory and not equivalent" (p.196), thus threatening to render any qualifications awarded by the institution invalid and unreliable.

Perpetuation of medical model of disability

The same authors, along with others (Riddell & Weedon, 2006; Chanock, 2007; Madriaga et al., 2010) also deplore the essentially medical view of disability implicit in the practice of individual reasonable adjustments. Whilst attempting to promote equality of opportunity by removing some of the barriers, such provision does little to promote the idea of an inclusive non-discriminatory education for disabled people. The onus is placed on some individuals to prove their difference before the institution will make concessions that single them out as needing special treatment. The resulting stigmatisation perceived by some disabled individuals is seen as a major reason for them not availing themselves of disability support (Riddell, Tinklin

& Weedon, 2005; Mortimore & Crozier, 2006; Madriaga et al., 2011).

Lecturers' views

There has been little wide-scale systematic research on the views of university lecturers concerning the practice of reasonable adjustments for dyslexic students. The few studies that there are (Tinklin & Hall, 1999; Farmer, Riddick & Sterling, 2002; Riddell & Weedon, 2006; Riddick & English, 2006; Cameron & Nunkoosing, 2011; Mortimore, 2012; Evans, 2014) are relatively small and confined to participants from either a small number of institutions or else a single department in one university. Most of them do not explicitly explore attitudes towards reasonable adjustments. However, in gauging lecturers' knowledge of and attitudes towards dyslexia, and dyslexic students, opinions emerge in these studies that generally confirm those reported anecdotally and by soliciting students' perceptions (Farmer et al., 2002; Fuller et al., 2004; Mortimore & Crozier, 2006; Cooper, 2009). Typical of lecturers' own opinions reported in this literature are feelings that reasonable adjustments have been forced on teaching staff, interfering with academic freedom and resulting in a "dumbing down" of academic standards, affecting important concepts of meritocracy and credentialism. Some lecturers doubted the the existence of dyslexia as a discrete category and cited equity implications in allowing reasonable adjustments to dyslexic students that were denied others, like overseas students and those from low participatory backgrounds, with seemingly identical difficulties. Concern was also expressed about the tension between reasonable adjustments and competency standards, and the wisdom of compensating during study when it would not be available to students in the workplace. Cameron and Nunkoosing (2011) gave some idea of the magnitude of such attitudes by rating those of the 13 lecturers in their study as positive (8 lecturers), neutral (3 lecturers) and negative (2 lecturers). Although this study was confined to 13 lecturers in one department of one university, its findings suggest that not all lecturers have strong misgivings about reasonable adjustments for dyslexic students.

The student voice

There is even less research that directly captures the voices of dyslexic students on reasonable adjustments. There are some studies that have explored the opinions of disabled students in general to what they perceive as disabling barriers to learning and assessment (Fuller, Healey, Bradley, & Hall, 2004; Healey, Fuller, Bradley & Hall, 2006; Waterfield & West, 2007; Madriaga et al., 2010). These studies, all of them comprising relatively large surveys, included roughly 50 per cent dyslexic students amongst their cohorts. The last three studies cited above also surveyed between 9% and 50% non-disabled students as comparison groups. Although none of these studies dismissed the not inconsiderable difficulties of some disabled students, especially in the area of assessment, all found that many disabled students did not perceive of themselves as having any difficulties at all, and that some of the difficulties that they did have were shared by not insignificant numbers of non-disabled students. The concerns of some lecturers over the manner in which disability provision privileges some groups over others was strongly reiterated by Madriaga and colleagues on the basis of their data. These researchers argued that all students would benefit from the support available to disabled students, and that this was a quality issue, and one not to be cast aside as an equality and diversity one.

Empirical evidence pointing to the commonality of difficulties faced by disabled and non-disabled students in higher education was also a finding of the only systematic survey of dyslexic and non-dyslexic students' perceived difficulties and support needs (Mortimore & Crozier, 2006). These researchers did find significant statistical differences in a range of learning and study skills between dyslexic and non-dyslexic participants. However, they also noted that there were concerns amongst some of the comparison group. For example, between 6% and 36% of the comparison group indicated that they had difficulties with at least one of the 13 surveyed learning and study skills, and 16% of this non-dyslexic group also responded that they would like to use extra time in exams.

The above-cited research provides piecemeal and not very precise

knowledge of the views of dyslexic students on their academic difficulties and of their opinions about reasonable adjustments. Different, and in some cases restricted, sample groups and different research designs make reliable comparison between and among the studies tenuous. Nevertheless, one common theme that did emerge was the need for flexible, non-generic provision that matched the learning needs of individual students rather than diagnostic categories:

In terms of learning needs, it is invidious to treat disabled students as a separate category; rather they fall along a continuum of learner differences and share similar challenges and difficulties that all students face in higher education . . . sometimes the barriers are more severe for them, but sometimes not.

Healey et al., 2006, p.5.

Summary

Debates engendered by the research literature on adult dyslexia, its assessment, and the disability status of those individuals diagnosed as dyslexic, have pointed to the oversimplification of the meanings attached to categories such as dyslexia and disability. They have exposed tensions between researched evidence of the continua and complexity of human skills, abilities and personal identities, and society's tendency to ineptly classify these different types of continua using a crude categorical binary divide. Such tensions are most pronounced in areas of higher education pedagogy where policy and practice have been based around the uncritical assumption of such binary divides. The following section of the literature review will briefly outline what is currently considered by many to be a resolution to these tensions around the conceptual, ethical and equity issues occasioned by differentiated provision for dyslexic students.

2.4 INCLUSION

Inclusion is a broad concept that has been applied increasingly, particularly since the 1990s, to many aspects of social life in this country. It upholds such values as equal opportunities, social respect and solidarity, and embraces

the entire gamut of social diversity, not just the rights and entitlements of those traditionally considered to be disabled. In the field of higher education its influence on policy and practice has been spearheaded by legislation and government led initiatives, particularly the Equality Act 2010 (and its precedents, like the Disability Discrimination Act (DDA) 1995) and the Widening Participation movement. In the climate engendered by these inclusive “drivers”, higher education participation in the UK has grown from what was once described as “elite” to what is now acknowledged as “mass” (Fuller et al., 2008). The expansion in numbers has brought with it concern about students who, in the opinion of some, lack the study skills and cultural capital to succeed in higher education (Hockings, 2010). Inclusion movement purists generally reject such concerns as focusing on a disablist deficit model of human diversity, proclaiming that in the interest of social justice it is the learning environment itself that should change to accommodate the diversity of students, rather than the individual students who should change to fit traditional moulds. They also reject what are considered “crude categorizations” and current practices of “segregation” and “discrimination” based on them (Hockings, 2010). In the case of provision for disabled students, and dyslexic students in particular, inclusionary practices broadly involve a shift in thinking away from the medical model of disability towards the social model, from compensatory differentiated provision and bespoke reasonable adjustments to systems of teaching, learning and assessment designed to be accessible to all students.

Theoretical positions

The general concept of a completely inclusive higher education institution has been criticized as idealist and unattainable. Even one of its strongest advocates, in recognizing the many existing tensions in the sector, has reluctantly acknowledged the idea to be a utopian vision (Barnes, 2007, November) but nevertheless, in the cited author’s opinion, a utopian vision necessary for human progress. Norwich (2013) also recognizes the intellectual difficulties inherent in holding what he terms a “pure” position with regards to inclusive education, maintaining that whilst the critical outside position may stay pure, in some ethical sense, the practical tensions and

dilemmas observed mean that “it will not engage and challenge the world” (p.9). Unlike Barnes, then, Norwich’s position is more realist than utopian. He argues that recognition, acceptance and analysis of the tensions and dilemmas occasioned by society’s and individuals’ plural beliefs, values and assumptions about the function and nature of education, is a vital step to overcoming them. The overcoming or resolution, though, will not be achieved by eventually attaining the ideal but by facing up to the hard choices involved in compromise and practical solutions.

Theory into practice

Most of the literature on inclusion in higher education, including reports initiated by government agencies and research councils assessing the progress made towards implementing the Government’s inclusive policies, has had a very strong agenda of social improvement through widening participation. Nevertheless, most have had to acknowledge, with varying degrees of criticism and exasperation, the tensions and dilemmas within the sector that appear to be resisting the desired cultural change. In a report synthesizing some of the research on inclusive teaching and learning, Hockings (2010) identified as a key implication for policy and practice:

The need for shifts in negative beliefs about, and attitudes towards, student diversity that currently inhibit the development of inclusive learning and teaching.

Hockings, 2010, p.47

A 4-year study funded by the Economic Social Research Council (ESRC) (Fuller et al. 2008), data from which produced more than 10 related journal articles, also encountered instances of what the researchers interpreted as negative beliefs and attitudes towards student diversity. This study focused on the wide category of disabled students rather than just dyslexic students, but the latter comprised half of the study’s disabled student cohort. Conducted approximately a decade after the implementation of the DDA 1995 legislation, the study found that although the four case study institutions had all made some centralised differentiated provision for disabled students, thinking about inclusive educational practice, i.e. offering a range of

approaches to teaching, learning and assessment to meet a wide range of learner styles, was at an early stage in all of them. It identified that progress towards instigating inclusive practice, and attitudes towards it, varied considerably across institutions, departments and individual lecturers within departments, and that particular uncertainty was expressed around the validity of the dyslexia concept (Riddell et Weedon, 2006) and the “reasonableness” of statutory reasonable adjustments for dyslexic students, with consideration of academic standards and fairness being contentious unresolved issues. The report concluded:

Universities should place more emphasis on developing inclusive curricula, incorporating principles of universal design. This would obviate the need to certify students as disabled, would go a long way to resolving the dyslexia controversy and would remove the need for lecturers to make numerous *ad hoc* adjustments. Some students, however, would continue to need very specific and individualized adjustments.

Fuller et al., 2008, p.28

Whilst Fuller et al. (2008) realistically concede that some disabled students' needs will never be satisfactorily met by inclusive practices alone, that the prevailing ideology will need to accommodate compromises, other researchers with a very strong social agenda of inclusion appear not to be as tolerant of anything as potentially divisive as recognising that an individual disabled student might need “special” provision. Madriaga et al., (2010) describe the continuing, current practice in the higher education sector of requiring a student to be formally identified as needy, to use special rooms and receive special attention as “shocking”, and demand immediate change. Their position with regards to the failure of institutions to implement fully inclusive systems of teaching, learning and assessment is evident in the language that they use to describe current practices. They equate the continued binary divide between disabled and non-disabled students with elitist academic attitudes of normalcy, redolent of everyday eugenics. Elitist academic attitudes, based on the assumption that the ideal student has no “defects”, the cited researchers maintain, are taken for granted, left hidden and unmarked today in notions of meritocracy, inclusion and widening

participation.

Similarly small research studies, carried out in single institutions in just one department (Cameron & Nunkoosing, 2011) or mostly in one department (Mortimore, 2012) also found that lecturers, although generally willing to be positive about dyslexia and dyslexic students, almost universally conceived of dyslexia according to a disempowering deficit model, and of dyslexic students as needing help. Unlike Madriaga and colleagues, though, these researchers saw encouraging signs of progress being taken towards full inclusive models of provision by the institutions studied, and Mortimore saw no evidence of overt disablist practices in the observed classrooms. Nevertheless, like most other research in the area, Cameron and Nunsooking, and Mortimore, also found that different departments and individuals can remain at different stages in this progress towards a fully inclusive ethos, delaying transformation of the whole system (Mortimore, 2012). Out of the 13 lecturers interviewed by Cameron and Nunsooking, for example, two displayed very negative, resistant attitudes towards taking responsibility for dyslexia and dyslexic students, and another three were described as neutral and passive. The authors exemplified one of these passive and resistant attitudes by quoting the lecturer's own words:

We are experts in our own subject; and when it comes to complex conditions like dyslexia, we shouldn't dabble like amateurs. We should divert students towards the expert services.

Cameron & Nunsooking, 2011, p.7

Mortimore found that despite inclusivity being central to the study institution's mission statement, that a "glass wall" (Mortimore & Crozier, 2006; Mortimore, 2012) still existed between centralised Student Support Services and lecturers, and that individually focused models of dyslexia support, reflecting a medical model, still persisted. Pertinent too, was her finding that tensions reflecting different values and attitudes towards inclusive pedagogy for dyslexic students were inhibiting the implementation of more inclusive systems of teaching, learning and assessment, particularly the almost perennial ones around gradueness, academic standards and the

scaffolding of vulnerable learners. Mortimore's position was that if the gaps between the institution's policy and practice could be identified and understood, then they could be more easily plugged. It is questionable, though, whether even with understanding, the personal beliefs of some individuals can be easily altered to allow the gaps to be plugged. With regards to holistic institutional inclusive support for dyslexic students based on the social model of disability, Mortimore realistically concludes:

Achieving an appropriate balance between facilitating success and disempowerment is evidently not easy.

Mortimore, 2012, p.46

The latest Higher Education Funding Council (HEFCE) review of provision for SpLD students (HEFCE, 2015) found no abatement of the tensions around the instigation of inclusive practices for dyslexic students within the 25 different institutions consulted. Like the ESRC study nearly a decade earlier, and the two studies cited above, this study concluded that although higher education institutions were actively moving towards or aspired towards an inclusive social model of disability support, particularly in relation to SpLD, their progress was still at an early stage. Most support was still delivered through centralized specialist services, with only patchy evidence of the responsibility of it being taken up or even shared by different schools or individual teaching staff within them. In fact, a survey of 150 students revealed that although SpLD students were positive about the support they received from central support teams, three quarters of them expressed disappointment about the level and quality of it received from lecturing staff. Additionally, most of the students surveyed who had DSA funded one-to-one support expressed concern about it being replaced by institution wide universal support, fearing that such a change would disadvantage them. There were obviously remaining barriers to the implementation of fully inclusive systems, as well as differences of opinion, not least from SpLD students themselves, about the effectiveness and appropriateness of replacing the traditional medical model of support with the proactive and mainstreaming social theory approaches advocated by HEFCE. The review highlighted amongst these barriers the issues of funding and pressure of

workloads on academic staff, but also hinted at more intractable barriers like tensions around personal and institutional values and beliefs. For example, in reference to institutions' legal duty to provide reasonable adjustments for disabled students, and to do so proactively, the report surmises that discussion about what defines a "reasonable" adjustment will need to become more prevalent: disagreements around time extensions, sticker systems and alternative assessments for dyslexic students were still rife. Resolution of such tensions, as the HEFCE review also acknowledges, will partly depend on another long recognised barrier to inclusion i.e. staff knowledge and understanding of the complexity of individual learning differences, and their willingness to take up offered, usually optional, staff training on the subject. Implicit, too, was the recognition that acceptable "inclusion" for one institution may not end up being the same as "inclusion" for another institution: "[d]ecisions about how to provide [legal entitlement of support for SpLD students] are matters for individual institutions" (1.4). As a result, the HEFCE review noted:

It has also been difficult to classify SpLD practice by type of institution . . . as a general observation, it is perhaps fair to say that the most holistic and inclusive practice was evidenced among smaller specialist institutions, the most wide-ranging and ambitious practice among widening participating institutions and the most challenging delivery environment among HE in FE settings

HEFCE, 2015, 9.4.

The HEFCE review's perhaps unwitting division of HE institutions into pre'92 and post'92 categories, with regards to their progress towards inclusive provision for SpLD students, exposes a real difference in the academic cultures of the two types of institution, one that is likely to perpetuate a difference in the inclusive provision offered to SpLD students between and across institutions in the UK sector. It is a difference that was commented on in the Fuller et al. (2008) report, one that is indirectly highlighted by Norwich (2013) in his theoretical analysis of matters in the field, and reluctantly acknowledged by Barnes (2007, November) in his wishful consideration of a "truly inclusive" institution. Broadly speaking, the pre-92 universities

emphasise the acquisition of knowledge in traditionally defined subject areas whereas the post'92 universities give greater priority to the acquisition of vocational knowledge and transferable skills (Fuller et al., 2008); education on the right is about the individual's learning in a strongly knowledge-centered curriculum whereas on the left it is about participating in a society-centered curriculum which aims to develop a more socially inclusive society (Norwich 2013); to varying degrees universities and colleges of higher education are essentially about the pursuit of educational excellence . . . but selection by ability inevitably means exclusion on presumptions of inability or 'disability' (Barnes, 2007). Such differences in values and cultures will inevitably affect the nature of inclusive provision that different institutions, and departments within them, will deem acceptable, or even necessary, for dyslexic students.

League tables, and the pecking order initiated by them, almost certainly decreases the heterogeneity of dyslexic students admitted to any one of the different universities, particularly to those at the academic pinnacle. It is hard to imagine some of the elite institutions, for example, ever becoming inclusive to the extent that they will "actively encourage anyone" "regardless of previous educational experience" to study at their "optimum" level (Barnes, 2008). Instead, three or four top grade A-levels are increasingly becoming a minimum requirement for a place at top UK universities: it could be argued that dyslexic students who manage to satisfy these criteria require qualitatively different inclusive provision to those with still underdeveloped literacy and study skills. It is perhaps, then, not surprising that in the smaller specialist, widening participation and HE in FE institutions that have made the most progress towards inclusivity (HEFCE, 2015), there are proportionally more SpLD students. A GuildHE analysis of HESA data, submitted to BIS for its recent equality analysis of proposed DSA changes (BIS, 2014) lists the 25 UK institutions with the largest proportion of SpLD students claiming DSA as all belonging to these post'92 and/or specialist groups (Table 2, Appendices p.5). It appears possible that institutions' inclusive policies and practices might be more contextually than ideologically led, that tensions around various academic priorities for a given population of

students will lead to different outcomes in terms of inclusive provision.

The HEFCE (2015) review of provision for SpLD students anticipated that the proposed significant changes to DSA funding provision for dyslexic students might hasten the pace of change from individual support based on the medical deficit model of disability to mainstreamed social model support available to all students. Indeed, the BIS equality analysis (BIS, 2014) of the proposed changes assumed that it would. However, the equality analysis still makes reference to a mixed model of support – institutional inclusive practices involving anticipatory reasonable adjustments, which it surmises should be sufficient for students with “mild” dyslexia, and also stipulates that the current additional DSA funding will continue to be available for students with “moderate’ to “severe” SpLD. The complexity of the dyslexia category itself in the higher education context, not to mention the research position in which it is regarded as a continuum of learner differences shared by non-dyslexic learners, both inhibits and encourages the adoption of a social model of provision.

Summary

It remains unclear whether or not tensions around the conceptual, ethical and equity implications of differentiated provision for dyslexic students in the UK will, and even can, be resolved by institutions adopting fully inclusive social models of support available to all students. What does appear likely, though, is that any effective resolution of these tensions will probably be contextually driven, with different solutions suiting different institutions, departments, and individual lecturers and students within them: overriding inclusive ideology might need to accommodate practical and workable compromises which meet general legislative requirements in different ways.

2.5 RESEARCH QUESTIONS

The research literature reviewed has highlighted and critically analysed some of the main theoretical and pedagogical debates to emerge from it around the concept of adult dyslexia and its assessment within the UK higher education context. Additionally, it has reflected on the contribution of such debates to current disability policy and practice within the sector. Such often contentious

and seemingly irreconcilable debates were the starting point for this research, as well as being the theoretical background against which its questions were devised. The research questions, to which it was hoped the thesis would deliver answers, are laid out below. Each question aims to collect the targeted perceptions of relevant participants either directly or indirectly involved with the assessment of dyslexia in higher education: assessors, lecturers, dyslexic students and non-dyslexic students.

1. RESEARCH AND PRACTICE: dyslexia and the assessment process

- a) What are assessors' assumptions about the behavioural and cognitive characteristics of dyslexia?
- b) To what extent is assessors' practice influenced by current research positions?
- c) What confidence do assessors have in their assessment practices and diagnostic conclusions?
- d) What is lecturers' awareness of, and attitude towards, dyslexia and dyslexic students?
- e) To what extent do dyslexic and non-dyslexic students experience the functional effects commonly attributed to dyslexia?
- f) What are the attitudes of dyslexic students towards the assessment process?

2. DYSLEXIA AND DISABILITY

- a) What are the opinions of assessors, lecturers, dyslexic and non-dyslexic students with regards to the disability status of dyslexic HE students?
- b) What are the attitudes of dyslexic students towards dyslexic and disabled identities?

3. EQUITY ISSUES AND REASONABLE ADJUSTMENTS

- a) What knowledge do assessors have of current disability legislation as it applies to dyslexic students in HE?
- b) How fair do assessors, lecturers, dyslexic and non-dyslexic students consider reasonable adjustments to be to dyslexic and non-dyslexic students?

4. INCLUSIVE PRACTICES

- a) What are the attitudes of assessors, lecturers, dyslexic and non-dyslexic students to individualized disability provision for dyslexic students being replaced by institution-wide inclusive practices focused on equality of access for all?
- b) What reasons do the above groups give for their attitudes on the above matter.

CONCLUSION

Conspicuously missing from the research literature available for review were studies soliciting the perceptions of those professionals who are directly responsible for formally identifying dyslexia in higher education students, as well as the perceptions of the individuals most affected by assessors' practice: lecturers, dyslexic students and non-dyslexic students. The following chapter details the methodological approach taken in designing, conducting and evaluating the study to which the research questions were expected to give answers from these hitherto largely unheard voices.

Chapter 3: Methodology

“There is nothing more deceptive than an obvious fact.”

Sherlock Holmes

Critical observers have assumed many “obvious facts” about both the questionable nature of the concept of dyslexia in general and its operationalization in the assessment of higher education students, in particular. Yet such assumptions have to date been made without the benefit of any systematic research on the knowledge and opinions of those most concerned and implicitly criticized, that is, the professional practitioners who assess dyslexia in these students. Additionally, the “obvious facts” often appear to be assumed on the basis of only very little similar research on the knowledge and opinions of other groups most affected by assessors’ practice: lecturers, dyslexic students and non-dyslexic students.

The overall aim of this study was to get beyond the assumed “obvious facts”. It aimed to find out whether or not there is a lack of consensus amongst dyslexia assessors and, if so, to gain some understanding of its extent and nature. The effects that current assessment practices might have on lecturers’ and students’ attitudes towards dyslexia were also sought, as were opinions of the respective groups on the implications of assessors’ practice for current legislative and institutional disability policy and provision.

In order, then, to satisfy the research aim and to answer questions derived from it (Document 1, Appendices p.78) it was necessary to design a study that utilized research methods capable of measuring the extent of, and exploring in more detail the nature of, participants’ knowledge and attitudes. The specific choices made in the design of the study, and the reasons for them, are outlined in this chapter.

3.1 PHILOSOPHICAL UNDERPINNINGS

The epigraph from Sherlock Holmes epitomizes, in general everyday language, the philosophical approach that guided the methodological choices

made in this study. Belief in the potential deceptiveness of what are often regarded as obvious facts, particularly those derived from generalizing, or worse, unqualified piecemeal observation of, human knowledge, practices and opinions, necessitated the use of data collection and analysis methods that would not only permit generalization, in a descriptively quantitative way, but also explore the not always obvious particularity within such generalizations. The choices made may appear unashamedly pragmatic and eclectic, in the “horses for courses” tradition (Denscombe, 1998), but they did not result from an “anything goes” approach. Admittedly, in an attempt to fit the methods of data collection and analysis to the provision of answers for the research questions, any self-absorbed academic debate over ontological and epistemological beliefs, or qualitative and quantitative affiliations, was purposely avoided, for the choices made appeared to be perfectly legitimate and uncontroversial practices employed by other respected researchers in the field.

Non-paradigmatic approach

In keeping with the above outlined practical approach, the design of the study makes use of data collection tools, data and analysis methods in a non-paradigmatic way, treating the different elements of the research process as lying somewhere along a continuum of what are traditionally characterized as quantitative and qualitative features. It is a practical holistic common-sense approach to the research process endorsed by experienced educational researchers and research theorists such as Pring (2005), Wellington (2000) and Denscombe (2008), and extensively promulgated by others such as Stephen Gorard in, for example, Symonds & Gorard (2010). The approach has been termed “non-paradigmatic” in the sense that it is not consciously designed around what are considered to be one of the three main methodological paradigms and their respective epistemological justifications: quantitative, qualitative and mixed methods (Symonds & Gorard, 2010).

In rejecting the strict paradigmatic categories of different types of data and data analysis, for example, the non-paradigmatic approach adopted in this study allowed for the positionality of the researcher to be critically considered

at all levels of the design, from the choice of research topic through to the final interpretation of the results. It also allowed for the related contextual influences on each of the participant's contributions to be taken into account in the interpretation of seemingly different types of data, thereby adding layers of meaning, depth and an element of complexity and even contradiction to findings that might otherwise be regarded, in everyday parlance, as obvious facts.

Practices employed by other researchers in the field

In addition to the practical, common sense, non-paradigmatic approach to research, as outlined above, being fit for the purpose of this study, its use by other experienced researchers in the dyslexia field contributed to it being regarded as a legitimate choice. The section of the Economic and Social Research Council (ESRC) funded study that looked at the effects of multiple policy innovations on provision for disabled students in higher education (Riddell & Weedon, 2006) used a variety of data collection methods, such as questionnaire surveys and in-depth case studies that involved focus groups and face to face interviews, and then integrated the findings. The final report (Fuller et al., 2008), that focused overall on the teaching, learning and assessment experience of disabled students in four higher education institutions, similarly made use of policy documents and statistics, case studies, as well as a survey before integrating the findings from these different data sources. Smaller studies centered on dyslexic students' experiences, cited in the literature review that precedes this chapter (Mortimore & Crozier, 2006; Madriaga et al. 2011; Cameron & Nunkoosing, 2011) provide further examples of research methodology pragmatically adopted to both establish seemingly generalized trends and at the same time counter deceptive uncritical interpretations of them.

Not all dyslexia researchers use a research design that combines methods in a non-paradigmatic way, but it appears to be a common acceptable practice when the specific aims of the study demand it, as does the present one. Details of this design and of the ways in which the various elements of it were influenced by the overall non-paradigmatic approach are outlined in the

following sections of this chapter, as well as emphasized elsewhere in relevant sections of the study where findings, analyses and interpretation are recorded and discussed.

3.2 DATA COLLECTION

Data were collected from samples of the four participant groups identified in the research aims and questions: assessors, lecturers, dyslexic students and non-dyslexic students. Two methods of collection were used, questionnaires and semi-structured interviews. Questionnaire data were collected between November 2013 and January 2015. The assessors' data were collected first (November 2013 to May 2014, followed by lecturers' (March 2014 to June 2014) and then students (May 2014 to January 2015). The questionnaires contained both closed and open questions, and were not identical across the participant groups. They were formatted into LimeSurvey open access software, hosted by the University of Exeter's website, and distributed electronically. The data from completed questionnaires were stored on the University's website, before being downloaded into SPSS and NVivo for analysis. Semi-structured interviews, designed following analysis of the questionnaire data, were conducted with a selected sample of assessor participants. These took place between May 2014 and July 2014. The interviews were recorded, verbatim transcripts made, and then uploaded to NVivo for storage, retrieval and analysis.

Questionnaires

Questionnaires were chosen to collect data because of their ability to economically and efficiently obtain focused information from a large number of individuals in each of the target groups. An important part of the research aim was to explore what had been widely assumed to be a lack of consensus amongst practitioners who assessed dyslexia in higher education students. Any insight into the accuracy or otherwise of this assumption demanded some means of quantifying relevant knowledge, opinions and attitudes. Much existing research into knowledge of and attitudes towards dyslexia, dyslexic students and related disability and pedagogical issues concentrates on in-depth studies with few individuals in one or only a few institutions;

enlightening as this is, it can be in danger of overemphasizing the individual and particular as opposed to the general state of affairs, effectively denying voice to what might otherwise be a silent majority. The research design thus attempted to counteract this potential bias.

Copies of the four questionnaires (Documents 2-5) used to collect data for the research can be found in the Appendices (pp.79 - 125.). Each was constructed around the four main themes laid down in the research questions. The items in each of these four sections were in turn focused on obtaining answers to the relevant research questions for each different participant group, and represent knowledge and attitudes derived from a thorough review of the literature.

Closed questions

The majority of the questionnaire items were closed, in that they allowed only for a categorical response, or one placed somewhere along a 5-point Likert rating scale. The inclusion of an “unsure” category went some way towards ensuring that participants did not feel forced into providing what they may have considered an inappropriate response. Far from being irrelevant, “unsure” responses, as advised by Oppenheim (1992), turned out to be very important in terms of the overall meaning that was ascribed to some of the data, as will be discussed in the findings chapters.

Open questions

One of the limitations of closed survey questions is that they structure the answers by allowing “only the answers that fit into categories that have been established in advance by the researcher” (Denscombe, 1998, p.101). They limit the range and subtlety of participants’ responses, particularly when the facts and opinions happen to be complicated. An optional open question was thus added to the end of each of the four questionnaire sections, inviting participants who were so inclined to add any desired further information or clarification. This design feature not only had the effect of counterbalancing any researcher control of content, producing much unsolicited yet relevant

information, but also provided additional rich and complex data from many more participants than it would have been possible to interview.

Semi-structured interviews

Semi-structured interviews, each approximately of one hour's duration, were carried out with eight of the assessor participants, following analysis of the questionnaire data. The closed question survey data produced general quantifiable trends in the knowledge, opinions and attitudes of a relatively large group of practitioners; the survey's open questions augmented this data with both illustrative and explanatory material that transcended that derived from fixed format responses; semi-structured interviews gave the researcher the opportunity to probe deeper into targeted areas of the practices and opinions of a selected sample of assessor participants in order to attempt some clarification of what appeared to be, from analysis of the questionnaire data, lack of consensus around some of the more controversial areas of dyslexia research and practice. The three areas targeted in the interviews were:

1. Discrepancy concepts
2. The medical categorical and bio-psycho-social continuum models
3. The disability status of dyslexia

Hierarchical and contextual focusing

The design and content of the semi-structured interviews around the above three targeted areas were heavily influenced by the hierarchical focusing method of interviewing outlined by Tomlinson (1989), and by that of contextual focusing, also mentioned by Tomlinson but adapted by the researcher for this study's interviews from a method of philosophical enquiry used by Davis (2009) in his attempts to understand assessment and fairness "in the spirit of the later Wittgenstein" (p.371). Tomlinson (1989) describes the advantages of the hierarchical focusing form of semi-structured interviewing as allowing the researcher "to have it both ways". In a manner similar to the open questions used in the survey data collection, hierarchical focusing allows the researcher to collect data in a way that minimizes

interviewer framing and researcher reflexivity, but unlike remotely administered open survey questions it also allows the interviewer to ensure coverage of the specific prioritised items on his/her research agenda. Contextualized focusing involves requiring interviewees to consider and respond to specific typical real life, as opposed to generalized, situations. Davis (2009), in justifying his use of the method, cites Wittgenstein's exhortation to philosophers to embrace the "fine grain of events and processes rather than forcing phenomena to fit preconceived theories". The interviews were contextualized around two very typical "fine grained" but potentially controversial scenarios (Document 6, Appendices p.126) with a view to capturing not only the interviewees' views on the above itemized targeted areas but also any existing tension in these views occasioned by the research-acknowledged bi-directional relationship between research based and professionally endorsed theories of practice and those derived from professional experience.

An agenda of the targeted topics to be covered in the interviews was drawn up after analysis of the questionnaire data (Document 7, Appendices p.127). As intimated above, selection was focused around those dyslexia issues that seemed to be contentious in both the research literature and assessors' practice (as indicated by analysis of the survey data), and which appeared to be heavily influenced by factors such as institutional context, professional and personal background. Two typical assessment scenarios were devised to act as contextual anchors around which interviewees' responses could be concretely focused (Document 6, Appendices p.126). Two separate interview record guides (Documents 8 and 9, Appendices, pp.128-129) were then constructed, a different one for each assessment scenario, which together covered the overall agenda of targeted topics laid out in Document 7. Each interviewee was invited to respond to both scenarios.

Tomlinson (1989) warns that the hierarchical focusing method of interviewing is complicated, daunting and needs considerable skill. The practicing assessors interviewed were all experienced professionals and most were expertly adept at prevaricating when they perceived that their opinion was

been sought on a contentious complicated issue about which they preferred not to comment without time for considered thought and extended qualification. Some of these difficulties were noted at the piloting stage (discussed below), and an attempt was made by the researcher to address them, but at times the manner of conducting the interviews did divert from that of hierarchical focusing, outlined above, to less subtle and more direct probing. Nevertheless, as conducted, the assessor interviews did succeed in capturing not only rich and illuminating data on issues prioritized by the researcher, but also much additional data on other very relevant related issues around the assessment of dyslexia in higher education students, discussed in detail in the findings and discussion chapters. Additionally, they allowed the researcher to reach a more meaningful level of understanding of the professional practice of those who assesses dyslexia in higher education students.

Procedures

Questionnaires: piloting

Once draft copies of the four questionnaires were completed, paper or Word formatted versions were piloted on two typical potential participants from each of the targeted groups. Feedback was obtained, face to face or by review comments returned electronically. Such feedback proved useful in ensuring the relevance of the content as well as checking on technical matters such as clarity of wording and appropriateness of vocabulary, the aesthetic aspects of layout and appearance, and on practical points such as acceptable length and completion time.

Piloting resulted in several small changes being made to the questionnaires that hopefully heightened their validity and effectiveness, although time and other practical restraints prevented the use of statistical procedures for verifying this. For example, all four students piloting the two student questionnaires made it clear that they did not engage with the term “inclusion” and became bored with the questionnaire when required to do so. Although the students appeared to be familiar with the meaning of the concept they were unfamiliar with the terminology used to refer to it, a state of affairs

subsequently confirmed by the student data collected: approximately three quarters of the 301 student participants claimed never to have heard of the term (Chapter 6, p.292). The relevant section on each of the student questionnaires was thus redrafted and severely edited to obtain only the minimum information required to answer the relevant research question: whether or not the student was familiar with the term “inclusion” and his/her opinion on currently bespoke dyslexia provision being mainstreamed so that it was available to all students who required it.

Other changes were made to the vocabulary and syntax of the questionnaires. Complex wording of some rating scale items was simplified to minimize the likelihood of participants being unable to respond in the straightforward way demanded. Some uses of vocabulary were considered potentially problematic in that they could give offence by being interpreted as “weighted” or “disabist”, or because they could imply different meanings to different participants. Every effort was made to address these flaws. Nevertheless, as is noted in Chapters 4, 5 and 6, problems with individuals’ differing interpretation of, and preference for, language, especially of key conceptual terms such as “dyslexia”, “disability” and “inclusion”, were not entirely avoided.

Questionnaires: final formatting into and distribution by LimeSurvey

Final versions of the four questionnaires were formatted into the electronic survey tool, LimeSurvey, for distribution to participants. The participants to whom the questionnaires were distributed were a convenience sample from each of the target groups.

Questionnaires: sample selection

The assessors were recruited mainly from volunteers via online professional forums to which the researcher had access. It was not possible to determine the overall representativeness of such a volunteer group, or to calculate the response rate. Lack of access to such variables inevitably affected the generalizability of the findings, a fact duly noted in the analysis, reporting and discussion of the findings.

Lecturer participants were also volunteers recruited via the Internet. The researcher chose six Pre'92 higher education institutions and six Post'92 institutions and painstakingly trawled through and selected a broadly representative range of staff email addresses publically available on each university's website. Choice of universities selected for the study was pragmatically based on the ease with which their websites allowed access to staff contact details. The targeted lecturers were sent an invitation to participate which included a brief explanation of the research together with a link to the LymeSurvey questionnaire on the University of Exeter's website. Approximately 20% responded, with only one individual complaining to the researcher about being "spammed". Again, the sample was self-selecting but, as is detailed below, relatively large and comprehensive in terms of numbers and range of subject affiliations.

The sampling strategy used to recruit students was even more "convenience" and opportunistic than that used for the assessors and lecturers. Students' contact details are not generally in the public domain. This necessitated negotiating access through obliging gatekeepers, a process that, for a wealth of legitimate reasons, was not easy and led to many dead ends. Principal sources of participants were a link to the questionnaires placed in one university's online student newsletter, and helpful disability coordinators at two other institutions, one of whom circulated the link to all students registered with her service, and another who managed to circulate it to all students in her university. Additionally, personal contacts of the researcher helped recruit a smaller number of students, and the researcher emailed the questionnaire link to several universities' student representatives, whose contact details were in the public domain. Not surprisingly, the resulting samples ended up as being not very representative of the population of dyslexic and non-dyslexic higher education students as a whole, as is discussed below, but it did succeed in providing very important and relevant data on a large cohort of high achieving dyslexic students who are typically unrepresented in most of the current research literature on disabled and dyslexic students.

Assessor interviews: piloting

The chosen method of interview, its format, schedule and content (as outlined above) was piloted on one specialist teacher assessor known to the researcher and who had also, like the eight intended interviewees, previously completed the questionnaire. The aims of the interview, including a brief description of the hierarchical focusing method, were explained to the interviewee in advance to enable her to comment critically, during the feedback stage that followed the interview, on the researcher's performance as well as on the content of the interview. The interview was recorded.

An evaluation of the piloted interview focused on points raised during the interviewee feedback as well as on those that emerged from the researcher's own critical appraisal of the tape recording. For example, the interviewee needed to ask for additional information on each of the contextual scenarios; these were thus amended to include such details. She also requested clarification on some of the questions, necessitating a careful rewording to minimize potential ambiguity. Crucially, she also commented on the researcher's attempt, on one occasion, to "put words into her mouth". This was a serious criticism, given the purpose, explained above, for which this method of interviewing was chosen, and one of which the researcher attempted to be mindful during the ensuing interviewing process. The tape of the interview, as well as the piloting experience itself, precipitated decisions having to be made on such practical issues as interruptions, pace and timing. Useful reminders were provided on, for example, the benefit of silences. The participant used for the piloting was experienced, thoughtful and perceptive, and frequently needed to take time before producing a carefully considered response to a complex question. Silences can sometimes seem uncomfortable or awkward in the course of an interview, especially when the researcher has a tightly packed agenda, but the piloting demonstrated that these disadvantages can be offset against the quality of the data that follows pause for thought.

Assessor interviews: selection of participants

Interview participants were chosen according to the following criteria. All those who completed the questionnaire were informed of the second stage data collection and asked to indicate, by providing their preferred contact details, their willingness to be interviewed. Approximately half the participants (55) responded in the affirmative. Selection was then based on geographical location (for logistical reasons), professional experience (on the assumption that individuals with more than the mean 7 years experience would provide more knowledgeable data), professional background and the theoretical positions held (gleaned from an examination of the assessor's questionnaire responses) on the three areas to be targeted by the interviews (see above). In choosing participants every effort was made to ensure that the final selection was representative of the range of theoretical views and opinions on the nature of dyslexia revealed by the questionnaire analysis, as well as of the professional affiliation and contextual experience of those who provided this first stage data.

Assessor Interview procedure

Interviews of approximately one hour's duration took place at the participants' preferred venues. They were conducted in the following manner. Each interviewee was requested to read the first scenario (Document 6, Appendices p.126). He/she was then asked a series of hierarchically arranged questions (Documents 8 and 9, in red, Appendices pp.128-129) to which he/she was encouraged to spontaneously produce as open a response as possible without his/her responses being cramped by interviewer framing. In addition to the main sequence of questions, the interview guide used by the researcher also contained bullet-pointed criteria on which the researcher wanted the interviewee to comment (Documents 8 and 9). The interviewee was given the opportunity, and encouragement, to introduce these criteria spontaneously in response to the general contextual questions, but if he/she did not, then the researcher used them as prompts and sometimes probes, subtly keeping a record on the skeleton sheet of what had been covered and what not. In this manner the interviewee was allowed to respond to general questions in an open way, using his/her own terminology, and free to

introduce new information and different perspectives, whilst the researcher was still able to collect the required data on the research agenda, with the added bonus of new information that had not been anticipated. The process was then repeated for the second contextualized scenario (Document 6, Appendices p.126). Audio recordings of each interview were transcribed, and any identifying details removed in order to preserve anonymity. They were then stored in NVivo, ready for analysis. A sample transcript of one of the interviews is included in the Appendices (Document 10, pp.130-147).

Participant characteristics

Assessors' questionnaires

One hundred and eighteen assessors completed the questionnaire intended for this group: 35% (42) of the group were Educational Psychologists (EPs) and 65% (76) were Specialist Teachers (SpTs). The participants' professional experience ranged from between 1 to 45 years, with a mean of 7 years, and encompassed an equally wide range of practice experience. The EP group included individuals who worked solely for local authorities, those who worked as part of private assessment organisations, and those who worked on a freelance basis. The SpTs were variously employed by different types of universities, private assessment centers, or, like some of the EPs, worked freelance. All of the EPs and 66% of the STs had had experience working with and/or assessing school age children with literacy difficulties.

Lecturers' questionnaires

There were 164 lecturer participants, 87 from six Pre'92 institutions and 77 from six Post'92 institutions. The division of lecturer (and student) data sources into "old" and "new" universities was a practice adopted by other researchers in the field (Riddell, Tinklin, & Wilson, 2005; Mortimore & Crozier, 2006), and allowed exploration of important variables and group differences at the analysis stage. The entire cohort comprised a very wide range of subject areas that were classified, at the analysis stage, into three broad categories: humanities (50%), STEM (31%), and artistic/vocational 19%.

Dyslexic students' questionnaires

One hundred and forty six dyslexic students completed the dyslexic student questionnaire, 110 from Pre'92 universities and 33 from Post'92 universities (the majority of these from a small specialist arts university). Sixty-one percent (89) of these students were female and the remaining 39% (57) were male. Seventy-one percent (104) were under 25 years of age and 29% over 25. Undergraduate and post-graduate students were included in each age category. The group was studying a wide range of subjects, categorized broadly: humanities 36% (53), STEM 45% (66) and artistic/vocational 19% (27). Sixty percent (88) of the cohort had been identified during compulsory schooling as having literacy difficulties; 40% (58) had not. A roughly similar proportion (57.5%, 84 students) had been formally assessed as dyslexic before the commencement of their university studies, the remaining 42.5% (62) had been assessed after the start of their university studies. These figures relating to educational stage of formal identification reflect those that have been consistently quoted in the literature since the Singleton Review (Singleton, 1999).

Clearly, the very uneven number of dyslexic participants from the two institution categories placed limitations on the extent to which the sample could be considered representative of dyslexic students in the UK higher education sector. Not only were the Post'92 students considerably fewer in number, but most were also from a small arts university unlikely to be typical of large metropolitan "new" universities. The starkly different demographic characteristics of the two sub-groups are illustrated in Table 3 (Appendices p.6). The specific characteristics of the overall sample group affected the analysis methods used, as well as the interpretation and discussion of the findings.

Non-dyslexic students' questionnaires

One hundred and fifty five non-dyslexic students completed the appropriate questionnaire. This group was more evenly divided between Pre'92 and Post'92 institutions than the dyslexic student group: 54% (84) from Pre'92 institutions and 46% (71) from Post'92 institutions. However, as for the

dyslexic student sample, the majority (52 out of 71) of the Post'92 students were from the small arts university. The broad subject categories into which the overall group was divided were: humanities 30% (46), STEM 36% (56) and artistic/vocational 34% (52). Seventy three percent (113) of the group were female; 27% (42), male. Eighty-one percent (125) were under 25 years of age; 19% (30) were over 25. Few, less than 7% (10 students) had been identified whilst at school with literacy difficulties.

Although the convenience/opportunist method of sampling resulted in data from relatively large participant groups of dyslexic and non-dyslexic students of roughly equal size, the groups were not well matched for any of the other quantified demographic characteristics, as is shown in Table 5 (Appendices p.8). The contrast between the non-dyslexic subgroups based on institutional category (Table 4, Appendices p.7) displays almost as much disparity as that between the similarly categorized dyslexic students (Table 3, Appendices p.6).

All four samples of survey participants simply represented themselves (Cohen, Manion & Morrison, 2011). Yet within this obvious limitation to the generalizability of any findings, the large numerical size of each sample, together with the specific comprehensiveness of its make-up, resulted in the data collected from each group of participants being capable of providing relevant insights into opinions on and attitudes towards the nature dyslexia, dyslexia assessment and dyslexia disability provision in the UK higher education context.

Assessor interviewees

Eight practicing assessors were interviewed, 4 EPs and 4 SpTs. Their assessment experience with higher education students ranged from 5 to 20 years, and each had assessed a range of students of varying ability and from different educational backgrounds and institutions. One of the EPs was working for a local authority. Another had recently ceased working for a local authority and had set up his own freelance business. A third EP was chief executive officer of a private assessment center, and the fourth EP had

worked privately, in a large metropolitan further education college, and currently had her own freelance business. The 4 SpT assessors had similarly diverse experience of professional practice. One was in the employ of two Pre'92 universities, and worked exclusively with the students from these institutions. The second worked with secondary school pupils as well as with a wide range of university students. The third SpT assessor had worked in the further education sector but was currently working privately for assessment centres and universities, and the fourth assessor, after a career mainly in the secondary sector, was also working privately, on a freelance basis, for both assessment centres and universities. Additionally, three of the assessors interviewed were academically qualified to PhD level, 4 of them taught on training courses for other assessors, and 6 of them had a publication record.

3.3 DATA ANALYSIS

The research design allowed for data to be analysed so as to answer the pre-determined research questions, but also made provision for the analysis of any additional information that may otherwise have been unintentionally excluded by researcher positionality. The survey data responses were quantified to enable inspection of apparent trends and of the strength and direction of such trends. Non-parametric statistical analyses were used to explore possible differences between identified sub-groups in the sample populations, and, in the case of lecturers, to investigate further what appeared to be inconsistencies in some responses. Exploratory principal component analysis was used to examine whether or not the responses to items in one section of the assessors' survey revealed any meaningful interpretation of participants' concept of dyslexia based on their agreement with different research findings. The textual data, from both survey open questions and assessor interviews, were analysed thematically in line with the way in which the data were collected by respective instruments to answer the research questions. The findings from the different types of data were then integrated by the researcher and interpreted to provide answers to the research questions. The interpretations made were able to take into account not only the apparent quantified "facts" but also the effects of variables, both

obvious and not so obvious, which are invariably disguised by quantitative descriptive analysis alone. The combined analyses thus allowed description and exploration of the areas of research investigation on a number of levels, resulting in findings that emphasized both the generality and particularity that was a paramount aim in the research design. The following paragraphs detail the different methods of analysis used.

Quantitative analysis

Data from the four surveys were downloaded from LymeSurvey into SPSS. Only those surveys that were complete were used. Frequency scores for each of the closed items were calculated. To simplify further analysis, items that featured a 5-point Likert scale were collapsed into a 3-point scale. As this procedure risked blurring the strength of some responses, effectively reducing responses on continuous scales of sensitivity to dichotomous categories with a mid “unsure” one, the original 5-point frequency tables were retained (Tables 6-20, Appendices pp.9-40), but referred to in the findings chapters only when the “strong” response to any item, in either direction, exceeded 25%. The 3-point frequency data were then converted to stacked bar charts (Figures 2-20, Appendices pp.51-69) to allow for easy visual inspection of the results.

Statistical analyses of group differences

Chi-square tests of independence

It was anticipated, at the design stage, that sample groups would be heterogeneous to reflect the more obvious differences within the populations from which they came. The non-parametric chi-square test of independence was used to explore differences in selected survey item responses between and among pre-identified subgroups in the samples, for example assessors from different professional backgrounds, lecturers and students from different types of institution, teaching or studying different broadly categorized subjects. When chi-square analyses indicated significant group differences in selected item responses, effect sizes were used to help determine the likely importance that could be ascribed to such statistical investigation.

Cross tabulation

The chi-square test of independence, based on crosstabulation, was also used to explore what appeared to be potentially interesting inconsistencies between some of the lecturers' responses. Again, due regard was paid to effect sizes in assessing the social, as opposed to the statistical, relevance of the results. Tables 21 to 26, summarizing the results of chi-square and crosstabulation analyses on selected survey responses, can be found in the Appendices pp.41-47.

Exploratory statistical analysis of data patterns

Principal component analysis

The 12 items in Part C of the assessors' survey (assessors' agreement with current research positions) were subjected to principal component analysis using SPSS. This method of analysis was used in an exploratory way to see if participants' responses revealed any meaningful patterns that would throw further detailed light upon the way in which, at the group level, the dyslexia construct was understood and operationalized by those who took part in the survey.

Thematic analysis

Text data from the surveys' open questions and the assessors' interviews were analysed thematically in line with the agenda identified in the research questions, and in the order explored in the two different methods of data collection. Verbatim transcriptions of each resulting set of data were inputted into NVivo for convenient storage and ease of retrieval, and then classified manually by the researcher into partly pre-determined themes and sub-themes. This method of thematic analysis allowed for unanticipated as well as anticipated themes to be identified, thereby minimizing to some extent the effect of researcher positionality on the selection of data that contributed towards the findings and the interpretation of the findings. The manner in which this method of thematic analysis was applied, and the findings that emanated from it, are reported and critically discussed in the results and discussion sections of the study.

The thematically analysed text data added a further layer of detail to the quantitatively described and statistically explored survey data, enabling insights into the influence on participants' survey data of some of the less obvious and more intangible variables that it would have been difficult to gauge explicitly, such as personal values, assumptions and social/political beliefs. Liberal illustrative use was made of verbatim excerpts from this text data to allow participants' individual voices to be heard. Where applicable, and the anonymity of the participants' not threatened, brief context details accompanied these verbatim quotations.

Non-paradigmatic analysis

The different methods of data analysis, particularly the quantitative and statistical, were in keeping with the overall non-paradigmatic underpinnings of the study. Although closed survey item responses were quantified, for example, it was recognized that the resulting descriptive data probably represented only approximate and therefore crude categorization of not just the direction and strength of participants' perceptions, opinions and attitudes, but also of the detailed nature of these perceptions, opinions and attitudes. The data were nominal, scaled into verbally described categories, but categories that by their very nature were heterogeneous, fluid and continuous. There was no guarantee, for example, that one participant's comprehension of "strongly agree", or "frequently" was the same as another participant's, or that all participants who chose the "unsure" category of response did so for the same reasons. In fact, the individual, experientially determined nature of participants' comprehension of language, particularly of conceptual terms, is a theme continually alluded to in this study. The survey data collected from closed rating scales were, in effect, analysed with the researcher assumption that they were both quantitative and qualitative in kind; illustration and clarification with verbatim text data from the surveys' open questions and the assessor interviews triangulated this assumption.

3.4 ETHICAL CONSIDERATIONS

The research was designed with due regard to the University of Exeter's ethical policies, guidelines and procedures, as well as those of the British

Educational Research Association's (BERA) *Ethical Guidelines for Educational Research 2011*. A copy of the Ethics Approval is included in the Appendices pp.148-151.

Participants were all consenting adults whose participation in the research was voluntary. All participants were informed of the purpose, nature and intended use of the research in the email that contained the invitation to participate; the information was also reiterated on the cover sheets of the respective questionnaires (Appendices pp.79-125), and the researcher contact details provided for anyone with further queries. Interviewed participants signed a consent form (Document 12, Appendices p.152). Each participant was assured of their anonymity and the confidentiality with which their contributions would be treated. The way in which the LimeSurvey program was set up did not allow for participants to be traced, unless they chose to include contact details in offering to participate in the interviews. Every effort was made to ensure that the eight interviewed assessors, or any institution or organization for which they worked, could not be identified. Any textual data that included details that might identify the participant were appropriately edited. Interviewees were offered the opportunity to authenticate a transcript of their contribution but all elected not to do so. The data were stored securely in electronic format, password protected.

Cohen et al. (2011) stress that the ethical nature of research is intrinsically tied up with its methodological rigour and fairness. These qualities of the research, detailed above, help respect and protect the integrity not only of participants but also of other individuals and bodies potentially affected by the research, such as the wider research community and the institutions and professional organisations with which the participants are aligned. Participants have a right to feel confident that their data will not be used irresponsibly and sloppily to misrepresent themselves, or to unfairly criticize their institutions, professions or professional organisations.

CONCLUSION

The preceding paragraphs, in detailing how and why the research was designed, carried out, analysed and its findings interpreted, serve to illustrate the degree of rigour applied to it by the researcher. Although “rigour” has been historically and commonly divided into the concepts of validity and reliability, the use of these latter terms has been purposely avoided in this research due to the confusing and often overlapping definitions given to them in the literature by different theorists outside the strict positivist tradition (Hammersley, 1987; Cohen et al., 2011). Without going into hair-splitting detail to define abstract nouns that are by their very nature interpreted variously by different individuals, “rigour”, in the context of the current research, refers to the research’s accuracy, credibility and trustworthiness.

Strategies, and the limitations of strategies, taken to maximize the accuracy with which the data collected matched the range and complexity of the target groups’ perceptions, opinions and attitudes on relevant issues have been described so as to allow the reader himself or herself to evaluate the credibility and trustworthiness of the findings, as well as the researcher’s interpretation of the significance of the findings. To this end, for example, extensive use has been made of illustrative verbatim quotations from participants themselves, and much of the raw data has been included in the Appendices. The positionality of the researcher, outlined in the introductory chapter, has been acknowledged, and other sources of potential bias, such as those that might have influenced participants’ responses, have been noted and considered at the interpretation stage. The danger that some of the more articulate, interesting participant quotations, “the loudest bangs and brightest lights” (Cohen et al. 2011) might dominate and thus swamp quantified evidence from the responses of the relatively silent majority, has also been addressed. All in all, every attempt has been made to ensure that the data collected for this research are accurate and unbiased, and that the findings, conclusions and recommendations made on the basis of them emanate from conscientious, transparent application of the research methods as described.

The ensuing chapters demonstrate the application and effectiveness, as well as the results, of the overall research methodology.

Chapter 4: Findings from Assessors' Data

Chapter 4 is divided into two sections: Section 1 briefly describes and provides referenced links to data summaries in the Appendices; Section 2 contains an interpretive analysis and discussion of the results from different data sources, themed around each of the research questions, in the case of the survey, and around the targeted research issues, in the case of the interviews.

Section 1: Summary of Assessors' data

Descriptive analysis of survey data

Stacked bar charts (Figures 2 – 8) visually summarising the frequencies of assessors' different responses to each item in the questionnaire are placed in the Appendices (pp.51-57). Overall, the stacked bar charts display a lack of consensus with regard to participants' opinions of and attitudes towards each of the issues explored in the different research questions. Also included in the Appendices are Tables 6 – 10 (pp. 9 - 20) that summarise the initial frequency analysis of the quantitative survey data. They have been included to enable more detailed interpretation of apparent trends in the data, particularly the strength of responses, a factor that may have been obscured when the five response categories were collapsed into three (Chapter 3, p.133).

Statistical analysis of group differences

Chi-square tests for independence indicated statistically significant differences in some responses between the two different professional groups in the sample: educational psychologists (EPs) and specialist teacher assessors (STs). Table 21 (Appendices p.41) summarises these group differences, listing Chi, p. and Phi values, as well as brief interpretations of each itemised variable.

Exploratory statistical analysis of data patterns

Principal component analysis of the 12 items from Section C (assessors' agreement with current research positions) revealed the presence of two components with several moderate to strong loadings that together accounted for 37.5% of the variance in the data from this section of the assessors' survey. Component 1 was interpreted as representing an interactive, bio-psycho-social model of dyslexia; Component 2 was interpreted as representing a biological syndrome model of dyslexia. Figure 21, Appendices pp.70-71, contains some of the detailed output from SPSS on which this interpretation was based. Although this analysis showed that there were some meaningful patterns in the way some assessors appeared to have assimilated various research positions into their practice, it also implied that most of the variance in their responses (62.5%) was inexplicably more complex.

Thematic analysis of open questions

Examples of optional clarificatory comments made by some individual participants are organised thematically in Document 13, in line with the way in which the research questions were explored in the questionnaire survey. Document 13 can be found in the Appendices p.153 -199.

Interviews

Data from the eight interviews with individual assessors were analysed thematically around the three main targeted research issues outlined in Chapter 3, (p.122; p.134). The results are summarised, in broad terms, in Table 27 (Appendices p.48). Also included in the Appendices (Document 10, pp.130-147) is a transcribed copy of one interview, lightly edited, where appropriate, to preserve the participant's anonymity. The interview data are very rich and, taken across the different assessors, reflect the ways in which their varying professional backgrounds and experience, as well as personal socio-cultural and political beliefs, shape the methodology, conceptual focus and attitudes towards the outcomes of their practice.

Section 2: Interpretive analysis and discussion

4.1 SURVEY DATA

In the following interpretive analysis and discussion quantified and text data from the assessors' survey have been integrated and structured around the research questions. Major emphasis is focused on quantitatively analysed patterns and trends, with selected comments from the optional textual data used either to illustrate these trends, or to throw additional light on possibly more considered interpretation of them. The clarificatory comments, made by approximately 20% of the participants, are thus not meant to be indicative, in any quantitative way, of aspects of assessors' professional practice or opinions on it. The comments are mostly brief, with the participants who made them not having had the opportunity to elaborate or to personally explain any apparent allusions contained in them to wider, more complex issues.

RESEARCH AND PRACTICE

Question 1 (a): Assessors' assumptions about the behavioural and cognitive characteristics of dyslexia

The group study sample of assessors appears to hold a range of different assumptions about the nature of dyslexia. Their quantified responses (Figure 2, Appendices p.51) indicate considerable variety in, and strength of opinion regarding, some of the research criteria considered necessary for identification and categorical diagnosis of dyslexia in higher education students. One might be tempted to conclude, along with critics of the dyslexia concept and assessment practice (Rice & Brooks, 2004; Elliott & Grigorenko, 2014) that because of the "imprecise" and "amorphous" nature of many working definitions of dyslexia, few are measuring the same thing. Quantified responses to fixed-format survey items, though, can create a superficial impression of what are essentially complex variables. Consideration of these quantified responses, together with some of the explanatory and clarificatory comments added by some participants, supports a more considered, less contentious view of professional assessors' understanding of dyslexia.

Past and/current literacy difficulties

Superficially, considering most definitions and the focus of much research interest, it may seem surprising that over a quarter of assessors in the sample regarded past or current difficulties with literacy skills as not strictly necessary for a diagnosis of dyslexia in a higher education student (Figure 2, B1, B2, Appendices p.51). Many though, took the opportunity (not afforded them by the survey items themselves) to point out the complicating compensatory ability of bright, highly motivated and well-taught dyslexic students:

Dyslexic students in HE may have high underlying abilities and may be 'well compensated' if they have received targeted training with, for example, phonics.

In my experience as a Level 5 SpLD Specialist Teacher supporting HE Students, although they will always have dyslexia they are able to apply strategies to certain problems, which may help the student to overcome the problem, so the dyslexia remains masked by the applied strategy.

Possibly because of the documented and professionally observed effects of compensatory strategies on some dyslexic students' literacy skills (Beaton et al., 1997; Rack, 1997; Singleton, 1999; McLoughlin & Leather, 2013), many assessors were at pains to point out that in the higher education context they were not necessarily looking for literacy difficulties in any statistically below average or absolute sense, but rather in a relative one:

It is important also to compare [the] student to University level expectations in e.g. writing and reading speed. [It] may be more likely to be an ability/achievement inconsistency issue in [university] students rather than absolute poor standard scores.

The consideration of factors such as the above illustrates the misconceptions regarding participants' opinions that can result from taking the quantified data at face value. It is just possible that all participants regarded past or current

difficulties with literacy skills as necessary for a diagnosis of dyslexia in higher education students, but that professional experience had alerted them to the contextual nuances involved in identifying such criteria – nuances inevitably missing from the vocabulary in which the questionnaire items were expressed. In such situations it can be difficult for participants to respond accurately. As one participant frustratingly commented:

Several answers do not qualify my actual feelings/beliefs.

Additionally, the quantified data obscures several significant differences in responses between the two professional groups of which the sample is comprised. A Chi-square test for independence (Table 21, B2, Appendices p.41), for example, suggested, with the addition of a medium to large effect size, that the educational psychologists were significantly more inclined than were specialist teacher assessors to regard current, non-compensated difficulties with literacy skills to be a necessary criterion for a diagnosis of dyslexia, even in higher education students. The influence of different professional backgrounds and experience on practice is also a well-documented issue in the literature (Schon, 1983; Eraut, 2004). It is an interpretive observation made repeatedly throughout this analysis, and will form one of the main foci of the study's conclusions.

Statistical discrepancy and/or spiky profile

Specificity, conceived of largely in terms of statistical discrepancy or a “spiky” profile, is another criterion that appears to have a higher diagnostic importance for assessors in the higher education context than is reflected in most current definitions or in many research contexts. Less than 10% of assessors in the sample indicated that they were prepared to entirely rule out the ability/literacy attainment concept (Figure 2, B11, p.51).

I know that the discrepancy model (on its own) is not accepted, but sometimes find it difficult not to have a discrepancy as a key indicator.

Perhaps controversially, yet not surprisingly considering the higher education context, the yardstick used to assess such discrepancy seemed to be underlying cognitive ability. Some participants commented that they understood the DfES Guidelines steered them towards finding an ability/literacy attainment discrepancy:

Discrepancy between "ability" and literacy attainment - the DfES is clearly looking for this, among other "signs". I am not so sure, - especially when both are "low" but attainment scores are lower than ability scores.

Others emphasised that in their practices they focused on statistical discrepancies between ability and processing skills, a criterion not offered by the survey items and which, with hindsight, should have been:

I look for a discrepancy between underlying ability and phonological processing, working memory and processing speed.

Disquiet around statistical discrepancies between low scores, not considered adequate for studying at a higher education level, were expressed in the open text boxes in this section, and in other sections of the survey. The following comment, for example, implies that the discrepancy ought to be between a high, or better than average, ability score:

This is a difficult area. I am agreeing that discrepancy is important because I see so many students, who, given a more appropriate education system in this country would be better training rather than on an academic course.

Indeed, others took the trouble to emphasise that the discrepancies often encountered and regarded as diagnostically important in their practice were relative, and did not necessarily need to involve low attainment or low processing scores:

Underlying cognitive difficulties may be low in relation to underlying reasoning ability but not below average as the discrepancy may be relative.

The “spiky profile”, a type of proxy for the historical discrepancy, scored highly in terms of necessary criteria (Figure 2, B12, Appendices p.51), although educational psychologists, as a group, were significantly less inclined, than were specialist teachers (Table 21, Appendices, p.41) to regard it as a necessary criterion for a diagnosis of dyslexia. Some educational psychologists, in line with some of the evidence debated in the literature (Watkins et al., 2005) were openly critical of the concept’s validity:

Please note that the term 'spiky profile' is discredited and although often used has no statistical basis.

A spiky profile is a misleading term.

One specialist teacher was strongly critical, in turn, of the practice of such educational psychologists:

In our University, we look for a 'spiky profile'. However, some EPs would diagnose those [students] described above [with a flat cognitive profile] as dyslexic. We try not to use these EPs!

Another participant was as equally emphatic about the necessity of a spiky as opposed to a flat cognitive profile for a diagnosis of dyslexia, justifying his/her decision by reference to a definition that cohered with his/her professional preference:

I would hope that an HE student with a flat below average profile would not be called dyslexic - they would not by me - but I've seen too many reports in which they have, not least because of the DfES descriptor, which is far too broad. Personally I use the 2010 BDA definition.

Not obvious from the quantified responses is the way in which some assessors use their professional, clinical experience to interpret test scores that, for example, fail to exhibit a spiky profile. Such a practice may well account for the relatively large “important but not necessary” responses to this questionnaire item. Several comments made it clear that assessors do

not always take low cognitive ability or low processing skill scores at face value; rather, they carefully consider the effect of any mitigating circumstances or adverse environmental factors that could account for an observed difference between their clinical impression and psychometric evidence for a student's difficulties:

Flat profiles can be found in [students] with English as second language . . . hence performance on ability tests [can be] very impaired, BUT there are usually signals that the scores are unreliable - way student talks in assessment, speed of response, academic background etc.

A flat profile may be due to cultural and educational deprivation and cause the culturally biased WRIT, for example, to undervalue the ability of the student. I think every student must be regarded as a unique case and the range of difficulties described - labels can be too inflexible as there may be some attention issues or slight dyspraxia etc. as well as dyslexia. The underlying cognitive profile is important.

It would be a distortion of the results, though, to imply that the majority of assessors in the study sample were more comfortable with a statistical discrepancy involving high underlying ability. Several indicated via their comments that, for diagnostic purposes, they were prepared to accept a discrepancy based on low scores:

My understanding is that you can be dyslexic despite general intellectual impairment (I have seen it at University, but only twice).

I have come across students who have dyslexic difficulties and low abilities.

Some participants carried this point further by making it clear that, in their opinion, low measured ability was of no consequence to the outcome of their diagnostic decision regarding a higher education student:

I have seen 'low ability' students achieve far better than 'expected' due to their determination, hard work and persistence (personality traits can greatly affect results).

We don't 'measure' ability, intellect or intelligence - students have met the academic requirements for an offer of a university place, and are attending HE.

Perhaps one explanation of the attitudes towards ability, expressed above, can be found in comments like that quoted below. This participant intimates that the personal ethical beliefs of individual assessors towards the educational entitlement of all students might influence the diagnostic significance that they placed on a flat profile, encouraging them, for example, to assign a label pragmatically for resource purposes:

The difficulty with the student with the flat profile is that s/he will actually need more help than most with degree level assessments and if no diagnosis is available will not qualify for financed assistance. I can imagine a scenario where the assessor "explains" the below average underlying ability score by reference to how deficits in information processing can impact on performances on these tests

Processing deficits

Another surprising trend to emerge from the quantified survey data is the low "necessity" rating (Figure 2, B3, B5, B4, Appendices p.51) for each of what are considered to be the classic triad of causal processing deficits: phonological processing, working memory and processing speed. Although research findings on the diagnostic power of these processing deficits are generally contradictory and controversial (Chapter 2, pp. 32-46), and there has been much research debate about the "purity" of each of the three skills (Ramus & Ahissar, 2012; Elliott & Grigorenko, 2014), for the last 40 years phonological processing deficits, in particular, have been consistently implicated in most theoretical models of dyslexia. Assessor training for specialist teachers emphasises deficits in all three phonological skills, but

particularly phonological awareness (Jones & Kindersley, 2013), as is attested by a comment made by one of the participants:

From questioning the PATOSS professional at the end of the Renewing Your Practising Certificate day, I was told emphatically that testees must have the phonological deficit.

The experience of practicing assessors working with university students appears to contradict the expectations described in most of the existing theoretical models of dyslexia, implying, along with much research (Eden et al., 2004) that the relationship between reading and phonological awareness can be bi-directional:

Adult dyslexics who are not below average in single-word reading often do not have phonological awareness difficulties. Below average Rapid Naming scores are therefore more important in adults than phonological awareness scores.

Whether such professional observations are due to poorly designed psychometric tests without sufficient discriminatory power for adults, or else the absence, in absolute terms, of phonological awareness difficulties in some of those being tested, it seems apparent that assessors in the study sample do not, as a group, subscribe to any one of the well documented causal theories of dyslexia. The magnitudes of the modal response categories (“important but not necessary”) for all three processing items (Figure 2, Appendices, p.51) strongly suggest that professional judgement of individual cases is, with respect to this and other diagnostic criteria, an influential variable on diagnostic practice:

I don't subscribe to single cause explanations of dyslexia. I believe individuals and their experience affect patterns of cognitive processing learning inefficiencies.

Question 1(b) Extent to which assessors' practice is influenced by current research positions

Not just literacy difficulties

In what could be interpreted as an unintentional comment on the “Dyslexia Debate” (Elliott and Grigorenko, 2014), but in line with the descriptive definition of dyslexia contained in the 2005 DfES Guidelines (Chapter 2, p.63), the overwhelming majority of assessors surveyed appear to conceptualise dyslexia in term of a syndrome of behavioural characteristics that affect the learning process (Figure 3, C3 Appendices, p.52). Furthermore, Table 6 (Appendix p.9) indicates the strength of this opinion, a refined interpretation not as explicitly obvious from the quantified collapsed category in Figure 3. Few, less than 10% of the sample, seem to restrict their conceptualisation of the category to “reading disability”, as is becoming increasingly common in both research circles and the compulsory UK educational sector (Snowling & Hulme, 2012). Those motivated to further confirm their responses appended comments such as:

The issue is not just about literacy, surely. Issues such as organisation are important, as are appropriate study skills.

In my opinion, as one gets older, although dyslexia may be, as from the Greek, an inability with literacy, there are other factors, which have very significant affect both in secondary school and later. Often the remaining difficulties are related much more to organisational skills, aspects of executive functioning and planning skills, which hamper young people with respect to note taking, revision, timing of things and seemingly concentration. These aspects are sometimes considered to be resultant from laziness, when in fact this may not be the case.

Nevertheless, despite their small number, there were dissenters from this position that, in all probability, would result in their practices contributing to current accusations of inconsistency across the profession:

I, like many psychologists, believe that dyslexia should be strictly defined according to difficulties with phonological skills and the

characteristic pattern of difficulties with spelling and reading accuracy etc. that follow on from this.

Interestingly, Chi-square analysis (Table 21, C3, Appendices p.41) indicated that the educational psychologists amongst the sample of assessors were significantly less likely to regard dyslexia as more than a difficulty with literacy skills.

Some clarificatory comments alluded to an historical, social and political use of the dyslexia label as a type of umbrella term to denote the observed specific learning difficulties of individual students:

I often worry about my identification of dyslexia. You know there is something that is making studying difficult for the student but it is a medley of difficulties but it gets labelled dyslexia because you don't want to give multiple labels.

A diagnosis is nothing more than a descriptive label that is theorized to have a neurological cause. However, the observations made are of a series of behaviours. If the neurological cause is true for the individual being assessed then the difficulties will be life long and affect information processing, rather than literacy per se, which with effort can continue to improve over time. Differential diagnosis is essential so that the correct reasonable adjustments are made.

Although not explicitly articulated in comments such as the above, there is in them an implicit recognition that the semantic wrangling over what the term “dyslexia” means is irrelevant to these assessors – what is important to them is the identification and recognition of a student’s individual difficulties, whatever they are called, together with the intervention or strategies that can be put into place to ameliorate them. Discussion of the categorical label, particularly in the context of the recent dyslexia debate as it affects assessment in higher education, will be taken up in greater detail in a later section of this study.

Categorical or dimensional

Current dyslexia research opinion is almost universal in its agreement that the behavioural, cognitive and neurological characteristics that are commonly ascribed to dyslexia are continuous throughout the population (Hulme & Snowling, 2012). Assessors who took part in the survey appear very divided in the way in which this research knowledge is incorporated into their practice (Figure 3, C11, Appendices, p.52). Over a third indicated agreement with the participant quoted below (although not necessarily with his/her fundamental understanding of individual brain structure and functioning):

If dyslexia is a difference in the neuro-wiring in the brain, then it is not just part of a continuum of normal distribution - although literacy attainment is: there is the rub.

Notable was the percentage of assessors that seemed uncertain or confused about the implications of regarding dyslexia as a spectrum condition – namely, whether the spectrum included the population at large, or just the category of dyslexic individuals with varying degrees of difficulty:

I think an individual is dyslexic or not. However I believe it is a spectrum from mild to severe.

Although I say someone either is or isn't dyslexic, some people have traits only.

While I agree that individuals are either dyslexic or not, I think that dyslexia is a continuum and many individuals exhibit some difficulty in some area; the important consideration is the extent to which their dyslexia affects them in studying/work.

The participants' group confusion and lack of consensus around whether or not dyslexia is a discrete category of specific learning difficulty could be exacerbated by possible tensions between research findings, assessors' own professional observations, and the legislative requirement in the higher education assessment context that a recognised categorical label be

produced for purposes of establishing eligibility for disability protection and additional resources:

An individual is dyslexic or non-dyslexic: we have to make that judgement in an assessment report (and about other SpLDs to some extent now), but it is a spectrum and the individual may have many compensatory strategies.

Deciding where the category begins and ends is thus not easy:

An individual is dyslexic or not - ultimately I agree yes, but it can be difficult to differentiate sometimes.

Mainstream research opinion is currently of the view that where you draw the line between dyslexia and non-dyslexia, in terms of literacy and processing difficulties, is arbitrary, dependant on externally agreed diagnostic criteria usually tied to the allocation of resources (Snowling & Hulme, 2012). Whilst the majority of assessors in the sample either agreed or were unsure that cut-off points used to denote cognitive deficits on standardised tests of cognitive processing were arbitrary (Figure 3, C10, Appendices, p.52), their diagnostic difficulties are compounded by the fact that their practice needs to be conducted without the benefit of any concrete externally agreed criteria:

I feel that much needs to be clarified in terms of what is a clearly defined difficulty, if 'dyslexia' can be clearly defined (and I know the latest research is pointing that way)...current testing protocol is more clearly defined than it was, but I think there's much confusion between 'dyslexia' and 'SpLDs' in the broader sense of the word and still too much variance in interpretation.

Some assessors went further and attributed what they saw as an over-identification of dyslexia in higher education students to the lack of any such externally agreed criteria:

[I]t is the lack of applied definition/ criteria that has enabled assessors to 'give' a diagnosis of dyslexia for HE students who

are struggling for reasons other than dyslexia, as the students are seen to need help.

Aligned to the concept of a dyslexia continuum with arbitrary, externally agreed cut-off points for “labelling”, is the related research position that diagnoses of dyslexia, if they are contextual, need not be stable over time (Shaywitz et al., 1992; Snowling & Hulme, 2012). Judging from the quantified data alone, a very large majority of the survey sample assessors appeared not to agree with this research position, many of them strongly (Figure 3, C6, Appendices p.52; Table 6, Appendices p.10). Most participants’ comments, though, were qualified with more considered professional observations:

An individual will not cease to be dyslexic, but may develop strong compensating skills/strategies.

There is no 'cure' for dyslexia. However, as it is developmental (and adults develop many compensatory strategies), dyslexia can present differently at different ages/stages.

I agree that an individual will not cease to be dyslexic but the measurable scores and difficulties/strengths may change with good intervention.

Like with some other opinions about the nature of dyslexia, statistical analysis of the data implied that around this issue of diagnosis stability there was a significant difference, with a large effect size, between the group opinion of the specialist teacher assessors and that of the educational psychologists, with the latter group being less likely to agree that dyslexia is stable over time (Table 21, C6, Appendices p.41). The effect on assessors’ practice of professional background and related personal individual variables is, as has been intimated previously, a theme that will be explored further in ensuing analyses of this and other data from the study.

Related to the concept of categorical dyslexia diagnosis is the survey item soliciting assessors’ opinions as to the possibility of distinguishing between different specific learning difficulties (SpLDs) categories. The overwhelming

majority (78%), if the quantified data are taken at face value, has responded in the affirmative (Figure 3, C7, Appendices p.52). Nevertheless, the content of some of the clarificatory comments suggests that the experience of practice has revealed this not to be so straightforward:

It is possible to distinguish between SpLDs - only to some extent as there is considerable overlap and each condition has variations of indicators/symptoms, and intensity of these, along a spectrum.

Although it is often possible to distinguish between SpLDs, there is often overlap or comorbidity.

It is not difficult to distinguish between different SpLDs - broadly this is true, but there is always that small area of overlap where you cannot be sure which category it comes into.

It is often difficult to make a clear-cut diagnosis of dyslexia, as there is often co-morbidity with another or other SpLDs.

Causal theories

One of the strongest group-level assumptions held by the assessors who took part in the study is that dyslexia stems from biological causes, defined in the survey as “differences in individual brain structure and function” (Figure 3, C5, Appendices p.52; Table 6, Appendices, p.10). Interestingly, but not surprisingly, the number and percentage of those participants who either strongly agreed or agreed with this research position were almost identical with quantified responses to the item tapping opinions about the stability of dyslexia over time (Figure 3, C6, Appendices, p.52; Table 6, Appendices, p.10), implying that they regarded individual brain structure and function as genetically determined and unalterable. Once again, though, there were indications in the textual data to suggest that this statistic disguised more complex positions so should not be taken at face value. Clarificatory comments revealed that the professional experience of some participants, and possibly many others, led to much less essentialist views. There were several implied references, in this and other sections of the survey, to what

has been termed the bio-psycho-social model of dyslexia, one that conceives of the behavioural and processing difficulties commonly associated with dyslexia as caused by complex interactions between biological and environmental factors:

I think I support the old framework of Frith - that environment, heredity, brain architecture etc. combine to make the genetic predisposition to dyslexia play out in different ways in different circumstances.

I think socio-cultural factors can't cause dyslexia but can exacerbate existing difficulties or present as dyslexia.

Some dissenters from the above position re the assumption of biological causes for dyslexia – chief among them educational psychologists (Table 21, C5, Appendices p.41) appeared to be working with a straight “reading disability” concept of dyslexia:

I do not believe that we should be distinguishing between poor literacy skills and the effects of environmental factors, although for intervention it is extremely important that appropriate teaching strategies are put into place, based in my view on the principles of instructional psychology as outlined by, for example Dr Jonathon Solity.

I am interested in the question which talks about dyslexia being different due to poor literacy skills due to environmental factors- why should it, and which environmental factors does this include? The BPS definition of Dyslexia includes "response to adequate teaching". Surely inadequate teaching is an environmental factor.

Although views of those who thought that environmental factors alone, such as poor teaching or socio-cultural deprivation, could cause dyslexia were proportionally few in number (13%), (Figure 3, C9, Appendices p.52), they do demonstrate an important lack of consensus amongst practicing assessors that invariably has an effect on the outcome of their practice i.e. inconsistent identification of “dyslexia”.

Question 1(c) Assessors' confidence in their assessment practices and diagnostic conclusions

Inspection of the quantified data in Figure 4 (Appendices p.53) suggests that assessors of dyslexia in higher education students do not all have confidence in various aspects of their practice, or in the diagnostic conclusions that emanate from it. Worrying is the approximate 20%-30% of assessors who claim to be “unsure” about their confidence (D6, D4, D2, D5), as well as the 10%-25% who imply that they positively lack confidence in important aspects of their practice (D6, D4, D2, D5).

Using the dyslexia label

Roughly three quarters of assessors who took part in the survey expressed themselves as feeling confident in using the dyslexia label to describe the specific learning difficulties of the students to whom they assigned it. Whilst this might appear to be a high percentage of the sample group, it still leaves just over 25% who felt unsure or not confident (Figure 4, D6, Appendices, p.53). Some, like the two quoted below, preferred to cling to recognised research definitions, implying through the tone of their comments that they may have had reservations against which they felt a need to protect themselves:

"Confident about using the label". . . only given that I quote definitions and relate my findings to those definitions

I always quote (in my reports) the BPS definition of dyslexia (1998 or thereabouts) and the Rose report definition (2009), and relate my findings to these. No one's come back and challenged me yet!

Roughly half of the assessors surveyed appeared to avoid using the label “dyslexia” altogether, preferring the more generic Specific Learning Difficulty (SpLD) (Figure 4, D7, Appendices, p.53), although others used this label only

when they were either unsure or else confident that a student's profile was not dyslexic:

Although I prefer SpLD, I do give a more precise label where I think it is clearly dyslexia/dyspraxia etc. but have used SpLD for unusual profiles.

I prefer the generic label SpLD" - well no, I don't, but when writing up a diagnostic report for someone who is not clearly dyslexic yet still has difficulties with processing/memory etc. it is useful. So I find it expedient rather than liking it.

Allowing professional judgement to override test scores

It seems clear from the quantified data from this section of the survey that although approximately 75% of assessors felt confident in using the dyslexia label, many of them attained such confidence via different routes. In contrast to the two examples above quoted, over half of the sample professed lack of confidence or uncertainty regarding the validity of some of the SpLD Assessment Standards Committee (SASC) prescribed psychometric tests routinely used (Figure 4, D2, Appendices p.53), and about the same proportion (Figure 4, D5) felt confident in allowing their professional judgement to override scores from such tests, in the manner, and for the reasons, already illustrated above (p.127).

Amongst the prescribed psychometric tests that failed to inspire confidence were those standardised on American populations (virtually all of those on the current SASC list):

I think it is increasingly difficult to rely on tests that are normed in the US.

I have some reservations about tests such as WRIT, and to a lesser degree WRAT, where there is a strong cultural bias.

Others felt that the Professional Association of Teachers of Students with Specific Learning Difficulties (PATOSS), one of the professional organisations charged with the responsibility of authorising practicing

certificates for specialist teachers, was eroding the professionalism of assessors by insisting on too rigid a dependence on statistical evidence at the expense of the assessor's experienced judgement:

I feel PATOSS are taking the professionalism of assessors away.

There is an increasing emphasis on statistical rigour in diagnostic assessment. In my professional capacity I frequently see, and sometimes need to feed back or make recommendations on, reports that I do not consider to be consistent with dyslexia on any level. As a passionate believer in dyslexia I don't think enough emphasis is placed on recognising when it isn't.

Another assessor, who had used her considerable professional experience to conclude that a student was not dyslexic, had her decision queried by PATOSS, and her application for practicing certificate renewal therefore rejected:

. . . my conclusion was not accepted by PATOSS. I was asked to reconsider my diagnosis on the grounds that if I had compared the test confidence intervals I would have identified significant discrepancies between his [the student's] nonverbal ability and achievement in literacy skills that could have constituted a robust argument for a conclusion of SpLD. I was required to send in another report (where I made certain I had a classic dyslexic!).

Nevertheless, some assessors made comments, also exemplified elsewhere (pp.131-132) that implied their professional confidence in their practice was so secure it allowed them to consider a label of dyslexia as effectively irrelevant:

In an ideal world the term dyslexia might hardly be needed. People function differently and we should welcome their differences. The term dyslexia is useful (and necessary) in order to provide individuals with an avenue for support into our educational system.

Assessment is useful in providing a picture of barriers to learning. It can help the learner understand his/her strengths and difficulties and provide information that will help those who teach. The label that becomes attached serves only to fulfill its limited purpose.

Distinguishing biological from environmental causes

Gauging and evaluating the effects of environmental factors on a student's presenting difficulties with regard to a specific learning difficulty is an area of assessment practice around which there is much variance, as has already been noted in the analysis and discussion of the relevant data around research questions 1(a) and 1(b), above.

The 2005 DfES Guidelines advise assessors that persisting literacy difficulties that are entirely attributable to environmental factors would not be appropriately diagnosed as a specific learning difficulty. Assessors are thus directed to tease apart possible causes of dyslexia (DfES, 2005). Yet the data from this section of the survey (Figure 4, D4, Appendices, p.53) imply that over 40% of the participants do not feel confident in being able to tease out student difficulties that are "entirely attributable" to environmental factors, such as educational experience and opportunities for learning:

I sometimes find it difficult to distinguish between poor educational (and social) experience/opportunities and difficulties resulting from SpLDs – e.g. in terms of language use, expressive language skills, general knowledge, study skills etc.

Environmental factors make the student look like they have dyslexia on the day of the assessment - it is not really possible to tease these out in a one-off assessment.

It is extremely difficult to determine whether mature students, and particularly those from socio-economically disadvantaged backgrounds, have an underlying difficulty or educational disadvantage, particularly where those students request a screening within the first year, and sometimes within the first weeks of HE.

There are occasions when what looks like a dyslexic profile is due to other factors but then it is not a dyslexic profile, of course - just looking similar. Sometimes the difficulties are so overlapping it is hard to pinpoint exactly which is which.

Frith (1999) expresses confidence in the cognitive level of processing to differentiate between poor literacy skills due to an inherent difference related to some aspect of biological make-up and those due to environmental factors. Yet even she recognises, in keeping with other research evidence (Fletcher et al., 1994; Beaton et al., 1997; Stanovich, 2005) that environmental factors, such as poor reading instruction, can affect the cognitive level of functioning as well as the more obvious attainment scores:

Cognitive theories . . . have to systematically take account of environmental factors that influence behaviour (Frith, 1999, p.195)

Views of the more confident individuals among the sample of assessors might be represented by the summative comment of the participant below:

Generally, it is possible to disentangle literacy difficulties arising predominantly from environmental factors with careful history taking and good use and interpretation of appropriate psychometrics. This is not to say that literacy difficulties arising from other causes should not be supported just as strongly but it is important to identify the cause and come up with the right support that addresses the underlying issue.

Nevertheless, it appears that a considerable percentage of other participants do struggle with differential diagnosis, and have difficulty distinguishing specific from general and largely environmentally caused learning difficulties. Many, unlike the last quoted individual, are of the opinion that the cause, in terms of diagnosis, is irrelevant – what matters is obtaining support for an individual student, even if this means assigning the label “dyslexic” pragmatically, as the following participant subtly intimates:

In my opinion, the issue with respect to a diagnosis is fundamentally related to how it affects someone's access to reading, writing, organising and planning. Further additional support and funding is related to having a diagnosis. Therefore it is important to not be affected by the surrounding aspects, which may give a reason for the status of a given person, but will reduce the likelihood of the relevant support, which may be required whatever the reason.

In keeping with other statistical trends observed in the data, the educational psychologists were more inclined at the group level, than were specialist teachers, to regard environmental factors as a cause of dyslexia (Table 21, C9, Appendices p.41). They were also less likely to think of the DfES guidelines' descriptive definition as helpful (Table 21, D1, Appendices, p.41), and more likely to consider the standard diagnostic criteria as too diverse (Table 21, D8, Appendices, p.41). It seems clear that dyslexia assessors, particularly those working with higher education students, hold a range of different assumptions about the nature of dyslexia, its causes, whether it can be reliably identified, as well as the ethical issues around the rights of different individuals to additional provision.

Differentiating “dyslexia” from poor reading and study skills due to environmental factors was a major worry at the end of the last century when researchers first began to turn their attention towards the assessment of dyslexia in higher education students: twenty years later, neither research nor practice has led to any reliable formal resolution of the problem.

DYSLEXIA AND DISABILITY

Question 2(a): Disability status of dyslexic students

“Disability”, “difference”, “difficulty or “disadvantage”

The quantified and qualitative data from this section of the survey of assessors reflects the participants' uncertainty and confusion around both the concept of disability in general and the disability status of dyslexic students in particular.

A large 85% plus majority of participants agreed (32% strongly) that the term “disability”, like “dyslexia”, referred to a continuum of learner differences (Figure 5, E2, Appendices p.54; Table 8, p.16). Such a common-sense trend might seem consistent with everyday observation, research positions and the experience of dyslexia assessment practice. It does, though, disguise a widespread tendency amongst the group (evidenced in some of the clarificatory comments as well as other quantified data) to confuse the concepts of disability, difficulty and difference - a confusion inherent not only in the perceptions of dyslexia assessors who took part in the study, but also in the relevant legislative policy and institutional disability provision (Chapter 2, pp. 97-98).

The survey data were collected “pre-Willetts”, before the then Minister for Business, Innovation and Skills announced, in April 2014, that diagnostic evidence for SpLDs used as eligibility for disability provision, the Disabled Students Allowance (DSA), needed to meet the criteria for “disability” as outlined in the Equality Act 2010. Previously, higher education students with a diagnosis of dyslexia did not have to meet the conditions of the Equality Act’s definition to be eligible for DSA provision (Student Loans Company, 2012). Such an historical fact may be responsible for what appears to be a very low rate of awareness amongst the sample assessors concerning the nature of the legal disability status of dyslexic students (Figure 6, F4, Appendices, p.54). Additionally, this low awareness, or possibly lack of differentiation between “disability”, “difficulty” and “difference”, may have been influenced by a widespread assumption, at the policy level, that all dyslexic students are “disabled”, as is witnessed in such students being included in HEFCE disability statistics (based on self-disclosure), most research on “disabled” students, and in routinely being awarded generic reasonable adjustments like extra time in examinations.

Pragmatic acceptance of “disability” status

The confusion surrounding assessors’ opinions as to the disability status of dyslexic students is further illustrated in their responses to the survey item soliciting their opinions on the appropriateness of dyslexia being recognised

as a disability by the Equality Act 2010. The analysed quantified data indicate that nearly three quarters of the sample group approved (35% “strongly) of this legal status being awarded to dyslexia (Figure 5, E1, Appendices, p.54). However, their reasons for DOIng so, intimated in many of the comments, make little mention of the severity of students’ difficulties substantially affecting their equal right of access to higher education, as expected and indeed required by the Equality Act’s definition of disability. Several assessors were at pains to qualify their responses with explanations like those illustrated in the following comments:

I have agreed that it is right that the Equality Act recognizes dyslexia as a disability only because this is a means of addressing a potential barrier to learning.

It is right that the Equality Act 2010 recognizes dyslexia as a disability... only because it establishes rights in law. I am not sure I consider it as a disability.

Hinted at in the above comments is a begrudging pragmatic acceptance of legal disability status for dyslexia as a means of obtaining necessary resources for students who need them:

I often find myself explaining to students that dyslexia crept into the 'disability' category in order to gain funding for it.

Discomfort with semantic connotations of “disability”

Assessors’ disquiet around the disability status of dyslexic students appeared to have much to do with the everyday, socially constructed semantic connotations of the term “disability” - connotations that many assessors did not associate with the difficulties or processing differences of relatively able, and in some cases academically talented, dyslexic students. Over 50% of the group agreed that “disability” was a demeaning and inaccurate way of referring to what they construed as a different or neuro-diverse way of processing information (Figure 5, E3, Appendices, p.54):

Dyslexia is not a disability; it is an input/output difference in the domains of reading and writing . . . Humans are diverse in a myriad of ways, but difference does not necessarily equate to disability

Dislike the term 'disability' when applied to dyslexia. Prefer 'difference'.

Rather than a disability I would rather refer to dyslexia as a difficulty, or possibly a difference

I don't like how learners with dyslexia/SpLD are labelled as 'disabled'

Equality Act much better name than DDA - and it is a shame that universities cannot move away from the Disability word.

One assessor, herself dyslexic, suggested that rather than be placed on a continuum of disability, dyslexia should be a separate category of, presumably, learning difficulty, but one that is put into perspective by being relative:

I think dyslexia or SpLD should be a separate category [of disability] . . . I am dyslexic, I am not disabled, it is just that I may not do some things at the same speed as many others of my ability. However I do things a lot quicker than others of a lower ability - does that make them disabled?

Many assessors' unease with reference to the disability status of dyslexic students is possibly a reflection of their rejection of the medical model of dyslexia, and of the associated perceived "disablist" and disempowering terminology that inevitably accompanies it. Such unease is illustrated in the strong, critical sentiments expressed by the following educational psychologist, who cited both Illych and Foucault in support of his/her similar damnatory position on the seeming medicalization of human differences:

The legal perspective [of dyslexia] is debilitated by the 'medical model' perspective of 'dyslexia', which is adopted by those

'experts' who hold the power to define it. I think it legitimate to ask who gains most from the label of 'dyslexia': the labellers or the labelled? It is my view that it is the former (Illych -'Disabling Professions' and Foucault's perspective) . . . I find it tragic that educational psychologists still do not recognise that the people with whom we are working are hugely influenced by the language which is used and, thereby, that the people we are working with come to use about themselves. The language we use becomes us. It is especially damaging when that language doesn't 'externalise' the individual from the 'problem'.

Social model of disability

Whilst 40% of assessors who took part in the survey appeared to be in sympathy with the social model of dyslexia disability (Figure 5, E5, Appendices, p.54), the position implied in the comment quoted above, those amongst them who expressed their views in the clarificatory comments generally did so less stridently than the above quoted participant, accepting the concept of “disability” but, like the above participant, preferring to “externalise” the individual from the “problem”:

I think of “disabled” as someone being 'disabled by' the views, rules etc. of other people, institutions etc. With appropriate tuition, support, aids etc. they need not be disabled

There is, in my view, no doubt that the institutions, in various ways, create the 'disability' for the wonderful variety of learning rates among students.

Others viewed institutions' literacy expectations as irrelevant to the consideration of some students' literacy difficulties:

Some students I have seen would struggle to succeed academically even if the institution changed radically.

. . . although institutions are using alternative assessments, it is ultimately a literacy enterprise and [students] enter it knowing this.

However, the medical model of disability was not rejected completely by the survey sample. In line with the current opinions of some disability theorists, 50% of participants were either “unsure” about, or else disagreed with, the social theory of dyslexia, implying that dyslexic students’ difficulties had an internal, biological cause and that their difficulties could not be completely externalised:

Dyslexic students are 'impaired' regardless of academic expectations although I believe that the teaching style, environment and the ability for teachers/lecturers to 'notice and adjust' are key elements for successful outcomes

It depends on the individual student, their course choice, attitude and level of awareness. I am not a strong supporter of the strong social model of disability.

Perhaps contingent with the recognition and acceptance of “difficulties” that can never be completely addressed by altered societal expectations is the opinion that legal disability recognition of dyslexia has not removed its stigma (Figure 5, E4, Appendices p.54). Half the assessors surveyed were either unsure or else disagreed with this common assumption (Mortimore & Crozier, 2006; Madriaga et al., 2011):

Legal recognition has helped but we still have the discrimination from those bigots who think it is all an excuse and we could do it if we really wanted to. Not as bad as it was but still very present.

On the question of whether the inclusion of dyslexia as a disability has freed individuals from discrimination, although I think things have improved, particularly in the higher education sector, sadly, discrimination has not yet been eliminated.

Legal recognition of dyslexia as a disability has not freed affected individuals from humiliating discrimination; they continue to face discrimination, particularly in our schools.

A range of different and often ambivalent opinions

It is clear that the views on the relationship between dyslexia assessors' concepts of disability and dyslexia in the higher education context encompass a range of different and often ambivalent opinions. These will inevitably affect the effectiveness of important areas of disability policy and provision that emanate from assessors' practice. In the words of two of the survey's participants:

Further work is required by the government to ensure we meet the medical and social models of 'disability'. The word creates a positive platform to access funding, but equally can negate the self-esteem of the students and attitude of the HEIs.

I am aware that many dyslexic students do not consider themselves as disabled and this can be upsetting term for them, but it has been an important step in ensuring that people with dyslexia have reasonable adjustments made for them until things move on further.

It would appear that at least some assessors are of the opinion that the disability status of dyslexic students, regarding the legislation and the protection and provision that it offers, remains an unresolved issue.

Section 3:Equity Issues and Reasonable Adjustments

Question 3(a): Knowledge of current disability legislation

Knowledge of legislation

Assessors' group level confusion around the disability status of dyslexic students can be partly accounted for by what appears to be a lack of familiarity with the relevant legislation. Only 12% of participants agreed that dyslexic students are considered disabled within the framework of the Equality Act 2010 because of a diagnosed mental impairment (Figure 6, F4, Appendices, p.55). Some participants even reacted with veiled hostility and disbelief towards the survey's use of the Act's terminology, "mental impairment":

I don't like the word 'mental impairment' but it is in the legislation.

Is the term "mental Impairment" used in the Equality Act? I didn't know!

I am not 100% sure why you use the term 'diagnosed mental impairment' on this page.

Not surprisingly, considering the historical anomaly regarding the disability status of dyslexic students and their eligibility for disability provision from the Disabled Students Allowance (DSA) (Chapter 2, pp. 97-98) only 7% of the survey group was aware, at the time, that legal disability status was not necessary for DSA eligibility (Figure 6, F1, Appendices, p.55). Presumably, the majority of the group either assumed that all dyslexic students were legally disabled, or else were unsure.

Another notable instance of legislation ignorance was the assessor group's response to the survey item gauging their knowledge of the purpose of disability legislation for dyslexic students (Figure 6, F2, Appendices p.55); although, to be fair, this result could be partly due to a misinterpretation of semantic subtlety contained within the survey item. Over 70% of the group agreed that the Equality Act 2010 strives to maximise the academic success of dyslexic students, rather than simply to ensure them equality of access to higher education. Whilst there is a widespread but disputed assumption that dyslexic students ought to be enabled to reach their academic potential (Kelman & Lester, 1997; Stanovich, 1999) this is not, strictly speaking, the main purpose of current equality legislation.

Assessors' knowledge of the legal eligibility of dyslexic students for reasonable adjustments was also insecure at the group level of analysis. Just over 40% of participants seemed to be aware that higher education institutions (HEIs) had a legal obligation to make reasonable adjustments only for those dyslexic students who met the Equality Act's criteria for disability (Figure 6, F5, Appendices, p.55). In contrast, 70% of the sample group were secure in the knowledge that dyslexic students did not need a

DSA to be eligible for reasonable adjustments (Figure 6, F3, Appendices, p.55).

Question 3(b): Fairness of reasonable adjustments

Decisions concerning the provision and nature of reasonable adjustments for disabled students are the responsibility of individual HEIs. However, in making such decisions for dyslexic students, it is customary for universities to take as evidence of need the information contained in assessors' diagnostic reports. Access for the student to reasonable adjustments is one of the important outcomes of assessors' practice in the higher education context, and one around which they can be expected to hold knowledgeable as well as ethical views.

RAs should be based on individual rather than generic needs

In line with much research opinion around the inappropriateness of generic reasonable adjustments for categorically classified specific learning difficulties like dyslexia (Mortimore & Crozier, 2006; Healey et al., 2006; Madriaga et al., 2010), there was almost unanimous agreement amongst the assessors who took part in the survey (93%) that reasonable adjustments ought to be made on the basis of individual needs (Figure 7, F7, Appendices, p.56). One participant illustrated the potential "unfairness" of not individualising reasonable adjustments via the following anecdote:

An example was a student who had illegible handwriting but typed at 70 wpm - he was recommended [by a Needs Assessor] voice recognition software in exams and extra time. Had this been implemented it would have been unfair to others - when I discussed it with the student he was quite happy to have the use of a computer and no extra time as his typing speed made up for the slightly slower processing speed. Every adjustment has to be justified by the student's profile of results.

Another assessor expressed equally strong feelings on the matter by stressing that the institution within which he/she was employed also attempted, as a matter of good practice, to match reasonable adjustments to individual needs:

I don't know what goes on elsewhere, but we try to make sure only those that 'deserve' exam arrangements get them.

Nevertheless, despite the opinions of the assessors in this survey sample, based on their professional recognition of the heterogeneous needs of diagnosed dyslexic higher education students, generic reasonable adjustments such as 25% extra time in exams are anecdotally reported to be the norm in most universities (Riddell & Weedon, 2006). The most obvious reason for this is most likely to be administrative efficiency, as the following participant intimated:

I think a line has to be drawn somewhere or the applying of reasonable adjustments becomes too convoluted and confusing.

Tension between dimensional and categorical concepts

Institutional failure to routinely match reasonable adjustments to individual needs could also have something to do with the tensions created between research and practitioner recognition of the dimensional nature of dyslexia difficulties, and legislative requirement that a categorical binary divide be made between disability and non-disability, as is astutely observed in the comments below:

The concept of 'reasonable' causes huge difficulties for the current perspective of 'dyslexia' as an 'all or nothing' 'condition'

[T]here will eventually need to be dialogue between the diagnosis-driven model in HE (which certainly does support many students way beyond the demands of the Equality Act) and the score-driven JCQ model.

Fairness of reasonable adjustments

Despite strong agreement amongst assessors that reasonable adjustments ought to be matched to individual needs, rather than generically allowed for diagnostic categories, their opinions on the “fairness” of such adjustments were more divided. Over 50% of the group (Figure 7, F8, Appendices, p.56), and significantly more of it educational psychologists (Table 21, Appendices,

F8, p.41) agreed that it seemed discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background. Concern has been expressed in the literature about the way in which disability provision for HE students privileges some groups over others, (Chanock, 2007), and in the compulsory educational sector, backed up with extensive research, it has led to policy change in the way resources are allocated to struggling young readers. If the comment from one participant is generalizable, then the subject is similarly debated in many HEIs:

[The] question is a hotly debated subject here

However, individuals in the other 50% of the group made most of the clarificatory comments re the prioritising of dyslexia for disability provision. These were either unsure or else disagreed that current policies in higher education are discriminatory and unfair. Such individuals appeared keen to emphasise the difference between a medical impairment resulting in specific difficulties and deficient skills due to a host of other causes:

Dyslexia is genuine difficulty due to brain wiring which can adversely affect students especially in timed conditions and will always be present. The other two disadvantages will disappear with appropriate training and experience.

Confusing deprivation with disability is not helpful. Universities should ensure that deprived students have the right preparation for universities - Access courses having been excellent are now a bit suspect - I have seen very inadequate students passed.

Couched in the above comments is the implicit opinion that those with academic difficulties due to socio-cultural or ethnic background do not really belong in higher education until such times as they have managed to address their attainment and skills deficits. Another assessor extended this opinion to refer to all higher education students with sub-standard literacy skills, including dyslexic students, placing a different interpretation on the concept of fairness as it applies to reasonable adjustments. He/she appears to be

suggesting that reasonable adjustments may not be fair to either prospective employers or to the students allowed to use them:

The reality is that it is reasonable for employers to expect a certain level of literacy from the holder of a degree, and extending RAs to anyone who simply doesn't have the literacy skills to succeed in an academic environment is not levelling any playing fields but raising unrealistic expectations

Surprisingly, there were no specific clarificatory comments on the item soliciting assessors' opinions on whether or not reasonable adjustments for dyslexic students were fair to other non-disadvantaged students (Figure 7, F6, Appendices, p.56). Only 30% of the group agreed that they could be unfair, whilst over 50% thought that they were fair. Research opinion is similarly divided, with some of it alleging that reasonable adjustments, in altering the assessment criteria, give some dyslexic students an unfair advantage in assessment procedures that are usually competitive and often for very high stakes (Kelman & Lester, 1997; Sharpe & Earle, 2000; Davis, 2009).

Views on RAs shaped by many different variables

Overall, most assessors surveyed for this study appeared to be of the opinion that reasonable adjustments commonly made for dyslexic students in higher education could be unfair to other students, particularly if applied generically on the basis of diagnostic category rather than on individual need. Nevertheless, both the quantified data and the clarificatory comments on it suggested that there were several different variables at work, at both the group and individual level, which shaped and qualified these opinions. The effect of such variables on assessors' professional practice, together with the consequences that follow from it, will be explored further in this study.

INCLUSIVE PRACTICES

Question 4(a): Replacement of bespoke by inclusive provision

Limitations of survey method of data collection

A cautionary observation has already been made in the introduction to this data analysis about how quantified survey data can lead to superficial interpretations of what are essentially complex variables (pp. 141-143). This observation is particularly pertinent with regards to this section of the survey that attempted to gauge assessors' opinions on the viability of bespoke disability provision for dyslexic students being replaced by institutional fully inclusive practices. A cursory inspection of the quantified data (Figure 8, Appendices, p.56) appears to suggest some inconsistency in the opinions of assessors, at the group level; the appended clarificatory comments make it apparent that many assessors' professionally acquired knowledge of the heterogeneity of dyslexic students prevented them from responding as they may have wished to the questionnaire items that referred to "dyslexic students" in a categorical general sense. What, then, appears to be inconsistency in opinions can perhaps be partly explained by the limitation placed on participants by, and their frustration with, the categorical terminology and inflexibility of the fixed format response options:

I cannot generalise about the nature of support needed for dyslexics because their needs are personal and diverse. Some dyslexics do need specific, targeted specialist support; others might have their needs met by high-level generic support.

I am aware that my responses to this section are somewhat contradictory. I think this is because I see a big difference between severe disabling dyslexia and people with some milder dyslexia characteristics who are now being diagnosed as dyslexic and are qualifying for the same provision.

I think in the cases where dyslexia or dyspraxia are severe then individualised provision is needed but most of the people I assess are only mildly dyslexic. I would answer differently to many of these questions if we were particularly talking about

severe dyslexia but the majority of the time we are talking about a mild form of dyslexia.

All dyslexic learners are different, it is very hard to generalise. Solutions need to be matched to their quantified and defined needs.

Replace DSAs with fully inclusive practices

Notwithstanding the above expressed provisos, the quantified data and clarificatory comments taken together did suggest that at least half of the assessors surveyed (one quarter of these “strongly”) would welcome the replacement of DSAs and reasonable adjustments specifically for dyslexic students with institution-wide provision flexible enough to cater for the needs of all students (Figure 8, G1, Appendices p.57; Table 10, Appendices, p.35). Educational psychologists as a group were significantly more inclined to embrace this view (Table 21, G1, Appendices, p.41), as they were for others connected with the subject (Table 21, G3, G4, G6, G7, Appendices, p.41):

I would love to see inclusive practice expanded and DSA support reserved for particularly severe/complex cases.

I think that ideally we should be accepting of neurodiversity and teachers should meet the needs of all their students through inclusive practice.

Most institutions are working hard to make environments more inclusive and to remove barriers to learning - I am on a working group at the University of Manchester that is trying to introduce University wide teaching practices that will support more students without the need for assessments.

Some assessors’ prefaced their positive attitudes towards fully inclusive practice with cautionary references to an ideal world:

In an ideal world all the above could work together to ensure every student reaches their potential through good teaching

skills, targeted support and a more positive attitude to learning differences by society in general.

The benefits of a fully inclusive system were not seen as confined to students alone; one assessor was of the opinion that academics also stood to gain:

A dyslexia-friendly institution would cater for all dyslexia needs in a generic way - it would also help academics become better communicators and reach a wider audience in their own publications and public engagement

Retain specialist support for severe dyslexia

Nevertheless, although institution-wide inclusive practices were seen by most assessors (90%, 50% “strongly”) as a positive development for all students, including dyslexic students (Figure 8, G2, Appendices, p.57; Table 10, Appendices, p.35), over 80% of the group surveyed indicated strong feelings with regards to retaining specialist support for at least some dyslexic students, particularly those perceived to be most severely affected (Figure 8, G4, Appendices p.57). This opinion was similarly implied, with varying degrees of strength, in both group and individual responses to related survey items e.g. G7, G3, G6 (Appendices, p.57):

It seems that my replies are contradictory and indeed I am in two minds over these questions. I think that institution wide provision that is flexible enough to cater for the needs would be ideal. My problem is that for the severely dyslexic students I do believe that they benefit and require more individual and specific specialised support. I think that removing this would place them at a disadvantage within the system. However, those with mild dyslexia are probably at not more disadvantage than many others without a diagnosed SpLD.

[It] depends on the severity of the dyslexia - mild dyslexia may fit well in to provision for all but severe dyslexics need one to one help.

Moving towards generic adjustments would discriminate against students with marked and severe difficulties. We would be back

to system where those students were denied the opportunity to engage with higher education and become disadvantaged. Students with milder difficulties and for whom literacy difficulties arise as a result of other factors (educational background, ESL, stress) may benefit from generic support though this will always be second-best.

I have been a specialist tutor for HE students and what they often want is very generic indeed. However, it is better if they can be guided towards more metacognitive tailored approaches, so I wouldn't want to see unqualified tutors used.

Out of the 20% of assessors that was “unsure” or disagreed that dyslexic students require specialist support for individual needs, a significant proportion, with a moderate to large effect size, was educational psychologists, rather than specialist teachers (Table 21, G4, Appendices p.41).

Criticism of specialist support

Specialist support for dyslexic higher education students, together with the “industries” that have sprung up around it, has been much criticised in the literature (Garner, 2004; Soler, 2009; Elliott & Grigorenko, 2014). One assessor was honest enough to add ammunition to such critics' arguments:

As a specialist tutor as well as freelance assessor, I have a vested interest in arguing that we should continue to support dyslexic students!

Another participant was more anxious to distance him/herself from what he/she perceived as self-interested practices of some of his/her colleagues:

It has been my experience that one particular group which has been very uncomfortable with this and, at the very least, done nothing to support such inclusive moves has been the 'dyslexia experts' because such inclusive provision removes the need for their 'specialism'/'expertness' . . . It mirrors the way special schools worked hard to sabotage inclusive education in the pre-16 sector.

Another criticism of specialist support and provision for dyslexic students is that it “ghettoises” such students by drawing attention to their differences (Mortimore & Crozier, 2006; Madriaga et al., 2011). Few assessors who took part in the survey agreed with this view, and nearly 60% disagreed (Figure 8, G5, Appendices, p.57).

DSAs a necessary source of funding for severely affected

Although 50% of the surveyed group agreed that Disabled Students Allowances (DSAs) should be replaced by flexible, fully inclusive practices (Figure 8, G1, Appendices, p.57), some assessors thought that they needed to be retained, at least for the most severely affected dyslexics, in order to guarantee and fund specialist support. The fact that we do not live in an ideal world was again emphasised as a comment on the necessity of this source of revenue, as was the currently limited resources of HEIs:

In an ideal world all students should be treated as individuals with their own individual learning needs, but unfortunately that is not the situation we live in. At least the DSA provides individual support for some students.

[Replacement of DSAs with inclusive practices], if put into effect, would bankrupt most universities! My responses to 2 and 3 seem to be contradictory, but that is because of the lack of resources.

Interestingly, despite this survey having been carried out prior to the Department for Business, Innovation and Skills (BIS) announcing its intention to “modernise” DSA provision, effectively removing it from most dyslexic students except those with the most complex needs, and placing more pressure on universities to make their practices fully inclusive, the sentiments expressed by at least half of the participants in this survey group of assessors appear to reflect those expounded in the documentation justifying the Government’s policy change (BIS,2014).

Question 4(b): Reasons for attitudes on inclusion

Separating participants' attitudes towards replacing bespoke provision for dyslexic students with institution-wide inclusionary provision, from their reasons for such attitudes, has proved difficult. The above analysis of the survey data thus combines these two factors. In summary, though, the reasons for each assessor's attitude can probably be explained by their individual professional background and experience, as well as by their own political views on the purpose and nature of higher education. Not all of these variables emerged from the survey data, but those that did included the heterogeneous nature of assessed dyslexic students, concerns about the availability of resources, and professionals' self-interested desire to maintain the source of their livelihood. Out of the last three mentioned factors, assessors' privileged professional knowledge of the dimensional nature of dyslexia, as variously assessed and experienced by the students with whom they work, is perhaps the chief determinant of their individual considered views on inclusion, and possibly the main reason for the diversity amongst such views.

4.2 INTERVIEW DATA

Data from the eight individual assessors interviewed provided a more detailed insight into three of the main areas of seeming controversy to emerge from the survey data. It is here interpretively analysed and discussed around these three research issues: the discrepancy concept, the disability status of dyslexic students and the effect of environmental factors on diagnosis.

Research Issue 1: the discrepancy concept

The PATOSS guidelines on best practice for assessment refer to the concept of discrepancy as “a thorny issue” but nevertheless advise: “the value of discrepancy work remains. Indeed it is at the heart of the matter – we are . . . looking for that classic spiky profile” (PATOSS, 2010). Quantitative analysis of the relevant survey data (Figure 2, B11, B12, Appendices, p.51; Figure 3,

C4, Appendices p.52) appeared to confirm that, at the group level, the majority of assessors of dyslexic HE students agreed. At the individual level, those assessors interviewed also revealed that some version of the discrepancy concept was central to their different practice-based understandings of dyslexia or, where dyslexia was not the preferred term for the difficulties identified, specific learning difficulty.

Importance of cognitive ability

The choice of scenarios around which the interviews were contextualised, together with the reasoning behind this aspect of the study's methodology, has been detailed in Chapter 3, pp.122-124. It was anticipated that presenting assessor interviewees with what appeared to be two challenging cases – a previously high achieving student with seemingly competent literacy skills from a Russell Group university, and a low achieving student with poor literacy skills from a post-92 university – would encourage each assessor to reveal what part intelligence or cognitive ability played in their concept of dyslexia. The data implied that it plays a major role, but not only for the purpose of assigning a label due to cognitive ability's historical connection with specificity and discrepancy.

All the interviewees routinely used a standardised test of cognitive ability, either the Weschler Adult Intelligence Scale (WAIS) or the Wide Range Intelligence Test (WRIT); most used it both qualitatively and quantitatively to help inform judgements about diagnostic conclusions. The exception was a senior educational psychologist working exclusively for a local authority (EP4), who was particularly reluctant to use such tests quantitatively:

I would only do it [test of cognitive ability] to look at the fact of motivational factors in terms of how this young lady responds to a problem-solving situation. So I would be looking at things like does she give up easily? When the task becomes challenging what does she do? Does she learn from previous aspects of a particular task? Does she generalise? What's her social reciprocity like in terms of the interaction with the assessor? So I would be looking for those factors because at the end of the

day if I were to do a cognitive assessment I'd get a score. What would the score tell me? Not very much.

(EP4)

EP4, although very experienced in assessing students at the pre-university stage of education, did not yet provide diagnostic assessments for higher education statutory disability provision, but was anticipating that this might be part of her role when details of the local authority's responsibilities for the new Health and Social Care Plans for 18-25 year olds were made more explicit. Unlike the other assessors interviewed, EP4 was exclusively committed to what appears to be a local authority dynamic assessment model:

The only reason I would get involved in such a scenario would be to find out how we could help this young lady and what were the factors that were preventing her from achieving.

(EP4)

Each of the other interviewees, like EP4, used their professional experience to gather a wealth of information qualitatively from observation of performance on standardised tests of cognitive ability, but admitted either explicitly or implicitly, that their diagnostic conclusions were also influenced, to varying degrees, by standardised ability scores.

EP3, when asked what was his rationale for measuring verbal and non-verbal ability, implicitly recognised the controversy around the issue in his carefully guarded cryptic reply:

The key question! It depends whose camp you're coming from really, doesn't it?

When encouraged to describe the rationale from his "camp", EP3 referred to the way in which he used the WAIS subtests to gauge the important "behind the scenes skills":

Some of the non-verbal stuff, for example, can be indicative of quite serious visual processing difficulties, visual spatial problems.

Qualitative use of cognitive ability tests

EP1 and EP2 also drew on their experience to use the WAIS subtests qualitatively. EP1 illustrated with reference to the WAIS verbal subtests:

If you're getting a very high Similarities score, that's showing some facility with language structure. Let's suppose that's a 12 for the sake of argument, and then you get 7 on the Vocabulary, that's telling you something because the average would be less than 10. That's telling you something about their experiences, economic class, a whole range of things that would need further explanation. And if it's the other way round, that might be telling you about a good middle class family who's really given their child lots and lots of vocabulary and experiences and information, but they can't actually work it all out for themselves. Again I'm talking in stereotypes, but...

(EP1)

EP2 exemplified her diagnostic use of the WAIS comprehension subtest:

I often include comprehension, although it's not one of the key core sub tests [of the WAIS], because I find it gives me interesting information on the students – their sort of background and their thinking and their ability to interact with society.

(EP2).

The specialist teachers interviewed used the WRIT in much the same way. ST2 expressed views on its use very similar to those cited by EP4, above:

I do like seeing how they solve things verbally and non-verbally, I think that part is useful . . . I've got to be looking for those sorts of below average scores, but myself, what I'm looking at is how they can manipulate information, what they can do with it in terms of processing because I think that's what they've got to do

for exams. And also really they have to manipulate it to do the critical aspects of university writing.

(ST2)

ST3, although very aware of the WRIT's limitations, nevertheless saw it as a useful qualitative assessment tool, as did ST2:

The WRIT is dated, there are flaws in it, I still think it tells us more than we give it credit for, qualitatively . . . Is this student comfortable, more comfortable with visual than verbal [processing]? . . . the Verbal Analogies is jolly good for teasing out real word retrieval issues, much better than a RAN test, in my opinion.

(ST3)

I do take notice of the scores as well, but it's used diagnostically. I really take notice – you always put the qualitative in, how they did it, that's always included.

(ST4)

Quantitative use of cognitive ability tests as discrepancy yardstick

Most of the assessors interviewed, like ST4, took a lot of notice of the underlying ability scores. EP3 made it clear that, in his view, where the assessment of “dyslexia” *per se* was concerned, underlying ability was irrelevant:

If you can't read and spell and you've had access to good education, then that's a good enough definition of dyslexia for me.

(EP3)

However, EP3 also made it clear that he would take cognitive ability into account in coming to any conclusions about a student's difficulties, because in his experience there was a qualitative difference between a dyslexic student with an ability/attainment discrepancy and a dyslexic student without this discrepancy:

If I saw somebody who, across five, six, seven, or eight different things which are not directly related to literacy DOIng extremely well, then there would be an expectation, there is a correlation, an expectation that they should be able to access their course accordingly. If I see a student, and probably the next one we're going to talk about, who may not do so well on all of that stuff, and none the less still has the same difficulties with basic literacy, I would still conclude the same sort of thing in terms of a dyslexic type profile, but I would also question whether they would need to discuss with their tutor their ability to meet the academic expectations of their course.

(EP3)

EP3 did not work with a syndrome concept of dyslexia; nevertheless he was still looking at the same combination of abilities and difficulties as those assessors who did work with this concept, only he referred to them as “specific learning difficulties”:

I may conclude that she's not dyslexic, however I might conclude that there are issues to do with attention deficit problems, visual processing difficulties, the broader specific learning difficulties of say reading speed, reading comprehension, visual tracking.

(EP3)

Even EP4 who, like EP3, regarded cognitive ability as irrelevant when it came to an understanding of dyslexia, indicated that general ability was an important influence on her diagnostic decisions. Her definition of dyslexia was in line with the Rose (2009) one:

My diagnosis for dyslexia would be based on difficulties at the word level, in reading, sort of more the phonological aspect, in spite of very intensive, repeated instructions, support, etc. over a period of time.

(EP4)

However, EP4 did differentiate, in some way, between specific and general (flat psychometric profile) learning difficulties:

It wouldn't be ethically right or professionally right for me to say that his difficulties were specific if they weren't, if they [form a] generally flat profile then they're not specific.

(EP4)

Whilst the positions about dyslexia held by EP3 and EP4 are logically consistent with regards to their own practices, and in line with much current research findings and opinion on the nature of dyslexia, they do, when compared with those of the other six assessors interviewed, illustrate the confusion inherent in what might be little more than semantic wrangling over classificatory terms.

Some semantic wrangling over classificatory terms was encountered in the other six assessors' references to cognitive ability, to differentiate between a general composite IQ score, in the traditional sense, and the scores from individual subtests of the different intelligence scales:

We never do full scale IQ's, they're irrelevant .

(EP1)

I cannot bear the reliance on IQ, I don't believe in it, I don't like it

(EP2)

I say ability; I don't say IQ.

(ST4)

The use of some measure of cognitive ability as a yardstick against which to measure discrepancies in the diagnosis of dyslexia, though, was seen as necessary. Some assessors accepted this practice reluctantly. ST1, for example, was concerned that one concept of dyslexia could be seen as acceptable in the compulsory education sector where taking cognitive ability into account was a big "no-no", and another concept used in the higher education sector where she perceived that some sort of discrepancy measured against cognitive ability was required. Nevertheless, she acknowledged that:

It seems reasonable to expect someone who is DOIng a degree to be able to . . . have sufficient academic ability in a sense to go on to the course.

(ST1)

EP2 tried not to be influenced by any sort of ability measurement but found this a difficult task in practice:

I mean the trouble is, you know, when you look at a score of say 135 in the verbal and then you've got a non-verbal of say 100 maybe, and then you've got working memory sort of 60 or 70, you know, you are influenced, you try not to be but you can't help it, you think 'Hey this is a bright person,' but I do try not to be.

(EP2)

ST2 liked the reassurance provided by supposedly objective measurements of cognitive ability:

I like them [tests of underlying ability] in a funny way I like them . . . They do give me a reassurance about whether or not this person is... I tend to think people are slightly more capable than they are, that's just my personal tendency, so I like having a marker, a guideline for myself 'oh yes this person is quite capable, quite able. This person is just average, this is where average is in a given population.' So I like them as a marker.

(ST2)

ST3 referred to the advantage and thus the importance of high cognitive ability (perhaps akin to EP3's "qualitative" difference), in allowing an otherwise dyslexic student to develop compensatory strategies to cope with the demands of higher education:

. . . the great dyslexia severity paradox that, you know, the brighter you are, the more severe it looks, but actually the more likely you are to be able to compensate .

(ST3)

ST4 spoke about attainment “expectations” of students, based on an assessment and/or observation of their cognitive ability:

It would be daft not to refer to [in reports]: 'You would expect them to do better...' especially when there's research to say that verbal ability, reading comprehension, vocabulary, are all quite correlated.

(ST4)

ST3 implied her agreement with the significance of underlying ability in providing a yardstick for a discrepancy concept of dyslexia by affirming her commitment to the clause in the British Dyslexia Association's current definition:

I tend to use the BDA 2010 one, which does still say 'May not match up to an individual's other cognitive abilities.

(ST3).

Informal assessment of cognitive ability

Interestingly, and not surprising considering the professional experience of all the assessors interviewed, assessment of cognitive ability was not confined to scores obtained from standardised tests. All the assessors were aware that test scores could be deceptive, and were confident in allowing their observation and judgement to override the scores. EP4 referred to this as “practice-based evidence” as opposed to “evidence-based practice”:

I think we, as educational psychologists, we bang on about evidence-based practice a lot, but there is a movement towards thinking about practice, evidence based on practice, so it's the other way round. . . so it's actually your professional experience, your practice, your knowledge . . . you bring all that into an assessment situation.

(EP4)

ST4 provided an excellent illustration of the way in which practiced-based evidence derived from professional experience can override the “evidence”

from statistically normed tests. She referred to two almost identical profiles used by her in training sessions for assessors:

One was a low ability student, and she really was general learning difficulties across the board, and the other one was very, very dyslexic, had all the visual difficulties, the poor tracking, and English was a second language. Looking at [the score profile] without knowing the students, you'd conclude they were both general learning difficulties. But in the case of the second one, there was a discrepancy. She'd got a degree in her first language, she was holding down a responsible job, when you talked to her she was fast, she was fluent, she was sparky, she was innovative. The other one . . . there was no spark, there was no creativity, the vocabulary was very limited. What she was DOIng was what I would expect from the scores on the page.

(ST4)

ST4 concluded that “you would be daft” not to note the discrepancy, however informally, and that “you can't just go on the scores”. Not always taking cognitive ability scores at face value (in attempting to accrue evidence for a discrepancy involving ability and/or processing deficits) was mentioned by all the assessors interviewed, and will be discussed further in the section of this analysis that focuses on the consideration that each gave to environmental factors.

Discrepancy between ability/attainment and/or ability/processing skills

Despite the explicit, or sometimes implicit, acknowledgement by all the assessors interviewed that some measurement of cognitive ability was integral to their assessment practice, either as a necessary criteria of their concept of dyslexia or else as a marker of what often appeared to be the same thing, specific learning difficulties, most initially bristled or became almost apologetic when the “thorny” subject of discrepancy was brought up:

It's gone out!

(ST4)

I don't hold with the discrepancy model of dyslexia . . . I think the discrepancy model has been discredited long ago.

(EP4)

EP3 retorted with an illustration of the ludicrousness of the discrepancy concept when treated in a strictly statistical sense, as it often was historically:

It's an interesting one that, isn't it, the discrepancy model? Cause if a student scores at the 99th percentile in terms of cognitive skills, and I think something like 97th percentile in terms of reading, there is a significant difference between the two. So if you take it to that extreme . . .

(EP3)

When asked what he would conclude if he did take it to that extreme, EP3 replied wryly:

I'd just say they can read. (EP3)

ST1 admitted that she struggled “with having to find that discrepancy” because she personally leaned towards the concept of dyslexia that did not include discrepancy as a necessary criterion, whilst ST2 admitted confused feelings in the opposite direction:

Over the years as things have moved on in dyslexia I have tried to wean myself further and further from that discrepancy definition. But I'm not free of it, I would not say that I ever make one, a full assessment where I have not tested the cognitive abilities, I probably never ignore that aspect if I'm really honest.

(ST2)

EP2 had no such qualms about expressing her views on the discrepancy concept:

[T]he discrepancy I think is incredibly important, I don't care what is going on in the research areas, I think discrepancies are very important. Not . . . in a damning way, which is why I don't like taking the overall IQ, but because if you find a score in the

verbal of 135 and you find a working memory of, well even if it's 90, that's an enormous difference and that person is going to be under huge pressure and under a lot of stress and anxiety . . . I mean I can't see how theorists can seriously suggest that the deficit model is not working or is not valid . . . as a practitioner it's the most important tool you've got and it accounts for their emotional reactions, their anxiety, their depression, all of this. I just, I get very angry about it!

(EP2)

Other assessors were also very much aware that affective conditions could be associated with a discrepancy between ability and attainment:

Even if a person were one standard deviation below the mean, I would be actually looking also at the impact that that difficulty was having on that young person and their emotional wellbeing. So to me that would be more important than to which side of the normal distribution curve they fell.

(EP4)

One wonders if she's one of these perfectionist girls who has never failed before and suddenly having to re-sit modules is a bit of a shock to the system. So one would need to look at her feeling of sort of self esteem and self regard at the moment and be fairly supportive in the way.

(ST3)

Interpretation of "attainment"

"Attainment", in the context of dyslexia identification in higher education, was not confined to the historical discrepancy concept interpretation of "literacy skills". Although two of the assessors interviewed, as already described, confined their working concept of "dyslexia", *per se*, to difficulty with literacy skills at the word level, the others allowed that the underlying cognitive deficits responsible for "dyslexia" could affect academic attainment in a wider sense, not necessarily evidenced in poor literacy skills. EP1, for example, replied definitively when asked:

Q: So you wouldn't restrict dyslexia to difficulties with reading?

A: No.

(EP1)

ST3 was even more adamant that dyslexia was defined against more than literacy attainment:

If it is **true** dyslexia, which is so much more than a literacy difficulty – Professor bloody Elliot, if it is **true** dyslexia then it can be [so much more than a literacy difficulty] - . . .

(ST3)

Even EP3, who did not regard a student with seemingly good literacy skills as “dyslexic”, conceded that specific learning difficulties could affect attainment in areas other than literacy:

I've seen students who have come out in the top 2% in terms of basic literacy skills, but none the less do have quite significant [problems with] underlying skills, different problems [which presumably affect attainment in areas other than literacy].

(EP3)

Attainment, both in literacy and other relevant academic skills, considered against a measurement, or at least an experienced informal observation, of ability appeared to be central to each assessor’s diagnostic conclusions regarding a student’s difficulties. Nevertheless, the assessors interviewed did not, in line with good practice (Jones & Greenwold, 2010; DfES, 2005) rely exclusively on a classic ability/attainment discrepancy as evidence of a dyslexia or specific learning difficulty diagnosis. More pertinent to the practice of all of them was a discrepancy between aspects of cognitive ability and processing skills deficits, placing the cause of dyslexia firmly in the cognitive domain (Frith, 1999). As ST3 confirmed:

I'm thinking of a within profile discrepancy model based on processing . . . I am not thinking of an IQ versus literacy attainment discrepancy model, no, definitely not.

(ST3)

EP1 also based his diagnosis of dyslexia on an attainment/processing discrepancy:

The big issue for me . . . if we're going down the dyslexic line, is to look essentially for a discrepancy between working memory and/or processing versus the verbal vocabulary, or perceptual skills. So we would need probably some kind of difference, and if you look at the WAIS, the marker would be at least a 15-point difference because figures less than 15 are found in high percentages of the population anyway.

(EP1)

EP1 recognised that there were traditional dyslexic models that are commonly accepted, the major ones being:

Big discrepancies with working memory, big discrepancies with processing speed, major problems in phonological processing.

(EP1)

Processing skills compared with measured ability was key for EP2. In considering a hypothetical diagnosis for the student with poor literacy skills in Scenario 2, EP2 commented:

If he's got poor literacy skills I'm assuming at that stage he would be getting scores of 80 or below, standard scores. So you're looking at that sort of thing. And again, what are his ability scores going to be? I'd be very interested to see because you often get students who have got very poor processing, who actually have quite good ability scores, I mean maybe 110 or whatever, and then very low literacy. So what has been going on throughout his student days or his school days? Again I would be looking for the discrepancy [between ability and processing].

(EP2)

The specialist teacher assessors all mentioned the importance of processing skills being significantly weaker than some aspect of cognitive ability for a diagnosis of dyslexia. ST1 focused on weaknesses in phonological awareness and speed of processing, plus oral short-term memory, as did

ST2. Both, though, were unhappy with the standardised assessments available to them to assess working memory. The ubiquitous backwards digit span, they thought, was not measuring what it is generally assumed to measure:

It's not catching any long-term activation so I don't think it's really showing any capacity for working memory really. It's showing [the ability to manipulate] items in short-term memory . . . but it's not showing what you have to do in HE.
(ST1)

What I'd like to see developed in the ideal world would be [an assessment test] where you have to process academic information. I think that [processing skills] is where we do our poorest job of assessing actually . . . There are so many ways people process information and we look at one tiny speck depending on what test we choose or what tests we're comfortable with, and we could be so far off how they process in some other way or in some general way.
(ST2)

Relative discrepancy – high scores

ST4 illustrated how an ability/processing discrepancy can negatively affect the learning efficiency of even the most able of students. The student in question had a profile with seemingly above average scores in everything, except for speed of processing:

He actually did have huge ability, he was 150 plus on the WRIT, which is almost unheard of, and that time I did use the discrepancy because there was no other way of DOing it. Even his sub tests didn't fall, I think the lowest sub test was 8. But it was the speed at which he did it. With the phonological awareness [items] he got right, he took forever!
(ST4)

Nevertheless, ST4 implied that she was not entirely comfortable with using a discrepancy concept for high-achieving bright dyslexics and would be very careful about the way in which she referred to it in her report:

When I sum up, I do often say: 'Although these two scores were in the area expected from this type of profile, these were lower than you would expect from a student with this ability.' So yes, it's creeping in, but you don't, it's not the only criteria . . . So if that's discrepancy, yes I use it, but I would not say 'Because there is a discrepancy...' it's more subtle than that.

(ST4)

Relative discrepancy – low scores

Interestingly, most of the assessors interviewed did not hesitate to admit that a student with relatively low ability (in the context of higher education), but with literacy attainment and/or processing skills significantly lower, would be given a diagnosis of dyslexia. Naturally, most of them doubted whether the contextual difficulties of such a student were primarily due to dyslexia, but they nevertheless felt compelled to give them a “dyslexia” label, presumably because they met the discrepancy criteria in some way:

I don't have a view that you cannot be dyslexic if you're below average ability, no. But if all your scores are pretty much on a level then it's not dyslexia, does that make sense? It is perfectly possible to be not very bright, and these days it is perfectly possible to not be very bright and still get in to university . . . they could be hovering in the 80s for ability, but have processing scores in the 60s, then they are quite clearly SPLD . . . depending on where the spikes come . . .

(ST3)

ST4 frequently “agonised” over such low ability higher education dyslexic students. She described giving them a dyslexia diagnosis, and thereby probably entitling them to disability provision as well as encouraging them to continue with a too challenging course, as a “moral dilemma”:

But sometimes it is general learning difficulties, but you've got enough evidence that there's dyslexia as well, and that is a moral dilemma, what do you do then? . . . Normally when they're low ability but they've also got dyslexia, the dyslexia scores, instead of being 60s and 70s, are sort of 58s and 40s,

so you've still got your shift downwards. And if it's all there, it's all there.

(ST4)

Of course, EP3 and EP4 were both happy with “dyslexia” for a student with low ability, with or without a discrepancy:

It's the difficulties with basic literacy skills. There may not be a consensus on that, but I'm happy with it.

(EP3)

My diagnosis for dyslexia would be based on difficulties at the word level, in reading, sort of more the phonological aspect, in spite of very intensive, repeated instructions, support, etc. over a period of time. I wouldn't base it on a discrepancy model because we have children with Downs Syndrome who have a dyslexic profile.

(EP4)

Nevertheless, EP3 qualified his concept of dyslexia by repeating, more than once, that there were important qualitative differences between bright dyslexics (identified by poor reading), and low ability dyslexics, identified on the basis of the same poor literacy skills criteria, and recognised that, in the context of higher education, their needs would be very different. EP4, too, implied that there was a qualitative difference between reading disabled dyslexics of better than average ability and those with low ability when she drew a distinction between students with a specific difficulty, and those with general learning difficulties:

It wouldn't be ethically right or professionally right for me to say that his difficulties were specific if they weren't, if they were generally flat profile then they're not specific.

(EP4)

No discrepancy, no dyslexia (or “SpLD)

If any general conclusion can be drawn about the relevance of any type of discrepancy concept to the professional assessment practice of all eight interviewees, it is that some measurement of general ability, whether it be

psychometrically obtained, or more informally observed, is of key importance to their diagnostic conclusions, as well as to any consideration of the assessed higher education student's contextualised difficulties and support needs. More tentatively, based on the data collected, it appears that none of the assessors interviewed has weaned themselves completely from the concept of discrepancy in the broadest sense, historically described as an observation of incongruity between seeming intelligence and literacy attainment. The responses of each individual, when asked to list the criteria that would rule out a diagnosis of dyslexia (or specific learning difficulties in the case of EP3 and EP4) provide a telling testament to this conclusion:

Absolutely no discrepancies across the board.

(EP1)

I'd have to be honest, probably the first factor for me would be their cognitive ability, and if that were low I might just end up with an even row of figures . . . I'm still kind of scores based (ST3)

A flat profile . . . no difficulties with working memory, no difficulties with visual processing, fast and neat handwriting, good oral reading.

(EP3)

If all your scores are pretty much on a level then it's not dyslexia . . . It is perfectly possible to be not very bright, and these days it is perfectly possible to not be very bright and still get in to university. I had one yesterday . . . Her verbal scores were 70 and an 87 . . . yet all her literacy scores were comfortably within the average range. . . I can't call that dyslexia, if your literacy is better than your ability would predict, you're not dyslexic.

(ST3)

I would expect no problems with working memory or short term memory, I would expect no difficulties whatsoever with any of the phonological skills. I would expect her to go through that test like a hot knife through butter, instant, instantaneously, no stopping to think about it, no having to re-listen. I would expect

the reading to be accurate and her to understand pretty much on a first read through, not hesitant, not stopping and starting, and I would expect good speed of work.

(ST4)

ST1 was not entirely convinced about the need for a discrepancy set against a measure of cognitive ability, but always focused her dyslexia identification on a deficit in the phonological skills assessed by the Comprehensive Test of Phonological Processing (CTOPP):

And if she's not coming out on the CTOPP for phonological difficulties I'm not really thinking dyslexia.

(ST1)

EP3 and EP4 appeared to be working with some concept of discrepancy to identify a specific, as opposed to a general, learning difficulty. EP3 spoke of an “expectation” (based on WAIS testing) of a student being able to access their course better than their current performance suggested; EP4 would take WAIS results (if she had used the test in a standardised way) into account before offering advice which might help the student:

I would look at that [WAIS] in relation to the other assessments that I'd done. I wouldn't look at it as a stand-alone assessment to inform my advice.

(EP4)

Whether their practice was focused on a syndrome concept of dyslexia, or on independently occurring, and sometimes co-occurring, dyslexia (reading disability) and specific learning difficulties, to some extent the assessors interviewed appeared to be looking at the same type of difficulties. As EP3 succinctly summed up:

The bottom line is it doesn't matter what you call it, if it's significant, it's 'what are you going to do about it?'

(EP3).

Research Issue 2: Disability

One of the reasons for the apparent uncertainty and confusion surrounding assessors' attitudes toward the disability status of dyslexic students, revealed in the survey data (pp.161-167), was the then similar uncertainty and confusion concerning the subject in legislative policy and institutional practice. This reason had been partly removed by the time that the interview data were collected. In the interim period the Government had announced that from the beginning of the 2015 academic year, the difficulties of students with SpLDs would need to fall within the Equality Act 2010's definition of disability if the students possessing such difficulties were to be eligible for disability funding from The Disabled Students Allowance (DSA) (BIS 2014, October 17). This event had had the effect of focusing the attention of the individual assessors interviewed on the legal disability status of dyslexic students, as one of the important outcomes of their reports, from the students' points of view, was access to this funding and related reasonable adjustments.

Disinclination to address disability issue

Nevertheless, when each of the assessors interviewed was asked to comment on the disability status of dyslexic students, their initial responses revealed the reluctance they appeared to share in having to address the issue. Most thought the term semantically inappropriate because of its socially accrued connotations:

I hate that question! (EP1)

It's semantic, isn't it? Most [dyslexic students] wouldn't call themselves disabled, would they?

(ST1)

I have a real problem with the term. Being the age I am and growing up with the term 'disabled', to me it [dyslexia] doesn't seem disabled.

(ST2)

It's not a nice term. (ST4)

I like to talk about difference, not disability; I hate that [term]
(EP2)

I think it [the “disability” issue] is a massive can of worms.
(ST3)

It's about time they re-thought that name isn't it, 'disabled student allowance'? . . . crikey, the number of times I see on a students face 'You qualify for the DSA, have you heard, do you know what is stands for?' 'No' I say 'You'll like this, disabled student allowance,' and this sort of look of 'What?' comes onto their faces!
(EP3)

It's just it has such an inappropriate connotation . . . “disabled”.
(EP4)

A semantic issue

Like more than half the group of surveyed assessors (Figure 4, E3, Appendices, p.53) the individual assessors interviewed preferred to speak of the “disability” of dyslexic students with alternative terminology, such as “difference”, “disadvantage”, or “difficulty”:

That's the question that, with my group, I bring up on a regular basis when they sort of say 'It's a bit of a difficulty, is this a disability? You. . . couldn't call it a disability because they can read, perhaps a bit more slowly, perhaps a bit more stumblingly, but they can do it all and therefore it's not really a disability, it's more like a cut finger than a broken leg.
(EP1)

Disability sounds more severe than I am usually seeing in the people that I assess. But, so if I slightly substitute the word 'disadvantaged' then . . . it's easier for me to see where they're disadvantaged than to think they're disabled; it's a semantic thing for me.
(ST2)

I don't regard anyone as disabled, I just regard him or her as different, or I try to.

(EP2)

I personally . . . prefer to adopt a more neuro-diversity based approach to the whole question.

(ST3)

Less able, academically challenged, I don't know . . . I just have difficulty using that word [disabled].

(EP3)

It's interesting. I'm not going to use the word 'disabled'; I'm going to use the terms 'learning difficulty' and 'difficulties with learning'.

(EP4).

Pragmatic acceptance of disability status

Nevertheless, most of the assessors' interviewed accepted, albeit reluctantly, that they had a gatekeeper role in procuring funding for resources to meet the additional needs of dyslexic students; to carry out this role it was necessary, especially since the recently proposed legislative changes to the eligibility of dyslexic students for this funding, to accept the terminology prescribed:

I have to otherwise you won't get the DSA after 2014.

(ST3)

I think it's a category [disabled] that we're forced in to for the DSA.

(ST1)

I have to make a decision about disability . . . in the structure we have . . . in applying for her to get any support if she needs it. I've got to decide whether she's disabled or not.

(ST2)

If you're dyslexic, you're dyslexic, and that comes under the DSA, so yes, you are disabled, aren't you? But in my gut feeling,

no I wouldn't consider [a dyslexic student] disabled.

(EP2)

I'd never thought about it until we got the new wording, but I suppose yes, you'd have to [consider dyslexic students as disabled].

(ST4)

But if it's to serve a purpose I think, if the disabled students allowance is what they need, then that's the reference I'll make, disability. They themselves [the students] may not think they are.

(EP3)

The interviewed assessors' feelings about the legislative pressure on them to pragmatically accept the disability label for dyslexic students is perhaps summed up in the frustration vented by EP1:

I'm not happy with it at all, I'm only happy with it because the students that we're talking about need a considerable amount of help, and the only way to provide that help is to say 'they've got a disability' rather than anything else. If we don't say that, they get nothing, that's what we're saying.

(EP1)

EP4, possibly due to the professional role that she held within one of the local authorities, admitted that she had not yet been in the situation described above, but said that if she were, she would have a few ethical issues with it:

Obviously I would not want to disadvantage the student; on the other hand if I'm being commissioned to do a piece of work then there are ethical issues about . . . saying what the person who's commissioned me wants me to say . . . I'm not a gatekeeper of resources because that would be wrong. I'm there to provide advice and to look at solutions as to how we can, irrespective of whether he could or couldn't get [the DSA], what there is in the setting already that could perhaps be harnessed in an innovative way to support and help [the student].

(EP4)

Disabled in the HE context

Changes to the legislation regarding the eligibility of dyslexic students to DSA funding (BIS, 2014, October) had resulted in most of the assessors interviewed having to seriously rethink their views around the disability status of dyslexic students. In keeping with the guidance, that in the context of DSAs “day to day activities” include education (3.1.1), most had decided to focus on this section of the definition when providing evidence of the disability status of some dyslexic students:

The way we handle it is at the beginning of our reports we are very clear that this is an assessment largely around things like literacy issues, which are pertinent to a university, a higher education environment, and may not be appropriate in other environments, like a work environment, for instance. So then that's a slightly different question, are they disabled in the context of the university? And I think that's easier to answer because supposing you've got somebody e.g. with, if I can talk in terms of IQ's, with an IQ's of 140, and they're reading at 100, 105, you could argue 'well that's pretty average in terms of reading.' but actually they're disabled in terms of what they should be able to achieve if they were functioning at their level . . . The discrepancy is there and in the context of higher education they are disabled because they cannot work at the level that their lecturers would expect them to work to.

(EP1)

The literacy demands of university can be disabling in an academic environment . . . In the context of what you're DOIng, . . . And that's probably the way I shall start to frame it if we have to start writing our reports in a BIS friendly way.

(ST3)

ST4 is herself dyslexic. In considering the medical model implications of the Equality Act's definition of disability, in particular “mental impairment”, she conceded, somewhat reluctantly:

Yes I would say, thinking about how I am, and thinking about how they are, we have to go with that definition. I don't

like it, but you'd have to go with it because I know that I have more problems than somebody with my ability without the dyslexia. I have lots of strengths they haven't got, but the day-to-day organisation, the memory, the speed at which you can do certain things – yes, it is an impairment - if you're measured against [those without the impairment].

(ST4)

Although she preferred to conceptualise dyslexia in terms of “different wiring” rather than “mental impairment”, ST4, like the assessors above quoted, considered dyslexic students to “be disabled in terms of being a student”:

[They] have persistent day-to day-effects [of their dyslexia] in the higher education environment, [they] meet the criteria of the government disability, government definition of disability, and it's long term.

(ST4)

Not all dyslexic students are disabled

In agreement with the new funding regulations, and in recognition of the dimensional nature of dyslexia, it was recognised that not all students who were assessed as having difficulties commonly associated with dyslexia or specific learning difficulties would need to be considered “disabled”. The difficulties of some dyslexic students formally awarded DSA funding were not always considered severe or complex enough to meet the criteria of disability enshrined in the legislation. ST3, who believed passionately in dyslexia, and had “a fairly robust personal construct of dyslexia”, was angered by the practice of the likes of one consultant educational psychologist at the university where she worked who would cherry-pick bits of the 2005 Working Party definition:

If [the student] met any single one of those elements he would say they were dyslexic, even if there was nothing in the profile to indicate it whatsoever, which I think is very, very bad. And then [the student] would get DSA and everything, it was ridiculous!

(ST3)

In the opinion of the above quoted specialist teacher assessor:

[the DSA] has been a cash cow for far too many people for far too long, not just students either.

(ST3)

EP1, too, was critical of the level of disability funding that went to students who did not need it. He thought that some of the Needs Assessments were “rubbish” [provision in excess of the student’s needs]:

It's almost standard, what the students get. We've talked to students after they've done their course, and yes, they found the computer useful, but our feedback is that often the best use is the support tutors, even if that was only for a few hours a year, who have taught them how to do some proof reading, structuring and so on, and then they've gone off and done it themselves, and they've done very well on the back of it. They didn't really need 'Text Help Gold', 'Inspirations', . . . so much of that [assistive technology] . . . students can get free.

(EP1)

ST2 and EP2 both made similar comments about the low level of study skills support that might suffice as additional provision for dyslexic students, possibly like Samantha in the first of the hypothetical scenarios, without complex needs:

Maybe there could be a short term intervention to help with the writing skills . . . a short term intervention where she just hasn't learned well enough what she needs . . . to write a good paper.

(ST2)

If she has a genuine difficulty, she needs somebody to sit with her, possibly every now and again, not even once a week, to help her prioritise, help her to goal set, helping her to keep a diary or a calendar or something to... And maybe to actually proof read. And I know you're not supposed to do all that sort of thing, but I think it's absolutely vital, having been a tutor too. You know, you need to actually say 'Well look you're just getting

too long winded here,' or 'You're going in to too much detail, this is what's taking you the time.' and all that sort of stuff.

(EP2)

Social model of disability

It appeared that most of the assessors interviewed held complex views around the social model of disability. On the one hand, there were attempts, already mentioned, to explain the disability status of dyslexic students in terms of the disabling expectations, for such students, of higher education institutions. On the other hand, however, the assessors' practices involved an unquestioned assumption that dyslexic students should be advised, enabled and supported to fit into established teaching and learning structures. When asked about their personal views on the purpose of their assessments, the most typical response, after helping the student to understand a reason for their difficulties, was to identify strategies and accommodations that would ameliorate some of the difficulties and lead to successful academic outcomes:

Explain how you can support those differences . . . reassurance as well, that even though she's got them, there are strategies to be put in place that can help her.

(ST1)

Help them find strategies to help with [their difficulties . . . demonstrate the right for exam adjustments.

(ST3)

Find out if and what the difficulties are, and then secondly to support those.

(ST2)

The main point is normally to identify if there are any underlying needs so they can be re-addressed or compensated.

(ST4)

To see if there is a case for reasonable adjustments to help him to access his course.

(EP3)

To find out how we could help this young lady and what were the factors that were preventing her from achieving.

(EP4)

The understanding of dyslexia in terms of disability was given another interpretive twist by the assumption of at least some of the assessors interviewed that the traditional emphasis of higher education institutions on efficient literacy and independent study skills was right and proper, and that “disabled” dyslexic students, if they wanted to succeed academically, had a personal responsibility to try to adapt their behaviour accordingly. For example, EP1 appends a section to the end of his reports detailing what the student, him or herself, should be DOIng:

It's things like accessing all the university courses, paying attention to what the department gives them in terms of support, there's a recommendation on a study skills course. And my feeling is when a student fails and comes back to whinge, the first thing a disability officer should be saying is: 'Well, did you actually make use of what the university offers?

(EP1)

The above-mentioned practice was justified by EP1 with the following reasoning:

Universities are research institutions, it's all about independent learning, it's all about preparation for DOIng a job, it's all about DOIng it on your own . . . I'm not saying they shouldn't have support. And I think universities aren't always good at giving all the students the support they need, particularly the Russell group ones. But independent learning is independent learning.

(EP1)

EP4 made a similar observation:

It's about coping mechanisms, you can be quite severely dyslexic, and yet have developed over the years really good coping mechanisms of accessing learning. You may not be so

severely dyslexic, but may use it as a peg to hang your coat on, 'I can't do this Miss, I'm dyslexic.' . . . at this particular age I think it's very much about attitude as well.

(EP4)

ST4 was also adamant that dyslexic students adopt a positive attitude and do not use their difficulties or disability as a peg on which to hang their coats. She explains to students that although processing differences are not their fault:

It is your responsibility, and now you know it's there, it's even more your responsibility to find ways round.' So it's not a *carte-blanche* to 'Oh I don't have to do that, I'm dyslexic or dyspraxic.' . . . this is your self-awareness, this is why you really do have these problems, this is what you can do about it. And one of the adjustments is the university giving you extra time, but the other adjustment is you *DO*Ing this.' And I always put strategies at the end of the report so it's got something practical they can do as well.

(ST4)

ST3 appeared to be of the opinion that dyslexic students, if they wanted higher education qualifications, ought to take responsibility for honing up their literacy skills by, presumably, using the support and the technology available to them:

Thus far I may have even the teensiest weensiest nod in the direction of the egregious Mr. Gove, that these qualifications ought to stand up . . . you should be able to rely on somebody with a degree being able to read and write . . . if the gap between the rhetoric and the reality is enormous then the qualification will ultimately lose credibility, and that's helpful to nobody.

(ST3)

It is difficult to judge the extent to which such attitudes as those illustrated above are influenced by the individual professional's own social and cultural views about the purpose and nature of higher education, and to what extent they are due to the expectations of professional bodies that the assessor's

practice will help the student to cope within the existing system. Like the imposed need to pragmatically accept the label of “disability” for some dyslexic students, and to adopt the related gatekeeper role for resources, encouraging dyslexic students to fit into the *status quo* may be an aspect of practice that some assessors accept reluctantly.

Regardless of assessors’ personal reasons, encouraging dyslexic students to fit into the *status quo*, enabling them to get around barriers rather than encouraging institutions to remove them, is an attitude much criticised by disability theorists committed to the social model (Tinklin, Riddell & Watson, 2004). So too are practices within the higher education context, like DSA funding, that confine the concept of dyslexia disability to that caused by a neurological impairment, excluding those students with poor literacy and general academic skills due to social and cultural reasons (Chanock, 2007). One of the assessors interviewed held views about the concept of disability and disability entitlement that were strongly influenced by such criticisms. ST1 had qualms about the equity issues around resource prioritisation for dyslexic students over other struggling students:

My gut feeling is that they are just as disadvantaged as those with specific learning difficulties, and perhaps have been more so in their lives. It's an equity issue . . . educationally disadvantaged, and in that sense, in my social moral framework, I think [the student] is just as disadvantaged as a lot of the students getting DSA.

(ST1)

It is perhaps inevitable that an individual assessor’s personal and cultural views about the purpose and nature of higher education will affect their diagnostic decisions about both dyslexia and disability, possibly resulting in the lack of consistency that has been much criticised (Rice & Brooks, 2006; Elliott & Grigorenko, 2014).

Research issue 3: Effect of *environmental factors*

Such personal and cultural views about the purpose and nature of higher education were implicit behind the diagnostic consideration that each of the assessors interviewed gave to the influence of environmental factors on the presenting behavioural characteristics of the students with whom they worked. Research has highlighted the complex interactions between biological and environmental factors that give rise to the processing and behavioural differences commonly identified as dyslexia (Hulme & Snowling, 2009; Asbury & Plomin, 2014). The results of such research are implicit in the widely accepted bio-psycho-social model of disability (WHO, 2001) and learning differences. Yet the guidelines for disability provision in higher education (BIS, 2014, October) make it clear that only students with a specific biologically caused difficulty are eligible, and that students with general learning difficulties, or difficulties not attributable to a “mental impairment”, are excluded (Section 3.1.2). The individual assessors interviewed demonstrated, in a more explicit way than did those surveyed at the group level, variance in the way that a specific learning difficulty like dyslexia was distinguished from similarly presenting cognitive and behavioural characteristics due entirely to low underlying ability, educational and/or socio-cultural disadvantage. In DOIng so, their comments also echoed opinions uncovered in the survey data about the difficulties of sometimes distinguishing between the two categories.

English as an additional language (EAL)

In taking environmental factors into account in deciding on the nature of a student’s difficulties, most of the assessors interviewed placed an important emphasis on scores, or at least clinical impression, of cognitive ability. The example that came up most frequently was students for whom English was an additional language (EAL). Failing to find a significant discrepancy in a student’s profile because of unexpectedly low scores on the cognitive ability subtests, especially the verbal, was commonly explained as due to the tests being culturally unsuitable:

I give the scores because we have to, but I will explain them. And for a student where English is a second language . . . I actually write 'This is not a fair test for this student because it is based on English as a first language, north American curriculum.' and if you've got students from Asia or Africa or totally different environments when they were younger, that test is not going to be a good test.

(ST4)

Educational and socio/cultural disadvantage

ST1 would also take educational and sociocultural deprivation into account in explaining a failure to find psychometric evidence for a discrepant profile. She gave an example of an adult recently assessed who came across informally as bright but who obtained very low scores for verbal ability:

She could verbalise very well, she came across as quite bright and her visual skills were good... but her [measured verbal ability] was so low . . . it just seemed odd, even from the interview.

(ST1).

The student referred to above had left school at age 12 and had come from a very dysfunctional background, spending much of her childhood moving between women's refuges with her mother. ST1 had used these mitigating circumstances to explain why a profile that she thought indicative of a specific learning difficulty was not being evidenced as such on the basis of the scores alone.

EP2 admitted that she would take an inadequate educational preparation for university into account in making recommendations for DSA funding, but only if the student's cognitive ability, as measured, was significantly higher than his attainment and/or processing skills. She was particularly critical of further education colleges that often "shafted" their students by encouraging them, via poor pastoral care, into higher education without ensuring that the students had appropriate preparation:

I would assume that if he's been to a further education college, he wasn't particularly well prepared, which is a dreadful thing to say, isn't it? But having worked there for 10 years I know they shove them in. And I just think what they're DOIng is actually wrong . . . So yes, that all comes in to the equation doesn't it?

(EP2)

Effect of dyslexia on cognitive ability scores

“Dyslexia” was also interpreted, in some cases, as a reason why ability scores were depressed and evidence for a “specific’ difficulty masked:

So a very severe dyslexic will get low scores on the WRIT anyway. So how much is low ability and how much is the test we've got? . . . you see the trouble is with dyslexia, if you get a low score on the WRIT . . .

(ST4)

ST4 did not finish the last quoted sentence, but implied that without average ability scores, or at least ability scores significantly higher than attainment and/or processing skills, it is difficult to provide convincing evidence for the difficulties encountered being specific. Sometimes, though, as illustrated above, the effect of environmental “mitigating circumstances” on test scores was used as part of the evidence.

Widening Participation

Widening Participation was seen to have exacerbated some of the difficulties assessors encountered in weighing up the effect of environmental factors on a student’s presenting difficulties. At the group level, over 30% of the assessors surveyed agreed that this policy had broadened the meaning of dyslexia, and another 30% thought it may have, but were “unsure” (Figure 3, C12, Appendices, p.52). The individual assessors interviewed generally felt that too many students were being presented to them whose difficulties were due to lack of ability and/or environmental factors like academic unpreparedness for higher education study. Peter Scott, a professor of higher education studies at UCL Institute of Education, recently opined, in a

Guardian article, that in the 21st century, in a country such as Britain, access to higher education beyond school is close to being a human right (Scott, 2015). Several of the assessors interviewed had encountered ethical dilemmas, as well as professional frustration, as a result of policies implemented on the recommendation of such ideals.

ST3 was quite clear about her views on Widening Participation:

University is not a universal right . . . one could argue that Widening Participation has gone too far already.

(ST3)

ST3 singled out certain courses that she felt were notorious for admitting academically substandard students, among them Nursing, Engineering, Animal Care, Health and Social Care, Social Work and Sports Science:

Particularly the sort of nurse who flunked out of education and became a healthcare assistant, and gradually worked her way up until somebody said 'Why don't you go and do your nurse training? . . . we had a guy from [somewhere] who was quite clearly exceedingly severely dyslexic, but no more capable of DOIng a foundation degree than flying. And his last academic qualification, if I remember correctly, was a City and Guilds in metal work, or maybe welding, from 1974!

(ST3)

International students with inadequate English language skills were also a problem for assessors of dyslexia, particularly those students enrolled for one-year Masters courses:

If you've come to do a one year masters with EAL and you may never have written an essay before and you're parachuted in to write your first essay at masters level in a language not your own, dyslexia is unlikely to be the main reason why that might be a problem . . . and even if it is dyslexia, that's not going to wave a magic wand and make it all better in a one year masters.

(ST3)

Ethical dilemmas centered particularly on those students who had a dyslexia discrepant profile but neither sufficient perceived ability nor current attainment skills to benefit from higher education:

And I've had this scenario several times, especially at [Post '92 University]. You get the two types of student: you get the really bright ones that have never had the support, and you get the ones who really shouldn't be there in the first place. And once or twice I've had to say that it's really general learning difficulties and they don't qualify for the DSA. But sometimes it is general learning difficulties, but you've got enough evidence that there's dyslexia as well, and that is a moral dilemma, what do you do then? It's a very difficult dilemma.

(ST4)

ST3 summed up what were, in her opinion, the implications of uncritical acceptance of some of the environmentally caused difficulties that assessors encountered due to Widening Participation

There has been a huge amount of over-diagnosis of a specific learning difficulty when clearly there are plenty of other explanatory factors. I think to assume that every single literacy difficulty is down to a specific difficulty is not helpful to people, is not helpful to the individual, is not helpful to the education providers, and it raises unrealistic expectations.

(ST3)

In consideration of how lack of preparation and poor teaching, on the one hand, and academic expectations inflated by the same environmental factor, on the other, can be erroneously attributed to dyslexia and specific learning difficulties, BTEC qualifications came in for severe criticism from most of the assessors interviewed.

ST1 and ST3 queried whether vocational National Diplomas provided an appropriate academic preparation for the rigours of higher education:

BTEC doesn't necessarily set you up for DOing a degree at all because you're not writing essays. If you've got to suddenly go from National Diploma to writing essays then you're really going to struggle a lot of the time, especially if you're the weaker type of student then it's going to be quite difficult, it's a huge step up.

(ST1)

There is absolutely nothing wrong with BTECs, but they are not worth four A-levels or four GCSE's or Two A-levels or any of that nonsense; they are worth one BTEC, and that's all there is to it. They are not wrong; they are just different. And although they can get you into university, they may not supply you with the skills that you need once you get there . . . it's all very well opening the door, but it's actually about what skills are you going to need when you get there? And people do need to be a little bit more realistic about this.

(ST3)

EP2, as already mentioned, having worked in a large metropolitan Further Education college for 10 years, was very critical about the standard of some of the teaching:

Well I would assume that if he's been to a further education college, he wasn't particularly well prepared, which is a dreadful thing to say, isn't it?

(EP2)

ST4 related an example of such poor teaching carried to the extremes of dishonesty:

A lot of students that do BTECs haven't done it themselves; the coursework has been done by the college because they need to get their grades up. And so you get students that appear to qualify, they get on to a course and they're not clever enough. And we had one at [Post-'92 University] who had a D in his A-level physics and he got a place at university on that D. I was assessing this boy and half way through I actually said 'How did you get a D in your physics?' and he said 'Oh they did my coursework for me. I shouldn't have told you that.' No way could that boy have got a D in physics, he just couldn't have

done it. He was general learning difficulties.

(ST4)

EP3 and EP4 both restricted their concepts of dyslexia to poor age-appropriate reading and spelling skills, regardless of perceived causes. Nevertheless, each put much emphasis on environmental factors in reaching a wider understanding of a student's difficulties in the HE context. When asked whether or not she would be looking to exclude factors like poor educational opportunities as an explanation for the difficulties of the student in scenario 2, EP4 replied:

That would all be part of it . . . it's looking at it in an ecological way . . . all the systems around the young person . . . because all of them inform who and what the young person is. So I don't think you could exclude anything . . . it may be a paucity of learning experiences, language experiences, and the fact that he had such poor literacy skills could mean that he hasn't read for pleasure because it's so hard. So all the age appropriate general knowledge isn't there to inform his understanding of things that he has to read [in HE]. Yet he might be brilliant at the practical side of animal behaviour and welfare, but it's just the theoretical bit that he might really be struggling with. So you have to take all of that in to account, I don't think it's just the label at the end of it .

(EP4)

The onus on assessors to assign a label, to make categorical decisions about dyslexia, specific learning difficulties and disability which appear largely due to lack of educational opportunity, had resulted in some uncomfortable dilemmas for some of the assessors interviewed. Over 40% of the assessors surveyed (Figure 4, D4, Appendices p.53) indicated that they were either unsure or else not confident distinguishing between dyslexia and poor literacy skills due entirely to environmental factors. Singleton (1999) fretted that widening participation, even at the end of the last century, might blur the distinction between dyslexic students and those with generic "learning difficulties". Whilst it appears that his fears might not have been unfounded, it may be the case that the problem could be alleviated not by

attempting to tighten up on definitions and applying more rigid cut-off points to psychometric scores, but rather by adopting an assessment model in higher education less focused on labelling. This theme will be revisited in a later chapter of the study.

CONCLUSION

Analyses of data from the 118 assessors who completed this study's survey, and from the 8 professionals who participated in the individual interviews, reveal varying degrees of consensus and lack of consensus around some of the important concepts underpinning their practice, and in the group and personal attitudes concerning the legislative and pedagogical policies affected by their practice. The following chapter, in presenting the findings from analysis of data from the lecturers' survey, focuses on how current dyslexia assessment practice in higher education can indirectly affect the perceptions of lecturers towards dyslexia, dyslexic students and the legislation and institutional policies instigated around them.

Chapter 5: Findings from Lecturers' Data

5.1: SUMMARY OF LECTURERS' DATA

Descriptive analysis of quantified survey data

Stacked bar charts (Figures 9-12) visually summarising the group frequencies of lecturers' different responses to each item in the questionnaire can be found in the Appendices (pp.58-61). Overall, this quantified analysis of the data displays much variation in the magnitude of the group's responses, both among and within the different criteria explored in the research questions.

Also included in the Appendices are Tables 11–14 (pp.20-27) that summarise the initial frequency analysis of the quantitative survey data. They have been included to enable more detailed interpretation of apparent trends in the data, particularly the strength of responses, a factor that may have been obscured when the five response categories were collapsed into three (Chapter 3, p.133). They are referred to in the following interpretive analysis when 25% or more of the group indicated responses at the extremes of the five-point Likert scale i.e. either “strongly agree” or “strongly disagree”.

Statistical analysis of group differences

Chi-square tests for independence indicated statistically significant differences in some group responses between lecturers from Pre and Post '92 universities, as well as between lecturers working in the three different disciplinary groups: Humanities, STEM, and Artistic/Vocational. (Tables 22 and 23, Appendices pp.42-43), summarise these group differences listing Chi, p. and Phi values, as well as brief interpretations of each itemised variable.

Statistical exploration of seemingly contradictory responses

Table 24 (Appendices p.44) summarises the results of Crosstabulation analyses on selected pairs of seemingly contradictory survey items, showing

the percentages of individual participants appearing to agree or disagree with both items. The implications of all these group differences are discussed in the interpretive analysis, below.

Exemplifying, clarificatory comments

Examples of optional clarificatory comments made by some individual participants are organised thematically in Document 14 (Appendices pp.200-227), in line with the way in which the research questions were explored in the questionnaire survey.

5.2: INTERPRETATIVE ANALYSIS AND DISCUSSION

RESEARCH AND PRACTICE

Question 1 (d): Lecturers' awareness of, and attitudes towards, dyslexia and dyslexic students

Dyslexia awareness

Institution-provided training

Previous research on HE lecturers' knowledge of and opinions on dyslexia and dyslexic students has unanimously concluded that more awareness training is needed (Mortimore, 2013; Cameron and Numkoosing, 2011; Madriaga et al., 2010; Griffin and Pollak, 2009; Riddell et al., 2007; Mortimore and Crozier, 2006; Farmer, Riddick and Sterling, 2002). In keeping with these findings, 86% of the lecturers surveyed agreed (44% strongly) that they relied on the student and/or the Disability Service to inform them of a student's dyslexia (Table 11, Appendices, p.21). Only 40% of the 164 lecturers surveyed agreed they had been offered dyslexia awareness training by their respective institutions (Figure 9, B1, Appendices, p.58). Examples of honest comments made in the open textbox sections of the survey by individual lecturers illustrate the situation described:

I don't feel like I know very much about dyslexia, which makes some of these questions [on the survey] hard to answer.

(Pre'92 English)

I feel many times (not just around dyslexia but around other issues to do with students) I am expected to know and to support students although I am given no training or time to do this.

(Pre'92 Geography)

Apart from a very general awareness, I have very little understanding of the impact of dyslexia or how I could support students. I am very open to improving this.

(Post'92 Business and Languages)

The trouble is that as lecturers/tutors we are specialists in our subjects and sometimes dyslexic students need a different approach with which we are not always equipped.

(Post'92 Architecture)

I am only on a fixed-term, nine-month contract, so it's quite possible that permanent staff members are given more support and guidance on this topic.

(Pre'92 Film Studies)

A notable statistically significant difference, with a medium effect size, was found between the proportion of lecturers from Pre'92 institutions (30%) who claimed to have been offered dyslexia awareness training and that from Post'92 institutions (51%) (Table 22, B1, Appendices, p.42). Nevertheless, it would be rash to conclude that Pre'92 institutions have been less assiduous than Post'92 institutions in providing their teaching staff with dyslexia awareness training. Proportionally more of the Pre'92 lecturers (39%) than the Post'92 lecturers (16%) were "unsure" about whether or not they had been offered this training, a result that does not preclude the possibility of the former group having neglected to seek out the available optional training simply because they did not perceive a need to do so:

I have never knowingly had a dyslexic student in my class.

(Pre'92 Education)

I have never had a dyslexic student in my tutorial group, so although I am aware of them through needing extra time in exams, I have no direct experience of this.

(Pre'92 Medicine)

Heterogeneity amongst assessed dyslexic students, including many high achieving individuals whose difficulties are “hidden” and thus not always apparent to teaching staff, perhaps helps to explain the lack of awareness illustrated in comments such as those cited above. Nevertheless, it is this training in the nuanced understanding of what dyslexia is, and the different ways that it can affect the learning and assessment experience of students, that appears not to be offered to, or taken up by, about 60% of the lecturers surveyed.

Further illustration of this lack of a nuanced understanding, perhaps compounded with thinly veiled scepticism associated with suspicions of over-identification, can be intuited from the following comments:

At one point 15% of my class had been diagnosed with dyslexia!!

(Post'92 Events Management)

40% of students in my final year class are given extra time in assessments and most of these are as a result of dyslexia or related impairment.

(Pre'92 Biological Sciences)

Regardless of whether or not many of the lecturers who participated in the survey neglected to access provided dyslexia awareness training, over 30% of individuals comprising the whole group registered that their institutions had not even offered it (Figure 9, B1, Appendices p.58).

Personal experience

Many individual lecturers confided, in the open text boxes, that their knowledge of dyslexia was gained not through institutional awareness training

but through being dyslexic themselves, or else having a close family member who had been assessed as such. One lecturer emailed the researcher to express her disappointment that the survey appeared to be focused on students' dyslexia and not that of lecturers themselves. Another expressed much the same sentiment, and connected it to individual lecturer's knowledge and awareness of dyslexia, in the comment below:

This survey does not take into account that staff members also have dyslexia and this is why they know about students who have this disability.

(Pre'92 Education)

The significance of lecturers' personal knowledge and awareness of dyslexia was reiterated and confirmed by other participants:

I think because I am dyslexic, I am able to see traits in others and openly share my diagnosis to demonstrate to students that it does not mean they are not clever nor that they won't achieve.

(Post'92 Nursing)

I am or was dyslexic. So most of my knowledge is from my own experience. I have had no training from the university in this area.

(Pre'92 Geology)

On a personal note I have been teaching in HE for over 25 years and was diagnosed as being dyslexic 7 years ago.

(Post'92 Business and Food)

I am both dyslexic and dyspraxic,

(Post'92 Law)

I am dyslexic myself, which may help.

(Pre'92 Engineering)

I had a real battle all my educational life trying to achieve what I am capable of intellectually due to undiagnosed, and therefore

un-helped, dyslexia.

(Pre'92 Education)

Children or close family members who had been diagnosed as dyslexic also provided some lecturers with insight into, and empathy towards, the difficulties of dyslexic students:

My confidence comes from having a close family member who is dyslexic - I watched her struggle through school with little support and saw the consequences of that, which has stayed with me.

(Pre'92 Geography)

Both my children have severe dyslexia and I know how both of them have struggled with the education system to be accurately assessed in exams. It has been a long hard battle. And they have suffered from staff thinking them stupid. They were both advised to take non-academic courses and I had to counter this advice. One of them is at university now.

(Pre'92 Linguistics)

I have to be honest that I am only just becoming aware of the wide variety of needs of dyslexic students as my daughter (age 8) is about to be assessed for dyslexia. Prior to this, I was very ignorant about how dyslexia can affect different people differently, and the wide challenge that they face.

(Pre'92 Medicine)

No doubt such close personal contact with a specific individual dyslexic person, and familiarity with the content of that individual's assessment report, will have affected such lecturers' understanding of what it means to be dyslexic.

Professional experience

Professional experience was another important source of the individual lecturer's knowledge and opinions of dyslexia and dyslexic students. Several lecturers were impressed with the academic strengths observed in dyslexic students with whom they had come into contact:

In my experience the students with dyslexia put in extra effort to overcome their problems. This tends to lead to higher quality work.

(Post'92 Biosciences)

I have had dyslexic students do exceptionally well academically.

(Pre'92 Chemistry)

Others, although equally impressed with the academic strengths of some dyslexic students, were also very conscious of the heterogeneous nature of students who had been assessed as such:

My strongest ever student was dyslexic but took great effort to be organised, to check and double check, and to have ownership of the work. Some weaker students are those who fly and hide behind a dyslexia flag, which I believe is grossly unfair to other dyslexic students and the wider student body.

(Post'92 Tourism)

In general I have found dyslexic students to be strong academically, in some cases the strongest in the whole cohort. However, I also recognise this is not always the case.

(Post'92 Accounting)

However, professional experience of the heterogeneous nature of dyslexic students also gave rise to some scepticism and confusion regarding the understanding of assessed dyslexic difficulties within the Higher Education context:

My best student is dyslexic. It is a very subjective topic (consumer psychology). She writes unbelievably well. If she was dyslexic, should she be able to write so well?

(Post'92 Events Management)

It is clear from the above query about an individual student's academic strengths that the lecturer concerned, and possibly many others like him or her, struggle to reconcile seemingly contradictory assumptions about the nature of dyslexia, assumptions often based on a superficial yet confusing

understanding of the concept and how it is perceived by most assessors to manifest itself in higher education students.

It seems reasonable to assume that lecturers in some disciplines might be more likely to encounter dyslexic students, and thus have greater awareness of their needs through professional contact, than those in other disciplines. Indeed, Chi-square analyses (discussed below) did indicate that those lecturers working within the STEM disciplines generally had significantly less awareness of dyslexia and were significantly less likely to be supportive of dyslexic students (Table 23, Appendices, p.43). Nevertheless, the survey data did not lend itself comfortably to uncritical acceptance of generalisations. Amongst the clarificatory comments were some from Individual lecturers, including those working within the STEM disciplines, who cited their disciplinary areas as attracting large numbers of dyslexic students, and thus affording them familiarity with dyslexia:

In Physics we have a high proportion of non-neurotypical students.

(Pre'92 Physics)

There are a relatively high number of dyslexic students who study Architecture in HE.

(Post'92 Architecture)

I teach Web Accessibility so I understand some of the matters.

(Post'92 Computing)

Archaeology loves dyslexic students because it encompasses such a broad range of data and learning. Students who struggle in other subjects may do well in Archaeology for this reason.

(Pre'92 Archaeology)

Overall, dyslexia awareness amongst the 164 lecturers who responded to the survey cannot be easily quantified by simply computing the proportion of the group who had been offered opportunities for formal awareness training by their institutions. It is clear that some, if not all, practitioners gain as much understanding from their personal and teaching professional experience as

they do from theory passed on from research via training sessions. Dyslexia assessors' practice, the theoretical assumptions and personal beliefs that underpin their diagnostic decisions regarding the assessment of dyslexic students, indirectly influences this understanding. It is the assessors who decide who is, or is not, dyslexic. They thus perform a major, if not always conscious, role in influencing the individual lecturer's awareness of dyslexia and dyslexic students.

Attitudes towards dyslexia and dyslexic students

Willingness to be positive and supportive

Despite indications that knowledge about and awareness of dyslexia is far from universal and/or satisfactory amongst the cohort of higher education lecturers surveyed, the majority expressed a preparedness, at least in theory, to be positive and sympathetic towards the difficulties of dyslexic students. A high 82% of the overall sample indicated tolerance of HE students who still had problems with reading and writing (Figure 9, B10, Appendices, p.58) and 75% of the sample agreed (26% strongly) that they were prepared to do whatever it took to make all aspects of their teaching accessible to dyslexic students (Figure 9, B8, Appendices, p.58). Furthermore, Chi-square analyses found no significant differences in the pattern of these attitudinal responses between the two institutional groups or amongst the three disciplinary divisions. Nevertheless, the effect on pedagogic practices of the negative attitudes of even a small percentage of the group cannot be ignored.

Lecturers' confidence recognising students' dyslexic difficulties

At the group level, willingness to be positive and sympathetic towards dyslexic students appeared thwarted, as illustrated by the already cited comment made by one participant, by the shortcomings of their knowledge about dyslexia:

Apart from a very general awareness, I have very little understanding of the impact of dyslexia or how I could support students. I am very open to improving this.

(Post'92 Business and Languages)

Most lecturers (86%) admitted that they relied on the student, and/or the Disability Service acting on the student's behalf, to inform them of an individual's dyslexia (Figure 9, B4, Appendices, p.58), despite a high 70% of the overall group agreeing that they were aware of the cognitive, emotional and social effects that dyslexia can have on HE students (Figure 9, B2, Appendices, p.58). More tellingly, only half of the group's members (52%) felt confident that they would be able to recognise dyslexia-type difficulties in their students (Figure 9, B3, Appendices p.58).

Lecturers' confidence in being able to recognise the signs of dyslexia in their students differed significantly between institutional and amongst disciplinary groups. In the Post'92 institutions, 66% of lecturers felt that they had the confidence to recognise their students' dyslexia-type difficulties, whereas in the Pre'92 institutions only 39% felt confident to do so (Table 22, B3, Appendices p.42). Amongst the disciplinary groups, STEM lecturers' were least likely to be confident in this area (35%), as well as more "unsure" (38%), than Humanities lecturers (52% confidence) and Artistic/Vocational lecturers (76% confidence) (Table 23, B3, Appendices p.43).

The existence of a relatively low overall group level of confidence in being able to detect dyslexia-type difficulties in students, together with significant inter-group differences in this confidence, was also reinforced by many of the individual comments made in the open text boxes:

More training would be useful beyond the basics. I feel that I can detect something is wrong but don't have the skills to be certain.

(Post'92 English)

It is a little bit hit and miss sometimes. Some students are suspected of being dyslexic. However, unless they are assessed, a lecturer is unlikely to know and not be sure how you as their tutor can help them.

(Post'92 Architecture)

We are not trained educationalists and are not in a position to judge whether someone has undiagnosed dyslexia - this would involve seeing a high proportion of their work. Even as their academic tutors it is difficult to judge sloppiness versus genuinely untidy handwriting or spelling.

(Pre'92 Physics)

Heterogeneity of assessed dyslexia

The comment made by the last-cited lecturer above, alluding to the difficulty some members of the teaching staff have distinguishing between dyslexia and behavioural characteristics of it shared by some non-traditional and/or academically unable students, is illustrative of one of the main areas of confusion that emerged from the lecturers' survey. Nearly half of the entire group (46%) admitted to being confused between dyslexic students and those whose literacy and/ study skills were ineffective due to past missed or poor educational opportunities (Figure 9, B5, Appendices p.58). About a third (35%) were similarly unable to reliably tell the difference between students with dyslexia and others unable to meet the intellectual demands of the course (Figure 9, B6, Appendices p.58). Amongst those working within the STEM group of subjects this difficulty was significantly greater, with only one third of the group (35%) not having difficulty in making the distinction, compared to nearly a half (49%) for the Humanities and 70% for the Artistic/Vocational group (Table 23, B6, Appendices p.43).

Again, comments made by individual lecturers illustrate some of the bafflement experienced. Their comments are not without more than a hint of frustration and scepticism about the dyslexia diagnosis:

The overall standard of writing and reading ability is so low that moderately intelligent and diligent dyslexic students will perform better than their non-dyslexic peers . . . I have had highly intelligent [dyslexic] students who simply couldn't spell, but they were rare. I regularly have students who can neither read nor write properly, either because they simply can't be bothered, or because they have never been taught, or because it all goes over their heads.

(Post'92 History)

There seems to be a good amount of students that didn't learn to read and write properly who are then labelled dyslexic years after. Dyslexia is also often used as an excuse not to put (even more) effort into reading and writing.

(Post'92 Computing)

It seems rather blunt but I have been faced with students who cannot even spell their own name and others who have received a diagnosis of dyslexia but who freely admit just to being poor writers.

(Pre'92 Theatre Studies)

Concern at the seeming heterogeneity of assessed dyslexic students was expressed by 40% of the overall survey sample, with a further 36% being “unsure” and only 24% being unconcerned (Figure 9, B7, Appendices p.58).

Over-diagnosis and dyslexia assessment practice

The cumulative effects of incomplete and often confusing understanding about the nature of dyslexia, a lack of confidence in recognising it in students and in differentiating it from academic difficulties due to other reasons, can be seen in the quantified responses to the survey and in comments made by individual lecturers, some of the latter expressed in tones of thinly disguised cynicism. For example, roughly a third of the sample agreed that there had been occasions on which they had doubted the validity of a student's dyslexia diagnosis (Figure 9, B9, Appendices p.58):

There are truly dyslexic individuals in HE and those who have been diagnosed as dyslexic but who are not dyslexic . . . far too many are diagnosed as dyslexic when they are not. I feel very strongly about the final question [students playing the system] as I encounter it frequently.

(Post'92 Science and Humanities)

I think dyslexia is way over-diagnosed.

(Pre'92 Science)

I do worry that the system is over-diagnosing.

(Pre'92 English)

Some lecturers supported their negative views on over-diagnosis by referring specifically to practices within their own institutions:

The basis on which a diagnosis of dyslexia is made is extremely nebulous and the term seems to be used as a 'catch all'. A colleague who deals with dyslexia assessment in my institution informed me that not a single student who was assessed for dyslexia in a particular year received a 'negative' result in the assessment. In other words, every single student assessed was found to have dyslexia or some form of SpLD.

(Post'92)

It has been our experience over the years that all students seeking an ALN assessment are provided with a diagnosis of dyslexia/dyspraxia.

(Post'92 Nursing).

Other lecturers explicitly attributed what they perceived as over-diagnosis to dodgy assessment practices:

[T]here is a systemic problem with the way dyslexia is being assessed in the first instance.

(Pre'92 Geography)

I have occasionally been concerned by the quality of some EP reports.

(Pre'92 Education)

I come from a country where dyslexia is not so prominent as in the UK. I believe that we have gone too far in the UK. The fact that a student is only diagnosed in their final university year (it has happened with my students many times), is perhaps the best proof that the whole system is not right. If this person were really dyslexic, she would have been diagnosed much, much earlier. My cynicism is founded on the self-serving system that

we created. The more staff diagnose dyslexic students, the safer their jobs are!

(Post'92 Events Management)

Dodgy assessment practices were also implemented in observations that some perceived non-dyslexic students could be assessed as dyslexic simply to get free computers and other benefits:

We have recently had experience of a number of students being assessed for dyslexia/dyspraxia who appear to be 'playing the system' to gain IT equipment, who do not display any signs of dyslexia, who are academically high achievers and who have seen friends gain new laptops as a consequence.

(Post'92 Nursing)

An increasing number of students are "playing the system" and claiming to be dyslexic in order to receive special treatment.

(Pre'92 Geography)

It is debatable whether or not such examples of scepticism and cynicism, expressed by individual lecturers around the assessment of dyslexia, are likely to be allayed, even if the demands of the following participant are fulfilled:

I would like to know more but not via an official university training session which will inevitably follow a particular viewpoint on the issue. I'd like to be made aware of (i) the extent to which there is consensus or otherwise amongst educational theorists; (ii) any hard evidence; (iii) how secure the diagnosis is.

(Pre'92 Statistics)

Dyslexia, as it is currently assessed in the context of higher education, presents much conceptual confusion amongst teaching staff. Such confusion can in turn be traced back to the lack of consensus amongst researchers and amongst the assessors who attempt to operationalise this research. Despite the willingness, in principle, of most lecturers in this study to be positive in their attitude towards dyslexia and dyslexic students, personal observation of

how the concept presents in their students appears to have led many towards attitudes that are more negative.

DYSLEXIA AND DISABILITY

Question 2 (a): Lecturers' opinions on the disability status of dyslexic HE students

Even a cursory glance at Figure 10 (Appendices, p.59) reveals the uncertainty, seeming inconsistency and lack of consensus of the sample group of 164 lecturers' views on the appropriateness of dyslexia being subsumed within the category of "disability". Such an impression is not unexpected considering the ways in which different individuals construe the meanings of variously defined categories such as "dyslexia" and "disability". Analyses of the data from this section of the lecturers' survey present another complex picture, largely dependent on individuals' different uses and understandings of the language involved.

Legal disability status of dyslexic students

Few lecturers appeared to interpret the term "disability" in the legal sense, as defined by the Equality Act 2010 (Figure 10, C4, Appendices p.59) despite the fact that the majority (63%) of the 164 individuals surveyed agreed that it was right that the legislation recognised dyslexia as a disability, with only 5% of lecturers disagreeing with the statement (Figure 10, C3, Appendices p.59). Notable, though, was the not-insignificant 32% of lecturers who were "unsure". Whilst it was difficult to ascertain what was understood, and meant, by the term "disability" at the group level, some of the qualitative comments offer a measure of clarification of the diversity of meaning at the individual level of analysis. For example, two such comments made by different lecturers alluded to the pragmatic funding advantages of having dyslexia legally designated as a disability (whether they regarded dyslexia as a "disability" or not), a practical resourcing necessity that has been widely acknowledged by many special needs activists and practitioners (Norwich, 2013):

It is right that dyslexia is recognised [as a disability], in order for funds to be allocated to ensure equality of access to education.
(Pre'92 Education)

I suppose my answers depend on what we mean by disability (the term is loaded and not necessarily helpful, though I recognise there are real political ramifications for using the term).

(Pre'92 Education)

Sense in which dyslexic students regarded as disabled

None of the survey items attempted to directly assess the extent of lecturers' knowledge of the Equality Act's definition of "disability", but there was little evidence from the data collected that it was widely known. Only one lecturer made a general reference to the term "impairment"; others assumed dyslexia to involve serious processing weaknesses and compared them in kind to physical ones such as visual and mobility problems, but the comments generally attempted to shy away from the term "disabled" in favour of something less evocative of wheelchair users:

The question as to whether students with dyslexia are 'disabled' is tricky - they are clearly frequently and often seriously disadvantaged, but with the right support can do as well as non-dyslexic students. It is contextual.

(Post'92 Social Work)

I am not sure I would use the word "disability" for any group. In some countries the term "differently abled" is used.

(Pre'92 Humanities and Global Citizenship)

Anything that interferes with a student's learning ability could be termed a "disability" but not in the common parlance of "disablement" i.e. physical disability . . . some dyslexic students try to cover up the fact they have a learning difficulty for fear of being labelled "disabled" as if there is some social stigma attached to that label.

(Post'92 Law)

In fact, 43% of the overall sample of lecturers agreed that they did not tend to think of dyslexic students as “disabled”, and a further 17% were “unsure” (Figure 10, C1, Appendices p.59) – statistics superficially at odds with the 64% who thought it right that the Equality Act 2010 recognises dyslexia as a disability, unless one factors in the aforementioned complexity inherent in the use and comprehension of the relevant categorical terminology.

Not all dyslexic students are “disabled”

In line with their confusion differentiating between assessed dyslexic students and others with similar academic difficulties, it is not surprising that a high 73% of the overall group agreed that some dyslexic students appeared to be no more functionally disabled within the context of HE than some non-dyslexic students (Figure 10, C4, Appendices p.59).

Support for the social model of disability

Although the majority of lecturers were positive (at least in theory) about the benefits of inclusive systems of teaching and learning (Figure 12, E1, Appendices p.61) there appeared to be little support amongst them, at the group level, for the social model of disability. Only 22% of the overall group regarded dyslexic students as disabled more by the literacy expectations of academic institutions than by in-person “impairments” (Figure 10, C2, Appendices p.59). In the Pre’92 group this figure, (14%), was significantly lower compared to the 31% of the Post’92 group (Table 22, C2, Appendices p.42). Lecturers, on the whole, were more likely to reserve the label “disabled” for those dyslexic students who they perceived as fitting the medical model:

Dyslexic students have a functional disability, they find it very difficult processing the written word, in a similar way to a visually disabled student, and not similar to students with poor spelling or grammar abilities.

(Post’92 Social Science)

Reasons for such a high percentage of the lecturers surveyed seeming to reject the social model of disability are unclear, but may have something to do with their professional need to affirm the medical disability status of dyslexic

students in order to condone such students' legal and ethical entitlement to reasonable adjustments. It may also stem from current disability and institutional policies that require assessors (often against their professional inclinations) to provide quasi-medical certification of students' learning "difficulties" or processing "deficits" as evidence for their entitlement to additional resources and differentiated provision.

"Playing the system"

The survey item that most tellingly revealed lecturers' uncertainty about disability and dyslexia, and the relationship between them, was the one that required lecturers to offer their opinions on whether or not an increasing number of students was "playing the system" in order to receive special treatment (Figure 10, C5, Appendices p.59). The modal response to this survey item (42%) was "unsure"; only just over a third (37%) felt confident enough in their knowledge of dyslexia to assert that most labelled dyslexics were genuine (and, by implication, disabled), whilst another 21% agreed that an increasing number of such students were "playing the system". Amongst the STEM group of subject lecturers the pattern of responses implied significantly more lack of knowledge and scepticism as to the genuine difficulties of some dyslexics: 52% of this group was "unsure" and only 19% felt confident enough to assert that they were unaware of any dishonest practice amongst students claiming to be dyslexic (Table 23, C5, Appendices p.43). The results of the Chi-square analysis on the data from this survey item, suggesting the comparative lack of dyslexia knowledge amongst the STEM group of lecturers, is duplicated in similar analyses on items B2, B3 and B6, also listed in Table 23, and all with small to moderate effect sizes.

EQUITY ISSUES AND REASONABLE ADJUSTMENTS

Question 3 (b): Lecturers' opinions on the fairness of reasonable adjustments for dyslexic and non-dyslexic students

If dyslexia and disability within the higher education context are not always synonymous, then what is currently widely assumed to be blanket entitlement

of dyslexic students to reasonable adjustments raises serious equity issues. If some dyslexic students' difficulties are not considered severe enough to have a "substantial" impact on everyday activity, including learning and assessment, then they may not qualify for the legal protection that reasonable adjustments are intended to serve.

Equity concerns, such as the above, centred on the credibility of dyslexia as a disability (Griffin and Pollak, 2006) have, along with other concerns to do with academic standards and the "scaffolding" of vulnerable learners (Tinklin and Hall, 1999), been highlighted consistently in the existing literature. Inspection of Figure 11 (Appendices p.60) appears to show that the sample of lecturers surveyed in this study generally expressed positive attitudes towards reasonable adjustments for dyslexic students. Nevertheless, such positive attitudes were far from unanimous, there was much uncertainty, and qualitative comments only confirmed the types of concern amongst some lecturers uncovered in previous research.

More favourable treatment

Analysis of the modal survey scores suggested that only a minority of the 164 lecturers appeared concerned about, or were prepared to tackle, the equity issues surrounding reasonable adjustments. Most (75%) agreed that it was appropriate that dyslexic students were entitled to the "more favourable" treatment afforded by reasonable adjustments (Figure 11, D1, Appendices p.60). Some of these lecturers vehemently resented, and even disputed, the legislation's use of the terminology "more favourable", suggesting less emotive alternatives to describe what they approved of as measures to "level the playing field". Such comments serve to reinforce the observation, made elsewhere, about the pervasive problems inherent in language use and comprehension in the field of dyslexia and disability:

"Favourable treatment" is NOT part of the Disability Act - "Reasonable Adjustments" are, which allow the disabled student an IDENTICAL experience to that of a non-disabled student i.e. they are not treated unfavourably but certainly never treated "favourably".

(Psychology, Post'92)

I do not agree with the use of the word "favourable" . . . it is not favourable treatment, these interventions are required to offer those students with ALN the same opportunities to do their best and offer their best piece of work possible, as with other students. It is about justice/equity/parity.

(Post'92 Nursing)

Is it 'more favourable' treatment??

(Pre'92 Education)

Extra time

There was also majority agreement amongst all lecturers (65%) (Figure 11, D2, Appendices p.60) that additional time in examinations does not give some dyslexics an advantage, although lecturers teaching the STEM subjects were significantly more likely to disagree (Table 23, D2, Appendices p.43). Amongst this group 35% of lecturers thought that extra time could give some an unfair advantage, as opposed to only 10% for the Humanities group and 17% for the Artistic/Vocational group. These differences in survey response patterns are most likely explained by factors such as different disciplinary examination formats and assessment criteria, and possibly by the reduced knowledge and awareness of dyslexia amongst the STEM group, as has been noted above and generally evidenced in Table 23.

Erosion of academic standards

Nor did the majority of lecturers (76%) feel that academic standards in their subjects were being eroded by the legal duty to make reasonable adjustments, although there were several dissenting voices in the individual comments, particularly amongst the 23% who were uncomfortable with, or unsure about (13%), dyslexia marking policies (Figure 11, D3, Appendices, p.60):

I am perfectly happy to make allowances for dyslexic students in terms of spelling and grammar but when we are told to accept written work that is essentially not correct in terms of what it says but are told to give a mark based on the overall

sense of what we think the student is trying to say this becomes a nonsense and is unfair to other students.

(Post'92 Archaeology)

I don't think that the 'reasonable adjustments' system works well at the moment. Staff feel obliged to pass almost incomprehensible work.

(Post'92 Ecology)

We are not DOing anyone any favours by saying, oh, you are dyslexic, I won't mark your mistakes. I'm sure you'll do fine in job applications / life. I wouldn't want to be embarrassed about hurting your feelings that you can't spell when support exists to improve your writing.

(Pre'92 History)

Reasonable adjustments, such as dyslexia marking policies, raise fundamental questions about the privilege of the written word in British higher education institutions (Tinklin and Hall, 1999), questions which challenge conventional notions of effective teaching and learning practice.

Conflict with professional expectations

More individual dissenting voices objected to reasonable adjustments, such as extra time and dyslexia marking policies, on the basis of them creating unrealistic expectations of professional life beyond the university:

While students with dyslexia should be accommodated when reasonable, this has limits. It should also reflect expectations in the future working place. Students need also be aware that reading and writing are essential skills in a modern workplace.

(Post'92 Geography)

A key point is that, what are these dyslexic students going to do after graduation? If they have to compete with other non-dyslexic students in the job market, they do not have many choices. A company won't give you the job just because you are dyslexic. In other words, they must be competent to what the job requires them to do (e.g., reading, writing etc.). This means they should not be treated very differently when they are

receiving HE; otherwise, they will have disadvantages after graduation.

(Post'92 Computing)

Dyslexic students on nursing programmes present particular challenges as the skills gained in university need to be applied in an often time pressured environment in practice.

(Post'92 Health and Social Care)

In teacher training it is not possible to be lenient towards poor spelling etc. The onus is on the trainee to develop strategies to overcome such problems - as teachers they have to meet the expectations of the profession.

(Pre'92 Education)

Whatever the legislation, reasonable adjustments just don't really exist in the world and we are not preparing students for the reality of life in ANY field by not supporting and demanding improvements. This is also true for literacy of students from disadvantaged backgrounds. Support, not excuses

(Pre'92 History)

Onus on dyslexics to develop compensatory strategies

Other lecturers commented, like the last two cited above, that instead of relying on reasonable adjustments, the onus should be on dyslexic students themselves to work with the support available to develop strategies to compensate for any academic difficulties. Some went as far as to suggest that development of such skills should be a priority before the students embark on a degree programme:

Students who have problems with basic reading and writing skills need sufficient support to get them to a point where they are ready to undertake a HE course before they start rather than admit anyone no matter what difficulties they have and then tell those running the course to make allowances for people who can't meet the requirements - this is unfair to staff, students as a whole and also to students with difficulties.

(Post'92 Archaeology)

Some lecturers were firm believers in support being available to develop good compensatory skills that could negate much of the need for reasonable adjustments:

Given the proper support and time and dedication a student who has any learning difficulty can be encouraged to learn strategies to circumvent any problems.

(Post'92 Law)

In a professional programme such as nursing it is imperative that students can write in a logical, coherent way. Our focus on supporting students with dyslexia is to enable them to develop strategies to manage their difficulties and it works well.

(Post'92 Nursing)

A student with Dyslexia can overcome this, particularly with university support, but needs to put in the effort to achieve this and take advantage of help available. A dyslexia diagnosis should NOT be used as an excuse for preferential treatment. Such an approach does not help the student in the long run and is prejudicial to other students.

(Post'92 Construction)

Alternatives to written exams and assignments

Lecturers' overall generalised support for reasonable adjustments for dyslexic students tended to be reduced in magnitude when it came to consideration of some of the details of what was reasonable. Just over half (52%) agreed that they would consider the request from a dyslexic student for an alternative to a written exam or coursework (Figure 11, D5, Appendices p.60). This positive response was significantly higher amongst the Humanities group of lecturers (63%) than it was amongst the STEM group (40%) (Table 23, D5, Appendices p.43), implying, possibly, that STEM lecturers thought their assessment methods less of an impediment to those with dyslexia difficulties, or else that alternative forms of assessment would not be equitable.

Fairness to other students

Lack of consensus with regards to reasonable adjustments was most noticeable around issues of fairness to non-dyslexic students who appeared to exhibit some of the same difficulties as those assessed as dyslexic. Included in this category were non-traditional students and overseas students for whom English is not a first language. Whilst the majority of lecturers agreed with the appropriateness of more favourable treatment for dyslexic students, only 33% thought that such treatment was fair to some other students (Figure 11, D6, Appendices p.60). Most (39%) declared themselves “unsure”, possibly for reasons similar to the one expressed below:

I'm unsure of many of these [survey statements] probably because I haven't had to think these ideas through before. I would be very interested in the opinion of others who have given thought to the academic and political implications of equality and diversity issues in higher education.

(Pre'92 Psychology)

Other lecturers had very definite opinions, several of them relating to the non-categorical, heterogeneous nature of assessed dyslexics:

I think misdiagnosis and variability in severity (by homogeneity of response) makes it difficult to justify lightening assessment criteria [for dyslexics] over students with literacy issues owing to poor secondary education provision.

(Post'92 History)

The problem I find repeatedly is that dyslexia is conflated with any kind of additional learning need to the extent that students will present themselves saying 'I'm ALN so I'm entitled to extra time' and are reluctant to even tell you what their ALN need is.

(Post'92 Archaeology)

I am all for reasonable adjustments but I do feel the label of dyslexia can provide opportunities that are not available to students with other disabilities.

(Pre'92 Engineering)

Many of the adjustments I am asked to make in my teaching are not reasonable, in my view, although I have no say in the decision to implement them. The medical condition(s) that lie behind are never explained.

(Pre'92 English)

One lecturer singled out the equity issues around a common reasonable adjustment for some dyslexic students – use of a word processor in examinations. This adjustment he/she regarded as an abuse of the system and far from reasonable:

It is the abuse of the system that is the problem. Genuine dyslexia students could benefit from some adjustments, albeit these should be minimal to maintain equity across students. For example, many dyslexia students type their exams on a computer. This gives them a MASSIVE advantage, because they can shift ideas around, write and re-write as they please. Today's student generation are not used to hand writing hence having access to a computer is a massive advantage. Because of the pervasive access to computers, current students write and then think, developing arguments along the way. Handwriting requires the opposite process: you have to think before you start writing, hence the advantage [to dyslexic students] in these situations.

(Post'92 Events Management)

Nevertheless, some of the individual comments were at pains to stress the difference between study skills deficits due to dyslexia “disability”, in the medical sense, and those assumed to be caused by other factors:

People with poor literacy due to socio cultural issues also need support, but it is fundamentally different from dyslexia support and the two shouldn't be mixed up.

(Post'92 Health and Social Care)

The [statement about discrimination] makes no more sense than to argue that it is discriminatory to give a wheelchair to someone who cannot walk, and not to give one to someone who is fat and unfit. Fat and unfit are curable. Socio-cultural or

ethnic backgrounds can be addressed. Dyslexia cannot be cured.

(Pre'92 Education)

Perhaps the last word in this depiction of lecturers' varied opinions on the equity issues around disability provision for dyslexic students should go to the lecturer who, alone in this survey, explicitly echoed the legislation's focus on individual rather than categorical needs:

It is important to identify specific needs in order to provide appropriate support. Treating people fairly within an equalities ethos does not mean treating everybody the same.

(Post'92 Architecture)

INCLUSIVE PRACTICES

Question 4 (a): Lecturers' attitudes to individualised disability provision for dyslexic students being replaced by institution-wide inclusive practices

The identification of and provision for individual, as opposed to categorical, needs does not sit easily with the formulaic disability, or even inclusion, provision currently available in most higher education institutions (Riddell and Weedon, 2006). As this study's data on assessors' practice has illustrated, and lecturers' experience of assessed dyslexic students testified, the terms "dyslexia" and "disability", as applied to those individuals given the labels, encompass wide continua of identifying features, many of which are shared by other individuals without the labels. Fully inclusive systems of teaching, learning and assessment have been seen by many as a solution to some of the contentious equity issues raised by bespoke disability provision.

Unfortunately, "inclusion" is another theoretical concept, like "dyslexia" and "disability", which translates differently in the minds of individual people. For many lecturers it is also bound up as much with social agendas as it is with disability. Although the study survey attempted to focus primarily on lecturers' opinions as to the viability of inclusive systems as an alternative to bespoke

disability provision for dyslexic students, many participants, judging from their comments, did not differentiate between dyslexia resulting from disability, and inadequate academic skills and knowledge resulting from disadvantage. It is possible that the numbers of assessed dyslexics who display characteristics from both groups, reflecting already discussed inherent difficulties in dyslexia assessment methods, is partly responsible for this confusion.

Complex views with many reservations

Inspection of Figure 12 (Appendices p.61) makes it clear that the 164 lecturers' views on the merits of fully inclusive systems of teaching, learning and assessment, as a solution to some of the equity issues raised by reasonable adjustments, are complex and far from unanimous. Closer analysis of the survey data, including the clarificatory comments, revealed that such views notably involved much confusion and uncertainty, characterised by a seeming commitment to the ideal of inclusion that was not always matched by preparedness or ability to change practices to attain it.

Generally positive position toward inclusionary practices

Few of the lecturers (11%) who participated in the survey disagreed outright that fully inclusive systems were preferable to targeted differentiated provision for dyslexic students (Figure 12, E1, Appendices p.61). Most (66%) expressed themselves as enthusiastic about the concept:

It would be great to have an education system that offered openly enabling learning strategies without having to categorise some learners as disabled.

(Pre'92 Archaeology)

An inclusive curriculum, I feel, will make dyslexia less relevant - people will have strengths and weaknesses and in some aspect of programmes, the non-dyslexic students could struggle, because of the type of activity. I think the main problem is our focus on one type of teaching and learning and not recognising the real potential of dyslexic students and staff to enrich the learning experience for all.

(Post'92 Health and Social Care)

Potential for removing disability “stigma”

Nearly half of the lecturer sample (43%) agreed that institution-wide inclusive systems would have the added advantage of removing what has been observed by some as the “stigma” attached to differentiated provision for dyslexic students (Figure 12, E7, Appendices p.61), but a roughly equal percentage (42%), (significantly larger amongst those from the Pre-'92 institutions) (Table 22, E7, Appendices p.42), remained “unsure”, possibly because many of the high achieving dyslexic students of their acquaintance did not display any of the more obvious characteristics of dyslexia that would attract an academic or social stigma:

I feel that there is still such a stigma surrounding dyslexia and the assumption that it directly reflects intelligence levels [means] that often students will not avail themselves of the assessment process until quite late on in their degree programmes.

(Post'92 Health)

Some dyslexic students try to cover up the fact they have a learning difficulty for fear of being labelled "disabled" as if there is some social stigma attached to that label.

(Pre'92 Law)

Others were confident that there was no stigma associated with being dyslexic and accessing reasonable adjustments:

Regarding stigma, none of my students seem overly stigmatised because of dyslexia. Most wear it like a badge.

(Pre'92 Geography)

I'm not sure there is a stigma associated with dyslexia in HE, as it is so common (or at least the diagnosis is).

(Post'92 Archaeology)

Dyslexia characteristics continuous with those of other students

Influenced by what they professionally observed as the non-categorical nature of both dyslexia and disability, as assessed, 42% of lecturers agreed that because dyslexia difficulties appeared to be continuous throughout the student population, those so diagnosed should not be treated as a separate category for “favourable” treatment (Figure 12, E8, Appendices p.61). Notably, though, the acceptance of the continuous, as opposed to medical categorical, natures of dyslexia and disability, was significantly more prominent amongst the Post-'92 lecturers than it was by those working within the Pre-'92 institutions (Table 22, E8, Appendices p.42). Within the former institutions 52% of lecturers recognised that dyslexic students fell along a continuum of learner differences, whereas within the latter institutions the statistic was only 33%. Again, the difference in awareness, and thus opinions, could be accounted for, at least in part, by the different student demographics in each type of institution.

Confusion and contradiction

Responses that seemed to imply lecturers' largely positive attitudes towards the implementation of fully inclusive systems were somewhat weakened by others that revealed confusion and uncertainty. A not-inconsiderable 29% of lecturers (Figure 12, E1, Appendices p.61) were “unsure” about the preference for inclusive systems, possibly suggesting, like the Psychology lecturer already cited, that they had not given it much thought. Furthermore, roughly the same percentage of lecturers who agreed that fully inclusive systems were preferable (60%), also agreed that there was nothing wrong with the current system of reasonable adjustments for dyslexic students, that allowed such students to manage with existing approaches to teaching, learning and assessment (63%) (Figure 12, E1, E5, Appendices p.61). A Crosstabs analysis (Table 24, E1, E5, Appendices, p.44) showed that 63% of individuals who agreed with each of these contradictory items were the same people, confirming the impression of some muddled thinking. Significant differences in the response patterns between the Pre'92 group and the Post-92 group add an even further complication to the interpretation of the results. Fewer lecturers in the Pre'92 group (53%) than in the Post-'92 group (75%)

were unreservedly happy with the traditional system of reasonable adjustments (Table 22, E5, Appendices, p.42).

Inclusion associated with some idealism

Lecturers' patterns of responses to the survey items about the idealistic and unrealistic expectations of all-inclusive systems further enhance the impression of confusion and uncertainty, and suggest that although many approved of fully inclusive systems in principle, in practice they had doubts. For example, 53% agreed that the diverse needs of all students could not realistically be satisfied by such systems, much the same proportion as the 60% that agreed that such systems were preferable to targeted differentiated provision for dyslexic students (Figure 12, E6, E1, Appendices p.61): a Crosstabs analysis of the responses to these two items revealed that over half (53%) agreed with both opinions (Table 24, E6, E1, Appendices, p.44). Some of the confusion is implicit in the comments below:

This is really about the tension between standardisation and diversity. I believe it is possible to create a system that honours both of these ways of being with students, but presently the standardisation discourse rules.

(Pre'92 Education)

There is no one "all inclusive system" to meet all students' needs. Inclusivity requires a flexible adaptive approach so that learners can have a range of ways of accessing information, communicating their knowledge and engaging with the curriculum.

(Post'92 Health and Social Care)

Other lecturers were mindful of more prosaic reasons for what was perceived as the idealism around the concept of fully inclusive systems. Fifty-six per cent (Figure 12, E2, Appendices p.61) agreed that such systems demanded time and financial resources that are currently in short supply:

I believe an inclusive approach to cater for all students would be ideal (although it may be unrealistic to find such a solution for all

students), but it would require more staff. Lecturers are working ridiculous hours even now, and for most of us there is simply no way to take on extra work, e.g. for designing alternative methods of assessment.

(Pre'92 Maths)

Tutors are often expected to cope with students with various learning difficulties and to devise specific strategies to enable students with any learning difficulty to succeed. This requires extra time, effort and training and most of the time the University management is totally unaware of the extra degree of effort required to attain this when designing and writing course contents.

(Pre'92 Law)

Alternatives to written assessments

Perhaps opinions such as those expressed by the individual lecturers cited above partly account for the group's quantified views on the possibility of designing alternative modes to written exams and assessments in their disciplines. Only 44% agreed that this was possible, with over a third (34%) registering that it was not possible (Figure 11, E3, Appendices p.60). The following comments made by individual lecturers illustrate the spectrum of opinions:

I believe we provide a range of assessments to meet the needs of all our students and there will be strengths and weakness within the whole cohort on the type of assessment they are being assessed on. Providing a range of assessments should therefore eventually ensure a balance of strengths and weaknesses for all individual students.

(Post'92 Physiotherapy)

Not sure how we could offer a non written alternative, except perhaps a viva based approach, which would be equivalent but hard to administer. If the meaning is lost due to poor grammar or vocabulary, it can be very difficult to tease apart how well a student has understood. In this case a viva may be the best way forward.

(Post'92 Marine Biology)

Yes it would be great to offer a range of assessments to all students so they can find their own path. Why should we value the exam/written form above all others?

(Pre'92 Archaeology)

I would be able to replace written exams with alternatives only partially.

(Pre'92 Biology)

Although a high 75% of lecturers agreed that they were prepared to do whatever it took to make all aspects of their teaching accessible to dyslexic students, that only 44% thought it possible to design alternative modes to written assessments (only 52% of these figures representing the same individuals) (Table 24, B8, E3, Appendices p.44) further illustrates the complexity inherent in lecturers' opinions both at the group and individual levels of analyses.

Centrality of high literacy standards to academic learning

The complexity of lecturers' opinions at both the group and individual levels seemed most apparent around the relationship between high literacy standards and academic learning. A very high 82% implied that problems with reading and writing should not bar an individual from participating in higher education (Figure 9, B10, Appendices p.58), yet 66% also agreed that high literacy standards were central to academic learning (Figure 12, E4, Appendices p.61), significantly different statistics taken from the frequency distributions of the items' responses (Table 24, E4, B10, Appendices p.44). Some explanation for the seeming contradiction possibly lies in the different interpretations that individual lecturers ascribed to the terms "high literacy standards", "dyslexia" and "problems with reading and writing". As one lecturer metaphorically illustrated:

People with a limp can still walk, but it is often more of a struggle for them.

(Pre'92 Education)

The maxim was echoed in less poetic terms elsewhere, implying that “problems” might refer to the effort put into literacy skills rather than to the standard attained by the dyslexic individual:

Literacy standards are central to academic learning, but literacy and dyslexia are not mutually incompatible. It depends on your definition of literacy standards. Literacy is about writing; dyslexia means a writing difficulty.

(Post’92 Social Work)

Another participant clarified his/her response with what was perhaps an implicit legitimate criticism of the limitations of fixed survey responses:

The problem is not that we value literacy; that is appropriate. The problem is that we do not value other learning as equally challenging, valuable, creative, disciplined etc.

(Pre’92 Archaeology)

An English lecturer further emphasised the many variables that inevitably contributed to different lecturers’ views on the importance of literacy standards to academic learning:

High literacy standards are and should be important to academic learning and there are expectations that these will be upheld in an English degree; however, there ought to be ways of striking a balance between upholding a good standard of literacy and not penalising those with dyslexia.

(Pre’92 English)

I think that high literacy standards are more important in some subject areas (you can be a brilliant mathematician and not be good at writing, but it’s another matter in English).

(Pre’92 English)

Widening Participation and competency standards

Not surprisingly, uncertainty and lack of consensus due to the varied experiences of, and meanings ascribed to, “dyslexia” and “disability” by individual lecturers appeared to come to a head in their attitudes towards Widening Participation and the need to maintain competency standards.

Twenty-nine per cent of the overall group agreed that there was an irreconcilable tension between the two concepts, and a further 29% was unsure (Figure 11, E9, Appendices p.60). Again, significant differences in the quantified pattern of responses between the Pre and Post'92 institution groups render the interpretation of the data more complex. Amongst the Post'92 lecturers 41% agreed that there was an irreconcilable tension between Widening Participation and the need to maintain competency standards, whereas amongst those working in the Pre'92 institutions only 18% were aware of this tension, although 37% were "unsure" (Table 22, E9, Appendices p.42). It is likely that Widening Participation, in so much as it brings in its wake numbers of non-traditional students with poor academic skills, is more of an issue for Post'92 institutions than it is for Pre-92 institutions. Amongst the Post'92 student bodies possibly are large numbers that have managed to accrue the "dyslexic" label, like the one referred to below:

I welcome developments in helping students with dyslexia, but wonder whether we sometimes go too far (I had a project student at another University [Post'92] who was simply not capable of functioning in a molecular biology lab/ as a field biologist because of their severe issues, causing amongst other problems real H&S issues for themselves and others; they have since left science - did the University make a mistake in letting it go so far?

(Pre'92 Biology)

Still, the distinction between students with a "diagnosable" disability and those with poor academic standards for other reasons heavily influenced the opinions of many lecturers:

This [an irreconcilable tension] depends on whether widening participation involves people with a diagnosable condition or poor academic standards.

(Pre'92 English)

But not all lecturers were happy with the distinction between disability and disadvantage. Others were influenced by their belief in the universal

right of higher education for everyone, despite ability and/or academic preparedness:

Students can be disadvantaged either via a disability or some other factors and everyone has a right to education. The powers that be are trying to make us believe that HE is only for the elite or those with resources - usually family wealth.

(Post'92 Architecture)

Lecturers' overall group responses to the item questioning the irreconcilable tension between Widening Participation and maintaining competency standards are neatly summed up in the following comment:

I don't think it's irreconcilable, but it's certainly not reconciled now.

(Post'92 History)

CONCLUSION

Despite the majority of the 164 lecturers who took part in the survey displaying broadly positive attitudes towards dyslexia, dyslexic students and the reasonable adjustments mandatory for the category of diagnosed learners, not inconsiderable minorities were less positive, revealing tensions that would inevitably affect the implementation of their institutions' disability and inclusive policies, and the nature of their pedagogic practices. There was also some indication, in the highlighted areas of confusion and contradiction, that positive attitudes towards dyslexia and provision for it might be of the unexamined "politically correct" nature; attitudes vulnerable to change when challenged by others with more carefully considered positions.

Dyslexia assessors' practice indirectly plays a major role in influencing lecturers' knowledge and awareness of dyslexia, and shoulders a measure of responsibility for the diversity of understandings and attitudes that lecturers who participated in the survey have displayed. The confusion and definitional blurring around the syndrome concept of dyslexia and the more popularly conceived reading disability concept, as employed variously in higher education assessment, is a case in point. The next chapter, which analyses

data from the two students' surveys, throws further light on how assessors' practice indirectly affects the perceptions of students, both dyslexic and non-dyslexic.

Chapter 6: Findings from dyslexic and non-dyslexic students' data

The perceptions of diagnosed dyslexic students, and of their non-dyslexic peers, generally reinforced those made by the assessor and lecturer groups of participants. An understanding of dyslexia based on the syndrome concept of the condition predominated, as did recognition and acceptance of its dimensional nature. Additionally, both categories of students displayed a similar lack of consensus around issues of labeling, dyslexic and disabled identities, as well as about the appropriateness and fairness of the legislative and institutional provision currently made for diagnosed dyslexic students.

6.1 SUMMARY OF STUDENTS' DATA

Descriptive analysis of quantified survey data

Stacked bar charts (Figures 13 – 20 visually summarising the group percentage frequencies of both dyslexic and non-dyslexic students' different responses to each fixed-response item in the two questionnaires can be found in the Appendices (p.62 - 69). Although this quantitative analysis shows definite trends in the opinions and attitudes of both groups of students, it also highlights the magnitude of variance and uncertainty amongst individuals in the same groups, as well as marked differences between the groups on some of the issues explored in the research questions.

Also included in the Appendices are Tables 15 – 20 (pp. 30 – 40) that summarise the initial frequency analyses of the quantitative survey data. They have been included to enable more nuanced interpretation of apparent trends in the data, particularly the strength of responses, a factor that may have been obscured when the five response categories were collapsed into three (Chapter 3, p.133). They are referred to in the following interpretive analysis when 25% or more of either group of students indicated responses at the extremes of the five-point Likert scale i.e. either “strongly agree” or “strongly disagree”.

Statistical analysis of group differences

Chi-square tests for independence indicated statistically significant differences in some group responses between dyslexic and non-dyslexic students on similar survey items, as well as between dyslexic students from Pre and Post '92 universities. Tables 25 and 26, (Appendices pp. 45 - 47), summarise these group differences, listing Chi, p. and Phi values, as well as brief interpretations of each itemised variable. The implications of all these group differences are discussed in the interpretive analysis, below.

Exemplifying, clarificatory comments

Examples of optional clarificatory comments made by some individual participants are organised thematically in Documents 15 and 16, in line with the way in which the research questions were explored in the questionnaire surveys. These documents can be found in the Appendices pp. 228 – 262.

6.2: INTERPRETATIVE ANALYSIS AND DISCUSSION

RESEARCH AND PRACTICE

Question 1(e): Dyslexic and non-dyslexic students' experiences of the functional effects commonly attributed to dyslexia

It is perhaps a reasonable assumption that academically high-achieving dyslexic individuals who have secured places at top ranking universities might have fewer apparent difficulties than dyslexic individuals whose pre-university academic achievement has been less illustrious. In considering the following interpretive analysis of the students' data it is important to bear in mind that over 75% (110) of the dyslexic 146 participants came from top ranking Pre-'92 universities, and that the remainder of the dyslexic group was mostly drawn from a small creative arts university, unlikely to be typical of large metropolitan Post 92' universities (Chapter 3, p.130).

Figure 22 (Appendices, p.72) visually summarises and compares the self-perceived difficulties experienced by all the dyslexic and non-dyslexic students who took part in the survey. Superficially the quantitative summary

makes some seemingly obvious statements; careful consideration of all the data, including some of the clarificatory comments and the contexts from which the data emerged, reveals a more complex picture.

Dimensional, as opposed to categorical, nature of dyslexia

A visual comparison of the responses to identical items of the dyslexic and non-dyslexic groups of students reflects the researched-acknowledged dimensional nature of dyslexia. Although it is obvious, from Figure 22, that dyslexic students as a group self-perceive themselves as experiencing the functional effects commonly attributed to dyslexia more frequently than non-dyslexic students (an observation strengthened by Chi-square significant results on all but one of the compared functional difficulties (Table 28, Appendices p.49) there is a varying amount of overlap between the quantified group responses, indicative of the difficulties itemised existing along continua of normal variation within the student population. Furthermore, a fact heavily disguised by the quantified data summary, is the comparative impact, in terms of student numbers, of the seemingly low occurrence rate of non-dyslexic students' experiences of continuously distributed academic difficulties. For example, approximately 85% of dyslexic students perceived themselves to experience difficulties with fluency, especially reading (Figure 22). Given that roughly 5% of students have a formal diagnosis of dyslexia, in a large university of approximately 20,000 students about 850 dyslexic students would struggle with fluency problems. However, approximately 15% (Figure 22) of the remaining ninety-five per cent of non-dyslexic students with perceived fluency problems in the same university would be about 2,850 students – more than three times the number of formally identified dyslexics.

Amongst this comparatively large number of non-dyslexic students who often experience many of the functional difficulties commonly attributed to dyslexia are students for whom English is an Additional Language (EAL):

All of the above [difficulties] tend to happen [to me] more often when I am tired or fatigued . . . I am not an English native speaker, so I systematically misspell or mispronounce certain words (at least until someone kindly corrects me) and have to

allow some time to attune myself to other people's pronunciation, especially when I first meet them. This takes considerably longer and is more difficult in noisy or crowded environments.

(PhD Pre '92)

Also positioned along the troublesome end of the continua of normal variation in the activities and emotional states itemised in Figure 22 (Appendices p.72) are some students who, for various reasons, may not have been formally identified as dyslexic:

I struggle with written tasks; although not dyslexic it could have been potentially more help if I were [dyslexic].

(Fine Art Post '92)

In a lot of ways I do believe I have slight literacy or dyslexic-type difficulties; my sister was diagnosed but I have never had testing or support in the area.

(International Development and Geography Post '92)

I've always been concerned about how poorly I spell, but because I've been top set English since primary school, feel that I never had any support or attention for the problem, which would have been helpful.

(Photography Post '92)

I'm dyslexic, I just never went anywhere to be diagnosed.

(Interior Architecture and Design Post '92)

Several non-dyslexic students, like the one last cited, felt a dyslexia diagnosis to be out of their reach because of the cost:

I think dyslexia is a largely misunderstood area and hard to truly identify, such as in my case where I am not sure if I do have learning difficulties or not, because testing was not readily accessible or too expensive.

(International Development and Geography Post '92)

I don't think anyone believes the extent to which I personally feel hampered by my possible dyslexia. Either that or I am

thick. The cost is too much to get it checked out now, though.

(BA Pre '92)

The implications of the researched-acknowledged dimensional nature of dyslexia for higher education policy and practice have been highlighted in preceding sections of this study and will be further discussed in Chapter 7.

A syndrome, not just a synonym for poor reading

The survey data summarised in Figure 13 (Appendices p.62) also suggests that assessed dyslexic students conceive of their difficulties in terms of a syndrome or broad cluster of related behavioural symptoms, rather than more narrowly as simply a reading and/or spelling disability. Just over 50% of the dyslexic cohort professed to frequently experiencing difficulties with accurate reading – the remaining 50% indicating that they experienced such difficulties only occasionally, or not at all (Figure 13, B1). Much more noticeable to this group of students (over 80% of it) was the fluency with which they were able to read and thus comprehend what they were reading (Figure 13, B12, Appendices p.62). The following comments illustrate the additional effort needed and resulting frustration endured by such students:

I struggle with reading out loud and it takes me much longer to read. I can read quickly. However, if I am trying to take in the text in an in-depth way it takes me longer.

(Sociology Pre '92)

[When] the tutor puts on a film that's in French I don't have a hope in hell of reading the subtitles to the film. It takes me much longer.

(Fine Art Post '92)

I read 3rd year Philosophy. I do sometimes skip key words, which can be a big problem. The weird grammar of philosophers can also throw me but that tends to throw everyone. Generally I have few problems understanding the grammatical construction of a sentence, unless I'm tired.

(Philosophy Pre '92)

If I have a lot of reading to do I get really tired and that's terribly frustrating.

(MPhil Medical Studies Pre '92)

Dyslexic students' comments also implied that their difficulties were not confined to fluency with their reading skills. Underlying cognitive processing weaknesses were implicated in the high frequency responses to difficulties with, for example, concentration (Figure 13, B9, 62%), short-term memory (B6, 64%) and completing exams on time (B13, 56%). Poor concentration skills, perhaps compounded with short-term memory weaknesses, were seen as contributory factors to inefficient study practices:

Normally I get things done and get good grades but it often takes me longer than other people and I have to keep re-reading things, and catching up on lectures where my concentration was variable.

(Zoology Pre'92)

My processing holds me back... Although I have accepted that I'll get there it just takes longer than other people. But when I don't get there - that's when I get down. And then when people tell me to move on and try harder next time I get more down about my abilities.

(Marketing Pre '92)

I tend to take a long time DOIng certain tasks such as writing as I struggle with using the right and sophisticated words to say what I am trying to say. I have a high attention to detail and I appreciate this makes me take longer in certain things. The main thing that used to annoy me before I was diagnosed was the fact I used to 'appear' to take much longer than others on an essay, for example, but end up with the same or less marks.

(Sociology Pre '92)

Many high achieving dyslexic students from the Pre '92 universities appeared confident in their ability to perform well in timed examinations, but only because they were allocated what they perceived as much needed additional time:

I don't have a problem finishing exams in time as I have extra time - otherwise it would be impossible!

(Chemical Biology Pre '92)

I almost never fail to complete or feel unduly time pressured in an exam where I am both allocated extra time and use a word processor. Either of those factors being absent can cause big problems (assuming it's not a Maths exam or logic where a laptop is useless). Remember in first year of GCSE History we had a mid-term test (no laptop or extra time) in the class. I got exactly to the staples, completing section 1, but didn't even start section 2. Got 48%!

(Philosophy Pre '92)

Nevertheless, even with extra time some dyslexic students found that processing problems affecting fluency made it very difficult for them to always achieve at the level at which they perceived themselves capable:

I have consistently underperformed in timed essay examinations, and achieved well below my potential. Usually my exam grades are 20% lower than what I would achieve in coursework (A Level and University).

(Economics Pre '92)

Spelling

Not unexpectedly, given the prominence placed on it in research findings, historical definitions and popular conceptions of dyslexia, the most frequent self-perceived difficulty of dyslexic students', after fluency, was spelling (Figure 13, B3, Appendices p.62). Seventy per cent of the dyslexic cohort claimed to experience spelling difficulties frequently. However, perceptive comments from many dyslexic students made it clear that in their opinion it was not poor spelling *per se* that defined their dyslexia, but rather processing difficulties that annoyingly thwarted their attempts to master the skill:

I have words in my head that I know are more appropriate but cannot spell them in my work.

(Fine Art t '92 Post '92)

I am quite bad at spelling, especially with certain words, which I never seem to get right even when I write the word a lot.

(Sociology Pre '92)

Other dyslexic students expressed their dismay at being, or having been, branded unintelligent because of their spelling difficulties:

I feel people equate poor spelling with lack of education.

(Anthrozoology Pre '92)

[I have] been called lazy thorough my education because I was obviously bright but could not demonstrate this in handwritten/spelling tasks.

(Counselling and Psychotherapy Pre '92)

Dismay at being regarded as unintelligent because of poor spelling was compounded with frustration and anger at what some students recognised as simplistic assumptions made by institutions about the nature of dyslexia:

I hate how the university uses dyslexia. Everybody's dyslexic tendencies are different... Not just that you're bad at spelling or reading etc.

(Marketing Pre '92)

The following cited student saw such lack of dyslexia awareness as unfair:

I can't help that I don't always understand things first time. Or that I can't think of the right word or get it completely wrong. But I don't use dyslexia as an excuse . . . I've always been told to do my very best, try as hard as I can, if something doesn't make sense or I need help, then ask. I do struggle more than my friends but I also sometimes end up with better grades. I do put the work in. I need more guidance sometimes. But it's so unfair that people think its just spelling. Its not, it should be explained better.

(Costume with Performance Design Post '92)

Poor dyslexia awareness was also equated with what this post-graduate student perceived as academics' lack of interest and concern:

The reality in my situation is that nobody really cares if I'm dyslexic or not. People want the work done yesterday in a research environment. I can explain to someone I'm dyslexic a few times, but it falls on to deaf ears after a while. Academics always claim that they are or know somebody that is dyslexic and that they have no issues, so why [have] you? Often they just think it's a problem with spelling and [that one can] use a spellcheck, or they will edit my work. They can't understand that I might have an issue around getting the words on the page.

(PhD Biophysics Pre '92)

Verbal comprehension and compensatory strategies

Like self-perceived difficulties with reading accuracy, spelling and literacy related fluency, the meaning of the quantified analysis of the data to do with verbal comprehension (Figure 13, B2, Appendices, p.62) cannot be taken at face value. Since over three quarters of the dyslexia sample had been successful in gaining admission to high profile universities, their self-perceived difficulties with comprehension (about 50% of the dyslexic group experienced them frequently) are likely to be relative rather than absolute, and more to do with fluency and processing difficulties than with verbal understanding *per se*.

Interestingly, although there were few significant differences in the frequency responses of difficulties between the dyslexic students from Pre'92 universities and Post'92 universities (Figure 23, Appendices p.73; Table 25, Appendices p.45) two of the three significant differences that there were centered on verbal and oral comprehension (Table 25, B2, B8) and the remaining one on word finding (Table 25, B7), a commonly regarded behavioural indicator of difficulties with phonological awareness and efficient memory retrieval. Whilst it might not be appropriate, given the unequal group samples involved, to speculate on the reasons for such significant differences in the data, it is tempting to postulate that, at the group level, the Pre'92 dyslexic students' less frequent self-perceived difficulties with, for example,

verbal comprehension (42.7% “frequently” as opposed to 75% “frequently” for Post’92 dyslexic students) may have something to do with the former group having developed compensatory strategies due, in part, to the nature of their career trajectories having necessitated greater conscious exposure to literacy and associated study skills.

Visual scrutiny of Figures 22 and 23 (Appendices pp. 72 - 73) suggests that many dyslexic students, from both types of categorised institutions, have managed to compensate for what might have been earlier difficulties with literacy acquisition and associated academic study skills. The fact that roughly over half of them declared themselves as having only occasional or no difficulty with many of the itemised activities and emotional states is testament to this interpretation of the quantified data. Nevertheless, the comparatively high group frequency responses to those items that involve fluent, efficient processing (Figure 22, B12, B9, B6, B13), together with the many insightful comments on the subject, indicate that the fruits of such “compensation” are not produced without arduous effort.

Many dyslexic students posited compensatory strategies as the key to their often arduously obtained academic success. The adoption of such strategies may also account for what might appear to be the unexpectedly low percentage of dyslexic students surveyed who claimed to have frequent difficulties with organisational skills (29%, Figure 13, Appendices p.62). The textual comments implied that such strategies were consciously developed, and appeared to be based on the individual student’s perceptive self-understanding:

I don’t forget dates and appointments but it may be due to keeping a diary for it all, and having a routine that keeps me from getting stressed over appointments and exams.

(Biomedical Science Pre’92)

As my dyslexia was recognised early I have adjusted the way I work to help organisation significantly, and institutional recognition means that I rarely have problems with achieving

grades.

(PhD Water Informatics and Engineering Pre'92)

I find that choosing coursework-based courses allows me to excel. I struggle with exams and I don't get the grades I deserve with them. However, with coursework I can express myself better and as long as I put in the effort and get someone to proof read my work I get the grades.

(Film Production Post'92)

The advantages of working with available institutional assistance were recognised, but so too was the personal need to produce work of an academic standard commensurate with that of non-dyslexic peers:

I think dyslexic students have to work with the assistance available to create strategies that work for them. If you want to achieve in academia you have to produce a certain standard of work what ever your disability or problems. Yes it can be more time consuming but it can be done.

(PhD Archaeology Pre'92)

The invaluable help of specialist support tutors was specifically mentioned as an important aspect of institutional assistance:

I have been working very hard for 6 years with a specialist tutor who has helped minimise the problem. Spotting it early is the best way to overcome it.

(MSc Economics Pre'92)

I would say that certain aspects such as organisation have improved greatly due to having a tutor who taught me ways of organising my life!

(MSc Science Media Production Pre'92)

The culture around teaching and learning, and by implication the institution-wide theoretical position informing it, was also seen as a positive contribution towards allowing dyslexic students to develop efficient compensatory strategies:

I feel the reason I've managed to do so well despite my difference in learning style is because I have concocted coping strategies, which have enabled me to succeed throughout my schooling. I think the culture around teaching and learning should be more focussed on encouraging all students to explore how they CAN learn rather than enforce a blanket approach.

(MPhil Medical Studies Pre'92)

In fact, the following-cited mature post-graduate student was of the opinion that an institutional culture that practiced and encouraged good organisational skills was just as important as individual effort in allowing dyslexic students to develop effective study strategies:

I personally would be careful to attribute [poor] organisational abilities to being dyslexic. These skills vary from person to person and also depend on the cultural environment you're in. For instance, my work life before university was much more organised with shared calendars and organised meetings with pre-set agendas. My experience of academics is that what they make up for in brilliance doesn't always translate into good management skills and training of their students. It's quite easy to get into a haphazard approach to your research if that is the culture in your lab.

(PhD Biophysics Pre'92)

Chi-square tests of analyses comparing Pre and Post'92 student groups on self perceived difficulties with organizational skills (Table 25, B14, Appendices, p.45) produced varied results: dyslexic students at the Pre'92 institutions registered significantly more problems with organizational skills than did non-dyslexic students, whereas for the students at the Post'92 institutions, there was no significant difference in the frequency with which they experienced difficulties with organizational skills.

Affective disorders

The research findings on dyslexic students' increased susceptibility to the experience of potentially disabling affective disorders have proved somewhat inconclusive, despite informal observation of it by practitioners working with dyslexic students (Chapter 2, p.46-49). The data supplied by the dyslexic and

non-dyslexic students who took part in this study displayed some interesting institutional group differences with regards to self-perceived experience of affective disorders.

Stress

Overall, visual inspection of Figure 22, B17, Appendices p.72) suggests that a larger percentage of dyslexic students (62%) than non-dyslexic students (44%) frequently experience stress related to deadlines and examinations. A Chi-square test of independence confirmed that this difference was statistically significant, albeit with a small effect size (Table 28, Appendices, p.49). Much the same result was found in a comparison between the dyslexic and non-dyslexic groups of students from Pre'92 Universities (Figure 24, B17, Appendices p.74; Table 25, B17a, p.45). However, a similar comparison and inferential analysis between the dyslexic and non-dyslexic student responses from the Post'92 Universities (Figure, 25, B17, Appendices p.75; Table 25, B17b, Appendices p.45) indicated that there was no significant difference between these two groups in the extent to which students belonging to each experienced stress. Whilst the reasons for this anomaly belong to the realm of speculation, it is possible that the dyslexic students in the high profile Pre'92 universities perceived themselves to be under greater academic pressure due to more of their assessments being literacy based and timed examinations, as the student cited below testified:

Stress is unrelenting. When DOIng an assignment it is hard to construct sentences like other people seem to do with ease. Not being able to do it makes it hard and therefore you do not want to do it. But when you don't do it and the deadline gets closer it overtakes your thinking, and lack off sleep near deadline dates is hard to deal with.

(Applied Engineering Pre'92)

Academic pressure and competition, and the toll that they can take on a bright dyslexic student's mental wellbeing, are also implicated in the next two comments:

Obviously there are times when being a mostly unsupported dyslexic on a humanities course at an excellent and demanding department is really quite hard, stressful, disheartening and so on.
(Philosophy Pre'92)

It is a constant, exhausting struggle.
(MA Biblical Studies Pre'92)

Academic self-disappointment and frustration

Dyslexic students' feelings of self-disappointment and frustration due to failure to live up to expectations can be intuited from many of the comments already cited. Quantified analysis of the students' responses to item B18 (Figure 24, Appendices p.74.), as well as Chi-square tests of independence (Table 25, B18a, p.45) indicated that the dyslexic students in the Pre'92 sample did experience these feelings significantly more often, at the group level, than did Pre'92 non-dyslexic students. Nevertheless, as with the experience of stress, there was no significant difference in the frequency with which dyslexic and non-dyslexic students from the Post'92 universities experienced such feelings of self disappointment and frustration (Table 25, B18b, Appendices p.45). The reasons for this apparent institutional difference remain unclear, given the limitations of the questionnaire method of data collection (Chapter 3, p.141; p.143). However, it is yet another illustration of both the heterogeneity of assessed dyslexic students and the dimensionally distributed nature of the behavioural characteristics assumed to be typical of the processing difference. Figures 22 to 26 (Appendices pp.72 - 76) point unmistakably to the wide range of individual differences both within and between student and institutional groups, and to the considerable overlap between the self-perceived difficulties of dyslexic and non-dyslexic students. Students' comments reinforced this impression of individual differences. For example, some students saw the effects of dyslexia as a constant source of embarrassment and frustration:

I still feel embarrassed when I can't spell something or don't notice that I've spelled it wrong e.g. by mixing up the correct letters but getting them out of order!
(Anthozoology Pre'92)

[Dyslexia] is still a stigma. Sometimes I get embarrassed when I am called to write on flip charts etc. I always feel I am slower at reading and comprehension than others.

(MSC Health Science Post'92)

Dyslexia sucks!

(Post Animation Production Post'92)

Other students' frustration was focused on their unrecognised need to put in much more work than their peers to achieve at the expected level:

Frustrated, as I am treated as if I am not dyslexic by most, as my reasoning and general abilities are above average and I over study to compensate, giving the impression that nothing needs addressing.

(Counselling and Psychotherapy Pre'92)

Many had simply "moved on" by accepting their processing differences and, as described above, devising strategies to accommodate them:

When I was much younger (circa 8 years old, now 22) I was incredibly frustrated with myself for not being able to spell or do things as fast as my peers. I have come to accept this and it will no longer bother me. Nor do I mentally bully myself over this shortcoming. I have learnt new techniques that work around these shortfalls and I am able to perform equally or above my colleagues.

(PG Mechanical Engineering Pre'92)

Lack of confidence and/or self-esteem

Although the quantitative student data identified that self-perceived academically induced stress and feelings of self-disappointment and frustration were quantifiably more frequent amongst dyslexic groups of students than non-dyslexic students, the same result was not obtained for the experience of low confidence and/or self-esteem. Figures 22, 14 and 25, as well as the Chi-square results (Table 28 & Table 25, B16a, B16b, Appendices p.49, p.45) suggest that all the students who took part in this

study, dyslexic and non-dyslexic students, were equally vulnerable to feelings of low confidence and/or self esteem. Inspection of Figure 22, B16 (Appendices p.72) shows that the frequency percentages of the different responses are almost identical for the two student groups, and that comparatively few students (about 20%), dyslexic or non-dyslexic, perceive of themselves as never experiencing a lack of confidence and/or low self-esteem. Perhaps the following appended comment of one dyslexic student typifies the intermittent experience of most students regarding this affective state:

I don't walk around every day feeling unsure of myself or as if I lack worth. It has a habit of simmering away then erupting to the surface whenever something goes wrong.

(Philosophy Pre'92)

Dyslexic students' self perceived strengths

In keeping with the syndrome concept of dyslexia as an unusual balance of strengths and weaknesses (Miles, 1993), a high 64% of the dyslexic students who took part in the study offered examples of their self perceived talents. Twenty-eight per cent of the sample was unsure whether or not they had any particular talents, but only 8% considered that there were no activities at which others perceived them to be talented. The range of talents listed (Document 17, Appendices pp.263 - 266) is exceedingly wide, and serves to belie any generic assumptions about the strengths and weaknesses of dyslexic individuals.

Question 1(f): Attitudes of dyslexic students towards the assessment process

The assessment experience

Predictably, the experience of being assessed as dyslexic affected the dyslexic students who took part in the survey in various ways. Roughly 60% of the students agreed that the purpose of each step of the assessment, and its findings, were carefully explained to them in a way that they understood. The remaining 40%, though, either could not remember (10%) or thought that

the purpose and findings of their assessment were only partially explained to them (24%), or not at all (3%).

When asked directly if they thought that they understood what dyslexia was, 60% of the students agreed that they did, and the remaining 40% either disagreed (4%) or admitted to only partially understanding it.

Initial feelings immediately after being diagnosed

Immediately after being diagnosed the majority of the students (61%) professed to be relieved at finally having an explanation for their difficulties. Much of this relief was centered on the assessment having provided evidence that now falsified previous assumptions of stupidity and laziness:

I was not diagnosed until I was 18-19 due to "a very high IQ that allowed [me] to work around [my] difficulties". To find out that I was not stupid and lazy was a huge boost to my self-confidence.

(Materials Science and Engineering Pre'92)

For years I had struggled with literacy and my parents had asked my schools repeatedly to assess me but they always refused saying I was too smart to have a learning disability...I was just lazy.

(Psychology Post'92)

Had been called lazy throughout my education because I was obviously bright but could not demonstrate this in handwritten/spelling tasks.

(Counselling and Psychotherapy Pre'92)

Failed last year at university during undergrads because tutors labelled me as lazy and not getting grades up to standards expected of me.

(International Communication in Business and Professions Pre'92)

Relief at others accepting there was an explanation (not just a "stupidness").

(PhD Water Informatics and Engineering Pre'92)

Felt less stupid as there was an explanation [for my difficulties]
(Arts and Events Management s Post'92)

However, not all the students surveyed experienced a positive reaction to their dyslexia diagnosis. Twelve per cent of the sample admitted to feeling upset and confused. For example, two students who were identified during their early years of schooling described unhappy memories:

I was 9-10 years old and I thought it meant I was dumb and useless.

(Film Production Post'92)

Different. I found out when I was 7. And at primary school I was singled out for extra support and help.

(Marketing Pre'92)

Several students diagnosed either just before or after the start of their university courses also considered the experience to be a negative one, particularly when it was compounded with feelings of anger at their difficulties not having been identified earlier:

I'd only just been diagnosed ADHD [as well as dyslexic] and was annoyed everything had been diagnosed so late. I was 18.

(Biological Sciences Pre'92)

I felt upset it had never been picked up on before.

(Costume and Performance Design Post'92)

Confused and frustrated that it had taken until I was studying at a Masters level to be diagnosed. Even at this point I was only assessed because I did not understand why I was not achieving the grades I felt I should be for the work I was putting in.

(MA Social Work Pre'92)

Another subset of dyslexic students (27%) expressed mixed initial feelings towards their dyslexia diagnosis:

Mixed feelings. Glad to have support, but feel like a fraud. A mixture of on the one side glad to know why I always tended to finish exams and reading last, and upset thinking that there is something abnormal about the way I think.

(Theology Pre'92)

An awareness of the incongruity of being a high-achieving student and still having a learning difficulty recognised - feeling "like a fraud", as expressed by the previously quoted student – is a theme that reappears constantly in the survey's textual comments by some dyslexic students' that explain their attitude towards their dyslexia diagnosis. Such awareness is also implicit in the following student's matter of fact account of the context in which he was identified:

My parents were known dyslexics so I knew from a young age I was likely to be dyslexic. At primary school my year 6 teacher mentioned to my parents that I seemed dyslexic. This was passed onto my secondary school but they were not interested until I started DOIng GCSE's. This was when I was finally offered support; however being a straight-A student they didn't have any support to offer to me apart from being diagnosed as dyslexic and to give me extra time in exams. I got formally assessed before going to University in order to get additional time in exams.

(PhD Plant Cell Biology Pre'92)

Other students' experiences of relief were tempered by regrets at, and a type of mourning for, lost opportunities:

Mostly relieved, but also had to rethink and go over all the difficult times which were mostly down to dyslexia.

(PGCE Pre'92)

I was relieved but also upset for how differently my life could have been had I known earlier

(MSC Science Media Pre'92)

Current feelings about being diagnosed as dyslexic

Given time to come to terms with their diagnosis of dyslexia the majority of the students surveyed expressed themselves as comfortable with the label

ascribed to their individual processing style (42%) and/or pleased that their learning differences had been formally recognised and provided for (36%). Many of the qualitative comments, though, were appended by dyslexic students from the remaining group (22%) who still harboured negative feelings about being diagnosed as dyslexic, or by those whose feelings could be best categorised as “mixed”.

Comfortable with the label

Some of the students who took the opportunity to elaborate on their fixed format responses embraced a positive dyslexia identity:

I am happy with the label, it is who I am and I like talking about it to people who don't understand it. I like teaching other dyslexic actors ways to cope with and to use their gift in their craft.

(Acting Post'92)

It's a useful category. It allows me to rapidly explain to educators and others my differences. There is no stigma attached to the label that I have ever really encountered, except maybe some lingering trivialisation. People can sometimes have a problem with the actual features that lead to me being categorised as dyslexic and dyspraxic.

(Philosophy Pre'92)

Other dyslexic students expressed feelings that appeared more ambivalent:

I am very pleased that my learning differences have been formally recognised and I was able to have some help, especially in the form of a tutor. I feel better equipped to deal with my dyslexia. However I am apprehensive about how to now progress into a career with this label. I am worried about telling employers or whether I should. I am less likely to tell employers, as although I know there are laws to defend such issues I still feel it will hinder my application process.

(Sociology Pre'92)

I have been only recently diagnosed so I am pleased to have a label for my problems but still have not got to terms with the full

consequences and benefits of this label.

(History Pre'92)

Some seemed anxious to avoid being labeled, implying residual negative attitudes towards their dyslexia diagnosis:

Though I am pleased that new opportunities have been afforded to me, I am ambivalent about my dyslexia on a day-to-day basis. I only consider it when necessary (i.e. during examination periods).

(Materials Science Pre'92)

I haven't been labeled; the University don't know I'm dyslexic. I just get on with it. I don't want to be recognized or perceived differently.

(Criminology Post '92)

I don't like it being thought of as a label.

(Biomedical Sciences Pre'92)

I don't tell many that I am dyslexic as it labels me.

(History Pre'92)

Sometimes it's still hard to accept that I am dyslexic and not always comfortable talking [about it].

(Paramedic Science Post'92)

One student declared him/herself offended that the university equated the dyslexia label with disability:

[I feel] offended that the university sees me as disabled - this isn't a disability in my mind - that label has too many negative connotations & should be reserved for those who would clearly benefit from the label, beyond the negative side effects.

(Medical Pre'92)

Attitudes verging on feelings of victimisation were evident in other comments:

Somewhat frustrated that I still have difficulties relative to my

peers.

(MSc Economics Pre'92)

Irritated that I have these problems.

(PhD Complexity Science Pre'92)

Hate having to come out of the dyslexia closet.

(Psychology Post'92)

Annoyed that it may hold me back, especially studying science

(Biomedical Sciences Pre'92)

Annoyed as my friends find everything so much easier than I do

(Arts and Events Management Post'92)

[I feel] like I've been dumped with a label that very few people understand and many assume means I am slow, incapable and less intelligent than others. The term dyslexia is associated with all manner of 'deficits' or 'difficulties', I don't feel being labeled in such a way has any real benefits.

(Childhood, Education and Society Pre'92)

Pleased that LDs have been recognised and provided for

Although 36% of the dyslexic students registered survey responses indicating that that they were pleased that their learning differences had been formally recognised and provided for, some students intimated that formal identification had not lead to any helpful provision:

I'm still confused about what happens next. I have been diagnosed with dyslexia and have received extensions on deadlines for essays, but have not been informed on where to go for information on any special requirements I may need or how to be tested for these.

(MA Social Work Pre'92)

Happy with the 'label', disappointed that my adjustments are taking so long to get in place.

(PGCE Pre'92)

Disappointed that I now have the extra burden of a label but no extra help.

(Economics Pre'92)

Wish I knew what to do with it! [the dyslexia label].

(Medicine and Surgery Pre'92)

One student worried that a recent announcement presaging funding cutbacks for disabled students would deny him/her any additional provision:

. . . concerned that I will struggle if the government get their way.

Wishing I didn't have it [dyslexia]

(Media and Communication Pre'92)

Other feelings

Acceptance, or at least resignation, was another typical feeling of dyslexic students towards their dyslexia diagnosis. Some students expressed this feeling positively:

Proud that despite the challenges I face academically they have not stood in the way of my intelligence. My dyslexia has never been my deterrent it has always been my motivator.

(History Post'92)

Others appeared to take a more neutral stance:

Doesn't bother me as I don't broadcast it and people are surprised to find out.

(Biology Pre'92)

Dyslexia is not a serious problem to me; there are FAR worse things in life.

(Visual Communication Post'92)

To me it is a just a label that I don't fully understand; I can't really draw comparisons with not having dyslexia, for me it just seems like normality.

(History Post'92)

Experience of the “awkwardness” of being academically high achieving and yet having what is regarded as a learning difficulty was again expressed in this section of the survey:

[I feel] slightly awkward as my dyslexia isn't exactly typical and I feel people often don't believe me.

(Physics Post'92)

DYSLEXIA AND DISABILITY

Question 2(a): Dyslexic and non-dyslexic students' opinions on the disability status of dyslexic students

Disability status of dyslexic students

Figures 14 and 18 (C1, Appendices p.63, p.67) make it clear that the overwhelming majority of students surveyed, dyslexic and non-dyslexic alike, do not think of themselves or dyslexic students as disabled. Amongst the dyslexic students this sentiment was particularly strong, with about 29% of the 60% who felt it registering responses in the “strongly disagree” category (Appendices, Table 15, C1, p.30). Like many of the assessor and lecturer participants in this study, the student participants expressed difficulty in reconciling their knowledge and experience of dyslexia with historical and socially accrued connotations of the term “disabled”:

I do not regard myself as disabled. I'm not sure if that is due to a personal unconscious stigma (I'm bad but not that bad essentially) or due to social expectations when it comes to the term disability. It feels, and one is regarded as, disingenuous to call oneself disabled without rapid further clarification.

(Philosophy Pre'92)

I'm not sure I would describe dyslexia as a disability, though I'm not exactly sure why! By this I don't mean to say that I think dyslexia is not real, I do think it's real and think dyslexic people should receive the extra help they need. I think I just shy away from calling it disabled as I have negative connotations of the word disabled that I wouldn't want to stick the label on those with dyslexia. - having negative connotations against the word

disabled is probably a bad thing in itself!! I just don't like labeling people.

(Non-dyslexic MSc Sustainable Energy Pre'92)

When asked, more specifically, whether they thought that dyslexia was a disability in the same category as blindness or cerebral palsy, the dyslexic students registered opinions vehemently denying it, at a level significantly different from non-dyslexic students, many of who may have been restrained by feelings of political correctness in deference to the difficulties of their dyslexic peers (Figures 14, C2, 18, C5, Appendices p.63, p.67; Table, 26, Appendices, p.47). Those students who did attempt to clarify their opinions on the difference between dyslexia and more obvious physical disabilities did struggle to do so coherently, indicating not just unformed opinions but also the researched acknowledged complexities around the issue:

I would classify CP, blindness and dyslexia as totally different disabilities as dyslexia doesn't restrict my movement/function, only my cognition. Also, it depends on the degree to which some people are dyslexic to which they are disabled. Like with CP, in the Paralympics a T37 is less disabled than a T32 athlete but both are disabled.

(Engineering Pre'92)

I do feel there is some sort of qualitative difference, though, between a conventional physical disability and a SpLD. Not sure if that is due to personal bias or if there is actually something to that thought.

(Philosophy Pre'92)

Uncertainty and confusion appeared to predominate around the students' opinions as to whether or not the disability, if it were one, depended on the severity of an individual's functional impairment. Amongst the dyslexic students, about 45% agreed that it did, with 30% being unsure and 26% disagreeing (Figure 14, C8, Appendices p.63). The comment below from a non-dyslexic student echoes that above made about the degrees of disability recognised by the Paralympics:

I think the difference with dyslexia is that it is not obvious - so while I'm sure it can be extremely disabling, I think there is a very wide range of disabilities experienced by the particular student. For example, some students I know who are dyslexic feel it only limits them in certain areas of study, whereas others seem to struggle more broadly.

(Non-dyslexic Medical Pre'92)

Another dyslexic student attempted to clarify the issue by alluding to a metaphorical comparison between blindness and dyslexia:

There is a distinction between someone who is legally blind and someone who merely has quite blurry vision when they don't have their glasses (though we make jokes that the latter is blind as a bat and they may, without correction, meet the criteria). We recognise that there is a spectrum ranging from really very disabled in day-to-day life to someone who has to wear slightly annoying glasses when DOIng lots of reading. The same is true, possibly to an even greater extent, with dyslexia and people should receive support appropriate to their level of impairment and their own wishes. The problem is finding and refining methods for fairly judging the former [level of impairment] and providing access to formal assessment.

(Philosophy Pre'92)

The overwhelming majority of dyslexic students preferred the terms "difference" or "difficulty" to "disability" to describe their dyslexia (Figure 14, C3, Appendices p.63), over 22% of the 58% of those agreeing with the opinion DOIng so "strongly" (Table 15, Appendices, p.31). Concepts of "difference" or "difficulty" are paramount in the following comments:

I don't think it's a disability, but it's not just a difference. Disability is too strong; difference is too weak. In my case it's a difficulty because things are harder but not impossible. People with different levels of dyslexia will obviously have different views.

(Zoology Pre'92)

I think I feel it is more down to different learning or expressive styles and unfortunately the systems/methods used in schools or

higher educational institutions favour the written form. I have no problem understanding information or expressing that understanding when it is presented in a way that suits my learning/thinking style

(Childhood, Education and Society Pre'92)

I find that dyslexia is a processing difference, not a disability, but it does require additional measures such as time extensions. Thus in an academic environment it does or can be considered as a difficulty.

(Biochemistry Pre'92)

The student cited below eloquently sums up this seemingly preferred concept of “difference” in processing style:

To a degree I appreciate that often a label or name is needed to categorise problems, link research or allocate support etc. but the more I read about it the more I feel dyslexia is not really anything more than the beginning of the understanding that people are wired differently, have different strengths and learning styles and that not having the strongest literacy skills is not a deficit but a difference- those who cannot sing in tune are not deemed disabled, it's just not their skill.

(Childhood, Education and Society Pre'92)

Question 2(b): Attitudes of dyslexic students towards dyslexic and disabled identities

Dyslexic identity

Quantitatively, 60% of the dyslexic students approved of the “dyslexia” label being assigned to their learning differences, and 70% of them claimed to prefer it to the more generic “Specific Learning Difficulty” (SpLD) (Figure 14, C4, C5, Appendices p.63). However, an acceptance of the label did not appear to imply that the same individuals were all comfortable with it. Only 45% admitted to being “proud” of their dyslexic identity (Figure 14, C6). Additionally, there were many “unsure” and “disagree” responses to all three of the survey items above mentioned (Figure 14) and several comments,

added to those already quoted on the subject, illustrated students' mixed and often ambivalent opinions about their dyslexic identity.

Resigned acceptance was a typical attitude:

I wouldn't say that I'm proud to be dyslexic/disabled but I'm certainly not embarrassed by it. It's part of me and not something I can do anything about. I think some of this comes from the experience of being older and generally just more comfortable in your own skin.

(M Pharmacy Pre'92)

I have learning difficulties and deal with them the best I can. I am not proud of having these difficulties. But I am not embarrassed or ashamed of them; they are what they are.

(Film Production Post'92)

It makes me different but a lot of those differences have formed me and some of them are actually really positive. That obviously doesn't mean I don't sometimes feel ashamed or worthless and it certainly doesn't mean that other people can't either deliberately or accidentally make me feel that way.

(Philosophy Pre'92)

The usefulness of the dyslexia label was also recognized by the same student:

Labels are useful. How else exactly would I explain my difficulties to someone and how would I convince them that there is a legitimate difference between us, other than the fact I am stupid or clumsy etc.? Categories can be dangerous and they create room for active discrimination but without a category society will automatically, and without noticing or even necessarily wanting to, discriminate against people with dyslexia, precisely because we would be inexplicably different without any understanding as to exactly how or why, or the positives or what can be done to mitigate the difficulties.

(Philosophy Pre'92)

Nevertheless, others resented being defined by their dyslexia, emphasizing the desirability of what they considered to be more politically correct terminology:

We are students or people with dyslexia, not dyslexic students or dyslexic people - it may be part of who I am but it does not define me.

(Childhood, Education and Society Pre'92)

I do not see how dyslexia should define me. It is a different manner of thought rather than a disability.

(Materials Science Pre'92)

The dyslexic students' opinions about the different categories of people to whom they felt happy to disclose their dyslexia provide enlightening information not only about the students' degrees of comfort with their dyslexia identity but also about their perceived awareness of others' knowledge about dyslexia. Figure 27 (Appendices, p.77) summarizes this information. Just over half of the students surveyed would be happy to inform all their lecturers of their dyslexia, many implying lecturers' ignorance of and misinformation about dyslexia as the reason for not disclosing to them:

I don't think any of my lecturers know that I am dyslexic or that any students on my course are.

(Media Production Pre'92)

My university claims to be supportive and inclusive towards students with dyslexia, but when explicitly asked very few (apart from those working in or alongside the disability services), have any understanding of what dyslexia is. For example, when discussing areas for my dissertation I mentioned to a tutor my interest in dyslexia and their response: 'Oh yes, that's when your eyes flicker and don't focus on what you read'.

(Childhood, Education and Society Pre'92)

There is certainly a variation in terms of how understanding lecturers are with regards to dyslexia. This was especially so

when I was DOIng my PhD (before this Masters). However once you have told a lecturer and realised they are not understanding, there is no way of taking back what you have just told them.

(MSC Science Media Pre'92)

However, the students' greatest reservations about disclosure, by far, were with current or future employers. Only 38% professed themselves as happy to disclose to all employers. Most of those who commented feared that disclosure would jeopardise their chances of success due to employers' ignorance, prejudice or poor understanding of dyslexia:

I feel like I would be at a massive disadvantage for a job opportunity if the firm knew I am dyslexic.

(Education and Sports Science Pre'92)

I have no shame whatsoever, but I do know employers worry that you may not be up to the job.

(Psychology Post'92)

Whilst I would not lie to deceive an employer, I will not actively go out to tell them about my dyslexia for fear of the stigma overshadowing my capability during an application process

(Sociology Pre'92)

I am concerned that with an 'official' diagnosis, employers may be looking for problems, and seeing them where they don't exist.

(PGCE Pre'92)

Other students said that they would consider disclosure only if they thought it would be to their advantage:

I would not actively disclose that I am dyslexic to potential future employers for fear of negative misconceptions affecting their perspective of me. However I would be generally happy to let current employers know, if I thought this could lead to better understanding or a more effective/productive working arrangement.

(PhD Maths Pre'92)

Some students cited unhappy personal experiences that appeared to justify reservations expressed by the majority of students about disclosure to employers:

I am not too keen on employers or lectures knowing that I am dyslexic because in my experience I was seen as an extra burden.

(MA Applied Security and Strategy Pre'92)

I have found discrimination in applying for jobs. The system of timed psychometric tests massively disadvantages dyslexics, and is a source of acute stress and anxiety.

(Economics Pre'92)

The following post-graduate student was possibly seen as a burden and disadvantaged – not the least financially - because of his dyslexia:

I am a research assistant part time and my current employer knows that I am dyslexic. My dyslexia was a small issue when I first started writing up reports and I thus received a small pay cut, as it was grant work and people thus needed to be paid to read through my work. I understand this and I am happy that I was employed even due to my disability in an area that was an important aspect of my role. I am worried about telling my future employers about my dyslexia as I feel this would hinder my ability to receive offers. I think dyslexics are still perceived as slow even though there is a bit more 'good press' for them.

(Sociology Pre'92)

Disabled identity

Figure 14, C7 (Appendices, p.63), together with the survey responses already discussed above, indicates just how little dyslexic students identify with a disabled identity. Just over 10% agreed that they were proud of their identity as a disabled person. The remaining 90% were either unsure, or disagreed, 29% of them strongly (Table 15, Appendices p.32):

Can't identify with an identity to which I do not truly regard myself as belonging!

(Philosophy Pre'92)

Some, like the student quoted below, recognised that others usually regarded dyslexic students as disabled:

The D in SpLD is generally taken to mean disability, which in turns means I am disabled, and I understand myself as fitting into that category, but I do not identity with it or regard myself as it. It is too broad and lacking in specificity.

(Childhood, Education and Society Pre'92)

Nevertheless, the pragmatic advantages of the disabled label were acknowledged:

Of course pragmatically . . . it is useful for gathering popular support, raising awareness, ensuring people with SpLDs are covered by legislation, and so on.

(Philosophy Pre'92)

Even though I don't believe it is a disability, it's the only way to acknowledge on forms in order for people to understand and in order to get help. Without help I would not be where I am today.

Theology Post'92)

Question 2(b): Attitudes of non-dyslexic students towards dyslexic students' dyslexic and disabled identities

Non-dyslexic students' attitude towards dyslexic identity

The non-dyslexic students who took part in the survey appeared generally to respect the difficulties of their dyslexic peers and to show sympathy for them (Figure 18, C2, C4, C3, Appendices p.67). A very high 84% denied outright that dyslexia is often an excuse for laziness (Figure 18, C2), and 67% perceived themselves as sufficiently cognizant of their peers' struggles to agree that they were glad not to be dyslexic themselves (Figure 18, C4). However, as with all the quantified data collected in this study, opinions and attitudes of any one group were not unanimous. Amongst the 22% of non-dyslexic students who were unsure about not preferring to be dyslexic, and the further 11% who would have preferred to be dyslexic, was the following student:

Whenever I have done tests I come up as slightly dyslexic, but when tested further, nothing comes of it. I have always had trouble with literacy and am not offered the help that dyslexic students are. Also, they get given free MacBooks and editing software on my course . . . and I want free editing software!!

(Non-dyslexic Film Production Post'92)

Non-dyslexic students attitudes towards disabled identity

Like the majority of participants from other categories surveyed for this study, most non-dyslexic students struggled to reconcile their concept of disability with the identity of dyslexic students known to them. Sixty-six per cent of the group agreed that although some dyslexics might be disabled, most of them appeared to be no different from non-dyslexic students (Figure 18, C3, Appendices p.67). This quantified result, bearing witness to the hidden but also the dimensional nature of dyslexia, is illustrated in the expanded opinion of the following student:

I think the difference with dyslexia is that it is not obvious - so while I'm sure it can be extremely disabling, I think there is a very wide range of disabilities experienced by the particular student. For example, some students I know who are dyslexic feel it only limits them in certain areas of study, whereas others seem to struggle more broadly.

(Medicine Pre'92)

EQUITY ISSUES AND REASONABLE ADJUSTMENTS

Question 3(b): Dyslexic and non-dyslexic students' opinions on the fairness of reasonable adjustments

On the whole, quantified analysis of the data from this section of the survey suggested that non-dyslexic students were more comfortable and less critical of the equity issues around reasonable adjustments for dyslexic students than were dyslexic students themselves.

The legislation

There was no difference in the opinions of the two groups regarding the appropriateness of the legislation: a very high percentage of each group (dyslexic students 91%; non-dyslexic students 90%) agreed that it was right that the law required universities to make allowances for dyslexic students, like giving them extra time in exams (Figure 15, D1, Appendices p.64; Figure 19, D1, Appendices, p.68).

Fairness of reasonable adjustments

However, at the group level, non-dyslexic students' displayed an altruistic attitude towards reasonable adjustments for what most of them perceived to be the difficulties of dyslexic students, surprisingly and significantly at odds with the attitudes of dyslexic students, as testified by the results from Chi-square tests for independence on three of the pairs of survey items exploring this issue (Table 26, D2/D3, D5/D2, D7/D5, Appendices p.47).

Significantly more non-dyslexic than dyslexic students believed that the difficulties commonly ascribed to dyslexia were confined to students formally categorized (Table 26, D2/D3, Appendices p.47). Dyslexic students (50%), unlike their non-dyslexic peers (11%), were much more likely to have observed that some of their difficulties were actually shared by their non-dyslexic friends:

Everyone learns in different ways, and has different learning needs. Dyslexia is simply one end of the spectrum; non-dyslexic students/very mild dyslexia can still benefit from reasonable adjustments.

(Biochemistry Pre'92)

Dyslexic students were also mindful of unfairness in the treatment of non-EU students with learning differences:

I have a dyslexic friend who is a non-EU student and so has less help available for her, I feel bad for her because she is having the same difficulties but not the same assistance.

(MPhil Philosophy Pre'92)

Observation of the dimensional nature of dyslexia may have partially accounted for dyslexic students (60%) being more likely to perceive that some non-dyslexic students resented what might appear as preferential treatment for dyslexic students (Figure 15, D5, Appendices, p.64), an assumption that actually appeared to be groundless as far as reasonable adjustments were concerned (Figure 18, D2, Appendices, p.67). A high 63% of non-dyslexic students agreed that extra time in exams and funding for one-to-one study skills support did not give some dyslexics an unfair advantage. The difference in attitude between the two groups was statistically significant (Table 26, D5, D2, Appendices p.47).

Further illustration of what appeared to be non-dyslexic students' inflated perception of dyslexic students' difficulties was seen in the statistically significant comparison (Table 26, D7/D5, Appendices p.47) between the two groups' responses to the items soliciting their opinions on the fairness of written assessment for dyslexic students (Figure 15, D7; Figure 19, D5, Appendices p.64, p.68). Over half (53%) of the dyslexic students claimed not to feel discriminated against by written and timed assessment systems i.e. they were comfortable with them, whereas only 16% of non-dyslexic students agreed that dyslexic students were being treated fairly by having to do written assessment and timed examinations. Dyslexic students tended to be accepting of the general fairness and appropriateness of written assessments:

I feel it frustrating that I can only express my knowledge via written assignments or exams, but due to practicalities such as time and finance I don't feel oral exams would be feasible and if they were an option exclusive to those under certain disability labels I'm sure this would then be unfair on others who struggle but not have a label.

(Childhood, Education and Society Pre'92)

I realise that written work utilises skills which are widely applicable to graduate life and work, and that it is important to develop these skills in all students (dyslexic or not). However, it is

important to assess students using a variety of assessment methods. I would feel disadvantaged if all of my assessments were essay format. Different students have different innate strengths and weaknesses (dyslexic or not) and diversity in assessment methods is essential for fair assessment of learning.

(PhD Maths Pre'92)

I'm not sure I would do much better at talking my way through an answer because I often have the same difficulties retrieving words or organizing my thoughts into words whether it is on paper or spoken, so what ever the assessing method it is going to advantage and disadvantage different people in different ways.

(Childhood, Education and Society Pre'92)

However, in what appears to be an undisguised criticism of inconsistent dyslexia assessment practices, one student implied a major impediment to the “fairness” of institutions’ systems of awarding reasonable adjustments:

I would not "feel discriminated by the university system" if the support were well provided and fair for all, but it seems to be a lottery according to which assessor you go to.

(Counselling and Psychotherapy Pre'92)

Despite their observations and reservations about the fairness of prioritized reasonable adjustments and differentiated provision, the majority of dyslexic students appeared to feel justified being eligible for them. A high 82% indicated that they felt comfortable with receiving them (Figure 15, D3, Appendices, p.64).

Stigmatization of differentiated provision

Feelings were less unanimous on whether or not differentiated provision stigmatized dyslexic students as being less able (Figure 15, D8, Appendices p.64; Figure 19, D7, Appendices, p.68). Although 23% of dyslexic students and 28% of non-dyslexic students agreed that it did, the majority of dyslexic students (53%) were of the opinion that it did not, and the remainder was unsure. Like other effects of dyslexia, dyslexic students accepted differential

provision with a certain amount of stoical resignation:

I feel [differentiated provision] marks [dyslexic students] as different but then the label already does that. It may lead to some stigmatisation . . . but it is necessary. Much like ensuring buildings are accessible to wheelchair users through use of ramps and a lift is necessary . . . Any stigma that results should be addressed through education and activism.

(Philosophy Pre'92)

Dyslexic students' perceptions of lecturers' awareness

Whether or not they thought that reasonable adjustments were fair, dyslexic students' opinions on lecturers' awareness of their needs, and by implication lecturers' willingness to implement reasonable adjustments, was also far from unanimous. Roughly 41% of the dyslexic students (Figure 15, D6, Appendices, p.64) agreed that most lecturers understood their difficulties and were prepared to be sympathetic; 31% was "unsure", and 28% disagreed. Some students had had mixed experiences:

The general attitude from my school is not very helpful and understanding. I often have to push to obtain the things I need for term time assessments etc. but the examinations department for final exams is fantastic and has always accommodated me very well.

(M. Pharmacy Pre'92)

The following comment from a post-graduate student who had recently attended his institution's training course for seminar leaders hints at one of the root causes of many lecturers' seeming lack of dyslexia awareness:

People in general in the university seem unaware of the adjustments that might be needed for any students with disabilities, not just dyslexics, and after having gone through the university's training for seminar leaders it is clear that no training on the needs of disabled students is offered.

(MPhil Philosophy Pre'92)

Non-dyslexic students attitudes towards the fairness of DSAs

Although quantitatively most non-dyslexic students appeared to be uncritical of the rights of dyslexic students to reasonable adjustments and even one-to-one-tuition, this altruism did not extend, to the same extent, towards dyslexic students receiving personalised DSA-funded IT equipment. Roughly half of the group (47%) objected to public funding being spent indiscriminately on dyslexic students in this way when all students needed this equipment (Figure 19, D4, Appendices p.68).

I feel that the amount and value of material objects that the dyslexic students are given, does not reflect the nature of the issue. Personally, having worked hard to save for my own equipment, I feel a little irritated that a student not working but with this problem, is given much more than I have been able to, when it isn't specialised at all. Also, the laptops and other items seem . . . unnecessarily expensive. For example, a housemate of mine received a 15-inch MacBook Pro retina display laptop, when she is on a course that doesn't even require a sketch book at the moment, plus a new model of a Canon printer, with ink, which to my knowledge has been used only for Freshers' tickets so far. I really do think people who need support should receive it, but I don't think that this is the way to go about it.

(Non-dyslexic Photography s Post'92)

I understand the people with dyslexia need extra time and help but free laptops etc. is completely excessive, considering so many students struggle with other problems such as mental health, illness and money issues and don't get this.

(Non-dyslexic Psychology Pre'92)

I do feel that if the university is able to procure funds to give dyslexic students laptops, it would be more fair if they could also procure funds to give laptops to students who are unable to afford them.

(Non-dyslexic Medicine Pre'92)

A further 41% of non-dyslexic students even suspected that some dyslexic students were guilty of "playing the system", by getting free laptops, for

example, when they did not really need them (Figure 19, D6, Appendices p.68).

I know more than one person who has played the system, getting free stuff and bursaries, when they really don't feel they need that much help.

(Non-dyslexic Psychology Pre'92)

I know of a couple of people that faked being dyslexic in order to obtain free equipment.

(Non-dyslexic Veterinary Pre'92)

More controls were seen as a desirable way of curtailing such abuse of the system:

The funding for computers and equipment to aid dyslexic students is something that is often abused by non-dyslexic students and should be removed or toned down to seem less desirable to those that would cheat the system.

(Non-dyslexic Illustration Post'92)

However, not all the non-dyslexic students took such a hard-line critical attitude, as the quantified frequencies of response in Figure 19 make clear:

The fact that there might be students taking advantage of the system does not justify taking away the help to all the honest ones. Granularity in assessing the degree of help needed might be too difficult and expensive to achieve.

(Non-dyslexic PhD Pre'92)

Establishing "fairness", particularly academic fairness, is an activity fraught with difficulties about which different individuals and groups will invariably disagree.

INCLUSIVE PRACTICES

Question 4(a): Attitudes of dyslexic and non-dyslexic students to bespoke disability provision for dyslexic students being replaced by institution-wide inclusive practices

Much of the terminology used to refer to the concept of inclusion appeared alien to over three quarters of the students who took part in the survey. Seventy-seven per cent of the dyslexic group, and a similar 74% of the non-dyslexic group, claimed not to have heard of the term “inclusive practices”. Nevertheless they were still able to respond to relevant survey items that attempted to gauge their opinions of specific aspects of the concept when such items were couched in more familiar terminology.

Differences in attitudes between dyslexic and non-dyslexic students

Quantitative (Figure 16, E1, E2; Figure 20, E1, E2; Appendices p.65, p.69) and inferential (Table 26, E1, E2; Appendices p.47) analyses of the survey data indicated that, at the group level, there were significant differences between the attitudes of dyslexic and non-dyslexic students towards various aspects of inclusive practice. Although attitudes of both groups towards each of the itemized positions were far from unanimous - with over a third of students in all categories being “unsure” - dyslexic students showed a clear preference for retaining Disabled Student Allowances (DSAs) and for not making reasonable adjustments available to any students who needed them.

Question 4(b): Reasons for students’ attitudes towards inclusive practices

Replace DSAs with institution-wide inclusive provision

The majority of clarificatory comments made by dyslexic students justifying their attitude towards the retention of differentiated additional provision in the form of DSAs centered around notions of entitlement. The following student, for example, attempted to articulate this notion of entitlement to DSAs by

compounding it with the argument of fairness in recognition of comparative academic difficulties and effort:

It's not about getting a free laptop; other students just see that and think that's unfair. For me it's about getting the help and the support from the academic support and the software so I can get the best grade possible. You could argue that it is unfair how I need to study 5 hours a day for months and manage to scrape a C and some of my non-dyslexic friends study on the night of the exam and get an A. There are pros and cons to everything. Getting some of the equipment can make dyslexic students a target of resentment, but it doesn't bother me too much because it makes me confident that the quality of my work will be up to the lecturers' standards.

(Film Production Post'92)

Similar arguments to justify prioritised support are expressed in the next comment:

The mere fact that the disabled student, who has spent decades developing coping mechanisms, can perform better than a student who was merely unprepared for university and unwilling to put the work in, is unsurprising and should not exclude the former from support or include the latter for support.

(Philosophy Pre'92)

Such support was also regarded as not being relevant or necessary for non-dyslexic students:

None of my non-dyslexic friends seemed to be at a disadvantage for not having similar provisions as myself. Many of the things that I found useful they said that they would not use at all (such as the programme that reads documents out aloud to you).

(PhD Plant Cell Biology Pre'92)

It was clear that many dyslexic students regarded DSA support as a crucial factor in enabling their academic success:

Without the DSA funding I don't think that I would be in the position I am now nearing completing and gaining a degree.

(Paramedic Pre'92)

However, although DSA support was seen as a necessary component to academic success, some students, as has been illustrated elsewhere, felt uneasy about accessing it:

I do not feel bad about having the extra time in exams, but I do feel bad about the DSA even though it hugely helps me.

(Chemical Biology Pre'92)

Other dyslexic students purposely refrained from using available DSA funding, for a variety of personal and ethical reasons:

I have never claimed DSA funding - I didn't think it was appropriate.

(PhD Engineering Pre'92)

I do not currently draw upon a DSA, given that I function quite well.

(Philosophy Pre'92)

Institutional inclusive-wide practices were regarded as desirable provision in addition to DSA funded support:

As a dyslexic student I have found the additional provision fundamental in enabling me to work at my intellectual potential and I would not like to see this provision reduced. However, there are simple [dyslexia-friendly] strategies that could be applied to lectures and assessments that could benefit all students.

(PhD Archaeology Pre'92)

However, the idea of replacing DSAs completely with more inclusive support attracted feelings of mistrust regarding the latter provision's effectiveness for dyslexic students. Most students wanted it retained, alongside more inclusive practices:

University wide provision seems unlikely to take account of the differences between conditions like dyslexia. My concern would be that I would be told that my condition was already accounted for. Few staff [members] have sufficient expertise to fully

understand what different people might need. I do, however, think that the university should have policies for inclusion of dyslexic students, AS WELL as DSA. For example, requiring lecture slides to be available in advance, setting out course booklets clearly and consistently in user-friendly fonts etc.

(PGCE Pre'92)

I'm not sure it would be possible to cater to every individual's needs in such a universal way. I do think some of the assistive technology on computers should be available to all students. And I think tutors could make their lessons more accessible to all students with simple strategies that are not particularly costly or time consuming.

(Childhood, Education and Society Pre'92)

Nevertheless, one cannot discount the opinions of the silent (in terms of optional clarificatory comments) 27% of dyslexic students who agreed that DSAs should be replaced by institution-wide inclusive practices, nor the further 39% who were "unsure"

Make RAs available to all

The quantitatively analysed attitudes (Figures 15 and 19, Appendices p.64, p.68) also need to be borne in mind when considering the qualitative data produced by students in response to whether or not they thought that reasonable adjustments should be available to any student who needed them. Although percentage response frequencies for the dyslexic students were equally divided amongst the three possible categories (Figure 16, Appendices p.65), dyslexic students in the "disagree" category contributed most of the clarificatory comments.

Amongst the comments that resented reasonable adjustments being available to all students there was a tendency to cite the "level playing field" concept. For example, extra time in examinations was justified by reference to it as an adjustment for dyslexic students' fluency and processing difficulties:

The point of extra time for dyslexic students is to balance it out and make it fair in comparison to non- dyslexic students. As a dyslexic person when I read a passage I don't always remember what I have read, it leads me to panic and I would have to re-read a passage 3-4 times in the exam. This is why they let dyslexic people have extra time. I don't think it would be beneficial for everyone to have this unless they had a learning difficulty.

(Film Production Post'92)

Some dyslexic students also saw allowing non-dyslexic students to use a word processor in examinations as a threat to the level playing field:

A moderately proficient student without dyslexia may gain significant advantage by use of IT in exams etc. and would in effect "un-level" the playing field again.

(Counselling and Psychotherapy Pre'92)

Dyslexic students saw reasonable adjustments as acceptable only if a viable need could be established:

I really doubt [whether] non-dyslexic people need extra time in exams; they just want it. That said, if there were proper tests for everyone to see in they need it I don't mind.

(Zoology Pre'92)

If by "any student who needs them" is meant any disabled student whose disability interferes with their ability to complete written exams under time constraint, then, yes. If it means any student whose grade would be increased by such a provision, then no.

(MPhil Philosophy Pre'92)

Whilst many dyslexic students said they would not object to any student being allowed to word-process their exams, they were more protective of their differentiated right to extra time:

I would be open to the idea that every student can choose to word process an exam. Not that the art of handwriting should die out. But really almost all non-artistic documents of any length now are typed. Why should an exam be any different? The extra time though is meant to compensate for slower processing times and longer time spent for dyslexic students' reading. Maybe a slightly lower bar on eligibility [for extra time] but ultimately time-management is, regrettably, an integral part of the examination and how it functions as a method of testing.

(Philosophy Pre'92)

I think anyone should be allowed to use word processors - but extra time should only be for those who really need it. You don't get extra time in working life!

(Non-dyslexic Ancient History pre'92)

Not all students, though, as the quantified data makes clear, share the same attitudes towards reasonable adjustments. Perhaps the following quoted non-dyslexic student speaks for several of his group in questioning whether any student should be allowed extra time in an examination

Essays, exams and so on, are a test of an individual's skills when compared to others. Allowing select students more time based on personal difficulties may affect the outcome of such tests in a way that does not accurately represent that student.

(Illustration Post'92)

CONCLUSION

Overall, both groups of higher education student participants surveyed appeared unaffected by the more obvious tensions within the research community, and amongst assessors and lecturers in the study, between the understanding of dyslexia as simply a reading disability and that which conceptualises it in broader terms. The students, either from their own experience of being dyslexic or from observing the behaviour of their dyslexic peers, seem to assume, without question, that dyslexia is more than just a reading disability. How much of this assumption is due to what is often termed students' "lived experiences", and how much of it is the result of

assessors' practice in the sector, is one of the considerations discussed in the next chapter.

Chapter 7: Discussion

This study emerged from personal professional disquiet occasioned by critical confusion both within and without the research field concerning the nature and assessment of dyslexia in UK higher education students, as well as the entitlement of such students to differentiated disability provision. Much of this criticism was aimed either explicitly or implicitly at the professionals who assessed dyslexia in higher education students (Soler, 2009; Grove, 2014) and yet there was no existing systematic research on the subject with the practitioners concerned, and very little with the individuals most directly affected by assessors' practice, namely students and the lecturers responsible for such students' teaching and learning. This study set about to redress the balance; its data has legitimized some extant opinions but also, more importantly, has succeeded in revealing several fresh perspectives on, and insights into, the current nature of dyslexia assessors' practice within the UK higher education sector.

Chapters 4, 5 and 6 separately analyse in detail the study's findings from all three groups of participants on each sub-question outlined in the Research Aims (Document 1, Appendices p.78). This chapter will refocus and integrate some of the most significant of these findings into a discussion of their relevance for the study's main research area i.e. the nature of dyslexia assessors' practice within the context of higher education. In DOIng so, it will not only consider how such findings compare with and add to others in the field, but will also attempt to evaluate the relative contributions made to the findings by the two different types of data and data analysis.

7.1: ASSUMPTIONS ABOUT THE NATURE OF DYSLEXIA

Lack of consensus around the dyslexia concept

Indisputably, the most conspicuous finding from analysis of the study's overall data is the apparent lack of consensus amongst all three groups of participants concerning the perceived nature of dyslexia. In keeping with

recent comprehensive research reviews (Rice & Brooks, 2004; Elliott and Grigorenko, 2014), acknowledged, albeit less censoriously, by prominent researchers in the field (Snowling, 2009; Bishop, 2014), and eagerly taken up by the media for what is probably a whole panoply of socio-political motives (Garner, 2004; Elliott, 2014), this lack of consensus is a far-from-surprising finding to emerge from the data. Neither is the finding confined to the UK, as systematic reviews of assessment reports carried out by Canadian researchers Harrison & Holmes (2012), and American researchers Sparks and Lovett (2009) make clear.

Lack of consensus amongst assessors

Figures 2, 3, and 4 (Appendices pp.51 - 53) provide quantified evidence of the range of different assumptions that the 118 individual assessors in the study group held about the nature of dyslexia, the influence on their practice of historical and current research findings, and of the varying levels of confidence that they had in their dyslexia assessment practices. Cited explanatory comments from the survey, as well as more detailed ones resulting from focused interview probing, serve to further illustrate this seeming lack of consensus. The proverbial metaphor of the elephant and the blind men has often been used to illustrate the piecemeal and divergent history of dyslexia research (Morgan & Klein, 2000; Wolf, 2008) and this might in part explain why over 40% of the study group thought that there were no agreed criteria about what is dyslexia (Figure 3, C1, Appendices p.52). Nevertheless, it is still surprising that the divergence of opinion within the assessor group extended to even one of the more universally accepted tenets of current research, namely the dimensional, continuous nature of the human attributes commonly associated with dyslexia (Bishop, 2012; Hulme & Snowling, 2009; Pennington & Bishop, 2009; Shaywitz et al., 1992). Roughly 35% of the assessor group appeared to conceptualise dyslexia as a distinct category, agreeing that an individual was either dyslexic or not dyslexic (Figure 3, C11, Appendices p.52), confirming the accuracy of critical observations about the tendency of some professional practice to adhere to psychometric and theoretical errors superseded by subsequent scientific

advances (Stanovich, 1999; 2005), and failing to ensure that practice keeps up with research (Elliott, 2014).

Furthermore, although analysis of the quantified data from the assessors' survey identified several significant differences in assumptions and attitudes between the two professional groups, educational psychologists (EPs) and specialist teachers (SpTs) (Table 21, Appendices p.41) the differences were far from exclusive, as was also detected from the cited qualitative comments from the survey and most conspicuously from the interview data. For example, although two of the EP interviewees conceptualized dyslexia strictly in terms of reading disability regardless of causes, and restricted their use of the label to this meaning, the other two interviewees from the same professional background conceived of the construct more broadly as a syndrome of characteristic strengths and weaknesses, more in keeping with the four SpT interviewees.

Lack of consensus reflected in, and partly explained by, student data

Data from the two student-surveys both reflects and helps to explain the general lack of consensus that has emerged from the assessors' data in this study.

The quantified perceptions of 146 diagnosed dyslexic students regarding their experiences of a range of commonly researched dyslexia difficulties (Fig. 13, Appendices p.62) illustrate the heterogeneity of dyslexia as it is experienced by, and presumably assessed in, HE students. Some difficulties, for example, fluency problems, were experienced by a very high percentage of student participants (86%) who had been assessed as dyslexic (Figure 13, B12), but every student in the group did not consciously experience even this high, frequently occurring and heavily research-evidenced cognitive difference. Some dyslexic students appeared to have no difficulties with fluency, and others, not necessarily the same students, experienced no difficulty with each of the remaining items in the survey's list of research-identified characteristics of dyslexia, or, in common with their non-dyslexic peers, experienced them only occasionally (Figure 22, Appendices p.72).

Julian Elliott has observed, disapprovingly, that “students who read perfectly well are being labeled as dyslexic” (Grove, 2014); Rice and Brooks (2004), in their extensive research review, concluded: “Dyslexia is not one thing but many, to the extent that it may be a conceptual clearing-house for a variety of difficulties with a variety of causes” (p.88). Quantified data from the dyslexic students’ survey used in this study appears to ratify such critical views. Dyslexia assessors’ practice, in being based, at the group level, on a heterogeneous concept of dyslexia, has no doubt contributed to this apparent lack of uniformity amongst HE students labeled dyslexic.

Nevertheless, as has been observed by more than one researcher and/or practitioner in the dyslexia literature (Miles & Miles, 1999; McLoughlin & Leather, 2013) the relationship between professional practitioner assessors’ understanding of dyslexia and the difficulties and strengths of dyslexic students is bi-directional. Assessor practitioners’ concept of dyslexia is developed and modified by what they learn from the students with whom they work. These students do not all experience dyslexia identically (Figure 13, Appendices p.62); this observation, in turn, inevitably shapes assessors’ assumptions about the nature of dyslexia, often modifying, in an individual way, official theoretical research-derived models.

A specific example from this study of the way in which assessors’ assumptions about the nature of dyslexia can be modified by professional experience is found in the responses given by the assessor and dyslexic student participants to the survey items gauging their opinions on the relevance of poor organizational skills. In contrast with most general descriptive definitions of dyslexia, such as the British Dyslexia Association’s current definition adapted from Rose (2009), both the assessor and the dyslexic student participants rated poor organizational skills as low in the list of dyslexia difficulties. Only 14% of assessors thought it a necessary criterion for a dyslexia diagnosis (Figure 2, B8, Appendices p.51), and less than 30% of dyslexic students were aware of experiencing it frequently (Figure 13, B14, Appendices p.62). Context is likely to have been an important factor in the production of these results. The majority of the dyslexic student sample (110

out of 146) were from high-ranking universities and had presumably got there by having developed effective compensatory strategies, but they had still been diagnosed as dyslexic despite having apparently excellent organizational and, in many cases, excellent literacy skills. What their assessors had observed, and what some of the students themselves confirmed in their explanatory comments (Chapter 6) was the manner in which individuals with high cognitive ability can, and do, compensate for underlying inefficient processing skills. The importance of compensatory strategies, historically and currently observed as being a complicating factor at the behavioural level of dyslexia assessment in HE students of above average cognitive ability (Rack, 1997; Singleton, 1999), has also been demonstrated by empirical research at the psychological (Hulme & Snowling, 2009) and neurological (Shaywitz et al., 2003; Hoefft, 2013) levels. Consideration by experienced individual assessors of high achieving dyslexic students' differing levels of compensatory strategies may well have affected their responses to items in the study's survey soliciting their assumptions about the nature of dyslexia, thereby contributing to the quantified lack of consensus displayed in Figure 2, (Appendices p.51). The differing compensatory strategies themselves, no doubt, are also partly responsible for at least some of the quantified heterogeneity observed in the dyslexic students' data (Figure 13, Appendices p.62). Such bi-directional influences can be observed in much of the study's data, providing an insight not only into assessors' seeming lack of consensus about the nature of dyslexia, but also into other aspects of their practice.

Indirect affect on lecturers' knowledge and opinions

Data from the study's survey of 164 lecturers from eight different higher education institutions can be interpreted as displaying an important indirect influence of dyslexia assessors' practice on many lecturers' assumptions about the nature of dyslexia. Assessors shoulder the responsibility for deciding who, and who does not, acquire the dyslexia label. Lecturers, it transpired from the many textual responses to the survey, gained much of their understanding about dyslexia from personal and professional experience of assessed individuals. Many were understandably confused

and more than a bit cynical about the heterogeneity observed in these assessed individuals. Whilst the influence of small but significant contextual variables such as institution type and disciplinary affiliation complicated the overall picture (Chapter 5), 40% of the entire cohort admitted to being confused by seeming heterogeneity (Figure 9, B7, Appendices p.58), 45% of them found it difficult to distinguish between dyslexic students and the academically unprepared (Figure 9, B5), and 35% had trouble distinguishing dyslexic students from those with insufficient intellectual ability to meet the demands of a degree course (Figure 9, B6). No doubt some of the admitted confusion was probably due to the apparently low level and depth of awareness of dyslexia amongst the lecturers who took part in the survey. Only 40%, for example, were conscious of having been offered dyslexia awareness training by their institutions (Figure 9, B1), but observations of heterogeneity amongst assessed dyslexic students provoked criticism from some of those lecturers who had knowingly come into contact with dyslexic students. One statistics lecturer questioned the consensus amongst educational theorists as to what dyslexia was, and others expressed opinions ranging from the observation that dyslexia's basis appeared to be nebulous, that it was over-diagnosed, and that there was a systematic problem with the way that it was assessed in the first place (see Chapter 5 for a fuller analysis).

Data from the lecturers' survey not only triangulates, in the sense of cross verifying, the lack of consensus about the nature of dyslexia found in the assessors' data, but also illustrates an important consequence of assessors' practice i.e. lecturers' often confused understanding of the dyslexia concept developed through their personal and professional experiences of knowing and teaching similarly labeled individuals with such wide variation of identifying features.

Individual diversity

Currently recognized models of learning differences, such as the holistic bio-psycho-social model (WHO, 2001), are complex and help explain the inevitable diversity encompassed within the loosely categorized learning difficulty, dyslexia. Assessors generally have the research and professional

knowledge to contextualize and accept this diversity; students' lived experiences evidence the diversity; some lecturers and members of the general public perhaps lack the privileged awareness of the concept necessary to accept the diversity; many researchers and legislators find it unscientific and impossible to operationalize. Nevertheless, diversity there is, as both the quantitative and qualitative data from this study show.

Fresh perspectives

Maryanne Wolf (2014), in reflecting on *The Dyslexia Debate* (Elliott & Grigorenko, 2014) started by quoting one of Marcus Aurelius' sayings:

"Everything we see is a perspective, not just a fact".

The ancient opinion is an apt one to apply to the present study's data. The interpretation put upon the study's seemingly diverse findings depends very much on the perspective from which such findings are viewed. Data that quantitatively demonstrates an undeniable lack of consensus amongst the 118 assessor participants is a case in point. When the same data that led to this conclusion is viewed from a different perspective, then it provides some fresh, more positive insights into the nature of dyslexia assessors' practice in the HE context.

Lack of consensus a semantic rather than a conceptual issue

Data produced from individual interviews with four EP and four SpT assessors strongly suggests that much of the seeming lack of consensus displayed by the quantitatively analyzed data from the study's assessor participants might be more of a semantic issue than a conceptual one.

Example 1: "Dyslexia"

Dyslexia theorists and researchers have long been notorious for their semantic wrangling over the meaning of the term "dyslexia". Practitioners, too, are not exempt from this activity. Chapter 4 illustrates the differences in the use of the term between two of the EP interviewees and the other six interviewees. EP3 and EP4 were adamant that "dyslexia" was "poor reading"

in the absolute sense, and nothing more. The other six interviewees conceived of the learning difference in the broader syndrome sense, as outlined by, for example, Miles (1993) and as akin to the notion of family resemblances, as philosophized by Wittgenstein (see Siegel & Smythe, 2006, as cited on p.66). Nevertheless, when probed, it turned out that EP3's and EP4's professional practices focused on the same syndrome of skills, using much the same set of tests and professional observations as did the other interviewees. If the broad range of difficulties observed in the student's functional and cognitive profile met certain criteria, six of the interviewees referred to them as "dyslexic"; EP3 and EP4 diagnosed "dyslexia" only for poor reading, but referred to the rest, the cognitive inefficiencies that may or may not have resulted in poor reading, and which appeared to be causing other academic difficulties, as "specific learning difficulties".

Notwithstanding the confusion engendered amongst educators and the general public by professional assessors' inconsistent use of classificatory terminology (Russell et al., 2012), the above cited example from the interview data makes it clear that observations of lack of consensus amongst dyslexia assessors in the HE context cannot be taken at face value. Even those most vehement critics of the practice who despairingly call for the abandonment of the term "dyslexia" altogether (Rice & Brooks, 2004; Elliott & Grigorenko, 2014) are at pains to stress their acknowledgement of the reality of "dyslexic" individuals' difficulties – difficulties that transcend reading problems and can be usefully investigated by educational assessment (Elliott & Grigorenko, 2014). Whether a rose by any other name would smell as sweet continues to be a hotly debated issue, but, regardless of terminology used, it is highly likely that assessors of dyslexia in HE are looking at the same thing, and, on one level, for much the same purpose i.e. to identify and help the individual student to understand their learning problems and to suggest a way forward. Their main focus appears to be intervention rather than labeling.

Example 2: "IQ" and "discrepancy"

A similar general consensus amongst the eight interviewed assessors was detected around another of the dyslexia field's hottest potatoes, namely the

relevance to dyslexia diagnosis of intelligence quotient (IQ) and the discrepancy concept. Again, the different interviewees engaged in various measures of semantic wrangling, occasioned, in part, by divergent research findings embedded in different professional training and background, and heavily influenced by robust social, political and ethical arguments against the use of the two concepts in the assessment of struggling child readers for the purpose of securing additional provision. What analysis of the interview data revealed, though, was that all eight practitioners used a standardized test of cognitive ability, both quantitatively and qualitatively, as a yardstick against which to conceptualize, if not measure, the specificity of a student's difficulties. Some substituted the terms "spiky profile" and "difference" for "discrepancy", and "ability" and "attainment" were not always interpreted in the same way, but all confirmed that for a diagnosis of dyslexia, or specific learning difficulties (in the case of EP3 and EP4) there would need to be some sort of discrepancy. (See Chapter 4 for a fuller discussion).

Words and labels can take on a life of their own. They readily become loaded with ideology while the concepts they refer to may be perfectly non-contentious (Frith, 1999)

The above two examples from the lexicons of different dyslexia assessors illustrate the workings of Frith's dictum. It appears that the broad conceptual consensus concerning specific learning difficulties at the higher education level may have been largely clouded by personal, individual comprehension of terminology that the rigid questionnaire format was unable to explore. Quantitative analysis of the assessors' survey data revealed that 62% of the participants regarded a "spiky profile" as a necessary criterion for an HE diagnosis of dyslexia (Figure 2, B12, Appendices p.51); a similar percentage conceived of dyslexia as a combination of strengths and weaknesses (Figure 3, C4, Appendices p.52). Forty-six per cent of assessors thought that a traditional ability/achievement discrepancy was a necessary criterion to accrue the label (Figure 2, B11). Participants whose responses were represented by the remaining percentages in each item, considered these criteria as either important but not necessary, or simply not necessary. These statistics, though, lack detail, and reveal nothing of the participants'

interpretation of the language in which the survey items were couched, or of the reasons behind their responses. They suggest a lack of consensus that takes on a different perspective when a selection of typical participants is given the opportunity to explain, elaborate and reflect on their practices.

Relevance of IQ and discrepancy to HE educational assessment

The historical discrepancy concept and its relationship with average and above average intelligence in the identification and assessment of dyslexia has been largely abandoned by much (Elliott & Grigorenko, 2014) but not all (Ferrer et al., 2010) scientific research on dyslexia that typically focuses on the important area of reading disability. The concept has also been discarded by most UK educational policies designed to allocate additional funding for struggling child readers. Its retention, in broad terms, in the assessment of dyslexia in higher education students not only reclaims for dyslexia the specificity of its original conception but also suggests that in a context where intellectual ability is assumed essential for success, learning disability concepts that do not take it into account, either formally or informally, are, or possibly should be, irrelevant. Interestingly, academic functioning not necessarily below average but notably below that expected on the bases of observed and/or measured intellectual ability appears to be undergoing a resurgence of recognition in the United States in the form of the Twice Exceptional (2e) concept (IDA, 2015). This concept and its relationship with the discrepancy model of dyslexia, is discussed further, below

Consensus around focus, nature and purpose of HE assessment

Viewed from the perspective of assessors' purpose in and methodology of carrying out an educational assessment for HE students, the study's interview data revealed much consensus. It confirmed that despite some of the language used assessors were, in general, looking at the same syndrome of cognitive strengths and weakness, and considering the significance of their findings within a broad conceptual framework historically attributed to the specific learning difficulty of dyslexia. If the purpose of assessors' practice could be confined to their professional bodies' good practice guidelines with regard to generating, for the student, an

understanding of their difficulties and advice as to how such learning differences might be ameliorated (British Psychological Society, 2002; Jones & Kindersley, 2013), then much of the confusion surrounding, and many of the problems associated with, their practice, might be resolved. All eight assessors interviewed cited allowing individual students to understand and learn to address their specific academic difficulties as the main purpose of their practice; dyslexic students, in turn, were also appreciative of this aspect of assessment (Chapter 6). Unfortunately, legislative requirements, together with professional and institutional expectations, still demand from higher education assessment a clear categorical label (SpLD Assessment Standards Committee, 2015); it is this assessment purpose, and the range of superficial erroneous assumptions commonly attributed to the ensuing dyslexia label, which attracts controversy.

7.2: DIAGNOSTIC CATEGORICAL ASSESSMENT

Objective, consistent and reliable identification impossible

Analyses of all three sets of data from this study strongly indicate that the current assessment model used to assess HE students is incapable of identifying dyslexia in the “consistent and reliable” way optimistically envisaged by Singleton and his 1999 Working Party. This failure has little to do with either incompetence or self-interest of assessors but much to do with the limitations of psychometric tests and, more importantly, the intrinsic nature of professional practice.

Limitations of psychometric tests

Attention has already been drawn to the limitations of any psychometric test in being able to establish a valid binary divide between what research has long established to be continuously distributed attributes of human functioning (Shaywitz et al., 1992; Snowling and Hume, 2010; BishopBlog, 2014b). Even when commonly accepted statistical measurements of below average functioning on appropriately standardized tests, such as those in the region of 1 to 1.5 standard deviations are applied (Jones and Kindersley, 2013), it does not follow that individuals scoring just below the prescribed

cutoffs will be qualitatively different in their functioning than individuals scoring just above whatever cutoff is used, even allowing for measurement errors. The fact that the DfES 2005 Guidelines do not prescribe but merely suggest approximate guides for below average or “deficit” cutoff points, only exacerbates the tests’ limitations as instruments of accurate, reliable and valid evidence across different assessors and different testees. It is accepted that such cutoff points are arbitrarily determined for both research and policy purposes (Hulme & Snowling 2009) but, in the case of dyslexia assessment in the HE context, they are left to the judgement and experience of the individual assessor, as positively attested by nearly 50% of the assessors who took part in this study’s survey (Figure 3, C6, Appendices p.52), with only 10% having the confidence to disagree that such diagnostic decisions were not arbitrary. It is more than likely that different professionals will come to different diagnostic conclusions when using different statistical models. The research literature, for example, documents instances of the way in which different versions of the discrepancy model (Proctor and Prevatt, 2003) and subtest profiling (Watkins et al., 2005) can result in unacceptable inconsistent categorical diagnoses, even of the same individual (Chapter 2, pp.77).

Nearly half of assessors who took part in this study’s survey (44%) were aware of the dimensional nature of learning differences like dyslexia in the general population (Figure 3, C11, Appendices p.52), and presumably the professional tensions inherent in having to categorize it in the binary way demanded by legislation, institutional policy and societal expectation. Their awareness was mirrored in the descriptively analysed data collected from the 146 dyslexic and 155 non-dyslexic students who took part in the study. Figure 22, (Appendices p.72), for example, illustrates the dimensionality throughout the entire student body of the self-perceived difficulties commonly attributed to dyslexia. Additionally, the quantified data shows that 50% of the dyslexic participants were aware that some non-dyslexic students shared their difficulties (Figure 15, D2, Appendices p.64), a finding also observed by 42% of the lecturers surveyed (Figure 12, E8, Appendices p.61).

Arbitrary cutoff points imposed upon a continuous distribution are not the only limitation of psychometric tests that are used to provide evidence of dyslexia. Roughly 45% of the assessors surveyed for the study indicated that their professional experience had led them to lack confidence in the validity of many of the recommended tests (Figure 4, D2, Appendices p.53), a fact attested by many of their comments that alluded to the shortcomings of specific tests which, in their personal opinions, either over or under identified the students with whom they worked. Researchers attempting to establish assessable differences between dyslexic and non-dyslexic individuals have repeatedly emphasised the uncertain face validity of such tests when used with individuals rather than groups (Frith, 1999; Ramus & Ahissar, 2012). Others have advised caution when their studies have revealed the poor discriminatory power of, for example, some tests of phonological awareness when used with very bright students whose high cognitive ability allows them to use compensatory strategies to effectively bypass the skill being assessed (Ramus & Szenkovits, 2008). In fact, a common finding of research with bright dyslexic students and academics has been that many of the usual tests are too easy for them (Smith-Sharp et al., 2003; Ramus & Ahissah, 2012). (See Chapter 2 for a fuller discussion of the limitations of tests commonly used to identify dyslexia).

Few would claim that dyslexia assessment is a science totally reliant on psychometric evidence, faulty or otherwise, but the fact that test results can be misleading and that they are always rightly subject to interpretation (Wagner, Torgeson & Rashotte, 1999) is another reason why assessment of dyslexia using such tests is unlikely to reliably and consistently identify the “same thing”.

The intrinsic nature of professional practice

Lack of consensus in aspects of dyslexia assessors’ practice in general, and in the results of their attempts to categorically diagnose, in particular, starts to make sense and to take on a whole different meaning when viewed from the perspective of theories outlining the nature of professional practice. Theories originally expounded by Donald Schon in the 1980s, and subsequently

extended and refined by others such as Michael Eraut, (2000; 2004), emphasize the bi-directional influences of research and professional experience on practitioners' knowledge, as well as the contextual social, political and personal values that combine to inevitably individualize each assessor's practice. Such theories connect the seemingly disparate findings to emerge from this study's data across all three groups of participants, forming an overarching framework from within which to understand, if not to resolve, them.

Limitations of tight frameworks and guidelines

The dyslexia assessment guidelines produced by the *The National Working Party on Dyslexia in Higher Education* (Singleton, 1999) and their subsequent updating into the currently used *DfES Guidelines* (2005), were an attempt to introduce uniformity into HE dyslexia assessment practice and its outcomes. They have been successful in prescribing the format, range of tests used and general content of assessment reports, and in raising the overall quality of the documents. Nevertheless, even the professional bodies with responsibility for the quality control of their members' practice acknowledge that practitioners' definitions of dyslexia grow out of their personal experience and knowledge, and that when coming to diagnostic decisions assessors must use "judgement and experience" (Jones & Kindersley, 2013). There is a subjective element inherent in all professional practice, even in that regulated by tight frameworks and guidelines:

A professional role places skeletal demands on a practitioner's behavior, but within these constraints, each individual develops his own way of framing the role.

(Schon, 1983, p.210)

Research and practitioner experience bi-directional

The dyslexia research field has long recognized the importance for knowledge of the bi-directional nature of dyslexia research and practitioners' experience of dyslexic adults. Miles & Miles (1999), Frith (2011) and the adult practitioners McLoughlin & Leather (2013), for example, have emphasized the ecological value of practitioner observation and case histories, alongside

systematic laboratory research. Eraut (2000) concurs that even in well-theorised areas of practice [of which dyslexia assessment is not one!]:

. . . the interpretation of theory is problematic and requires further learning from experience. So for practitioners additional knowledge is required beyond the set of propositions taught as theory and the evidence suggests that this additional knowledge is highly situated and often very tacit.

(Eraut, 2000, p.126).

Practitioners' knowledge is "highly situated"

In the dyslexia field, as noted above, much of practitioners' additional knowledge has historically fed back into theory. Yet evidence from all three groups of participants in this study illustrates the way in which such knowledge about dyslexia is "highly situated", in the sense of being contextual. Figures 2 and 3 (Appendices, pp.51 - 52), for example, show that assessors of the learning difference in higher education students hold assumptions about its identification that would probably not be shared by their colleagues looking at child dyslexia. Experience working with this group of student individuals has taught assessors that not only is there great diversity in the way and extent to which dyslexia manifests itself in the HE context, but also, as has been demonstrated previously with reference to compensatory strategies, some of the expected behavioural characteristics, such as a history of literacy acquisition difficulties, poor phonological processing and organizational skills, might appear to be, or indeed be, absent.

The "highly situated" knowledge about dyslexia amongst participants in the study is further illustrated in the observed institutional differences in the analysed data. Figure 24 (Appendices p.74) quantifies the self-perceived dyslexia difficulties of the study's 110 dyslexic student participants from high-ranking Pre'92 universities. Close inspection of this frequency data, together with consideration of many of the explanatory comments added to the survey (Chapter 6) suggests that relatively few of these high achieving assessed dyslexics had generally expected difficulties with comprehension, either

reading (43%) or oral (15%), and that more than 50% of the group did not experience frequent difficulties with over half the survey's itemized criteria, including accurate reading. Many of the students in this cohort revealed that they preferred not to disclose their dyslexia diagnosis, suggesting that it was possible to keep their difficulties hidden and still achieve at a level" commensurate with challenging competition.

Unfortunately, sampling limitations (Chapter 3, p.130) do not allow any reliable comparison between the dyslexia characteristics experienced by the study's 110 dyslexic students from Pre'92 universities and a numerically similar sample of dyslexic students from typical Post'92 universities. However, the compared lecturer data from the two categories of institution does suggest that the behavioural characteristics of assessed dyslexics from Post'92 institutions are not only different in degree but also more obvious and less easy to hide. Table 22 (Appendices p.42) displays the significant differences between the analysed lecturer data from the two different categories of institution regarding aspects of their awareness of and attitudes towards dyslexia and dyslexic students. Lecturers working within Post'92 institutions, for example, were not only more likely to be offered dyslexia awareness training (possibly because of a greater perceived need), but were also more confident in being able to recognize students' dyslexia-type difficulties (possibly because they were less hidden) and more likely to accept the need for reasonable adjustments. As this and other data illustrate, professional assumptions and knowledge about the nature of dyslexia are highly situated, amongst lecturers as well as assessors. "Individuals operate within a social system that shapes their behaviour" (Schon, p.328); the organisational and cultural contexts within which individual assessors work inevitably contribute towards group diversity in the understanding of dyslexia which, in turn, impacts upon the reliability and consistency of the diagnoses made.

"Situated" comprehension of language

Consideration of the highly situated nature of assessors' practice also helps to make sense of what has previously been observed, in this study's data as

superficial semantic wrangling amongst individual assessor participants about such key terms as “dyslexia” and “discrepancy”. Language and comprehension of language, particularly conceptual terms such as dyslexia, are very much dependent on an individual’s experience:

The meaning of a concept for its knower is embedded in a cluster of experiences of knowing it

(Eraut, 2000, p. 313).

Wolf (2008) is even more explicit about the subjectivity of comprehension:

Comprehension emerges out of all the cognitive, linguistic, emotional, social, and instructional factors in the [individual’s] prior development.

(Wolf, 2008, p.139).

Recognition of the fact that individuals’ comprehension of language (when terms are not narrowly defined in the scientific operational sense) is inextricably connected with personal experience of its usage, does not necessarily preclude the possibility of effective communication between and among researchers, practitioners and the general public. It rather demands an acceptance of a more nuanced understanding of the way in which categorical terms such as “dyslexia” can be, and are, used - an argument that will be developed in ensuing discussion of the matter in this chapter.

Individual “frames”

Theorists have pointed out that professional practice is also affected by the individual practitioner’s personal opinions, termed “frames” by Schon (1983), and defined as the “values and norms to which [the practitioner] has given priority, and those to which he has given less importance or left out altogether” (p.310). Roberts (2012) classes assessors’ personal attitudes and beliefs, like dyslexia’s disability status, the rightfulness of equal opportunities and the appropriateness of accommodations, as amongst the environmental factors that influence the diagnostic outcome of their practice. Qualitative data from the assessors’ survey, for example, provides comments from individuals professing the unsuitability of higher education for those without

the cognitive ability and/or academic preparedness to benefit, as well as others opining, by way of contrast, that higher education should be a universal human right, regardless of seeming ability (Chapter 4). The interview data, too, illustrated how the personal sociopolitical beliefs of some individual assessors, as opposed to others, predisposed them to consider the effects of unfavourable environmental factors in the student's background that might explain or "excuse" poor scores on cognitive ability tests, thereby allowing them to base their conclusions on some model of differential diagnosis.

Intuition

Whilst the nature and effects of "situated" professional knowledge on assessors' practice are relatively easy to identify and understand, the contribution made by less explicit tacit knowledge is more elusive, yet it can be seen as another factor responsible for inevitable inconsistencies in practice at the group level. A third of the assessors who took part in this study's survey agreed that there exists a clinically recognizable "essence" of dyslexia that defies explicit definition (Figure 3, C2, Appendices p.52). Behaviour such as detecting this "essence" of dyslexia has been recognized and variously described by theorists as "professional intuition", "artistry", "craft", "gnawing feeling" and "knowing-in-action", all terms denoting a heavily implicit, difficult to articulate, element of cognition. Frith (1999) claimed that in the "fraught and complex" diagnosis of dyslexia, clinical intuition rightly played an important part. This type of professional "knowing" does not always stem from prior intellectual operation (Schon, 1983), leading Eraut (2000) to doubt whether personal tacit knowledge, such as professional intuition, can ever be made explicit or identified by researchers. Such an observation strengthens the interpretation given to the seeming inconsistencies in the study's data when viewed from the perspective, or within the framework, of theories pertaining to the nature of professional practice.

Professional tensions leading to erosion of confidence

Conscientious practitioners tend to be aware of the gap between accepted "espoused theories" of practice and their own experientially developed

“theories in use” (Eraut, 2000). This can give rise to what Schon (1983) has termed “dilemmas of rigour”, leading, in turn, to uncertainties and lack of professional confidence. Figure 4 (Appendices, p.53), for example, illustrates that not all the assessor participants in this study were confident about various aspects of their practice. Nearly 50% of them demonstrated what could be interpreted as uncertainty about the meaning of the term “dyslexia” by declaring their preference for the generic label “SpLD” (Figure 4, D7); 42% registered that they were either unsure, or else not confident, about excluding environmental causes in order to establish a strong neurological likelihood for a student’s presenting difficulties (Figure 4, D4). Eraut (2000) argues that what he calls the “exigencies of practice” often result in practice-derived theories which, “even if explicit would not ‘be deemed fit for public communication’ as they would diminish the image of the profession” (p.123). One such exigency in the context of dyslexia assessment in higher education is that occasioned by the legislative and institutional requirement on assessors, for funding purposes, to attach a clear categorical label to the learning difficulties experienced by the students they assess. Comments made by several of the assessor participants who took part in the study confessed to pragmatic practices they felt constrained to adopt, against their better judgement, due to the pressure on them of legislative, professional, institutional and societal demands and expectations. Eraut (2000) further argues that sometimes the ensuing dilemmas experienced play on the “professional conscience” of practitioners, and over time lead to either scepticism, or to frustration and burn out.

7.3: RESOLUTIONS

Knowledge of assessor practitioners’ conceptual understanding of dyslexia, and of explanatory theories as to why it is as diverse as it appears to be, is worthwhile in that helps to clarify and make sense of many seeming anomalies in the field. It also raises important questions about the limits of current diagnostic classification and practice (Norwich, 2009). What such knowledge and understanding do not do, however, is to readily suggest an

effective resolution to the recognised confusion surrounding the diagnostic classification of dyslexia and the professional practice responsible for it.

The dyslexia debate

One such potential resolution is to do away altogether with the diagnostic classification of “dyslexia”, a solution adopted by the DSM-5, and strongly advocated by Rice and Brooks (2004) and more recently by Elliott and Grigorenko (2014). The last cited authors, for example, argue that because the term “dyslexia” lacks “scientific precision and rigour” it is impossible for practitioners to operationalize it, for assessment purposes, in any reliable and consistent way. Furthermore, due to what the authors see as the conceptual and political “baggage” that “dyslexia” has accrued, alongside “a myriad of other associated or co-morbid cognitive and behavioural features”, they regard the diagnostic label as confusing, divisive in an unscientific Manichean way, and no longer a meaningful or accurate descriptor of an individual’s difficulties. Educational assessment, in the view of these proponents of the term’s demise, should confine itself to a more specific description of an individual’s strengths and weaknesses with a view only to establishing appropriate provision. Dyslexia, as a diagnostic category and descriptive term, should be permanently retired.

Few would disagree, as the data from this study has overwhelming demonstrated, that the categorical label “dyslexia” lacks scientific precision and rigour, that it is difficult to operationalize in a reliable and consistent way, or that educational assessment should rightly prioritise helping the student to understand their difficulties and move forwards. The problem with positions that see a solution in the abandonment of the dyslexia category, though, is that being primarily focused on identifying reading disability, whatever the cause, for the purpose of demonstrating eligibility for disability or other additional resources in an educational and socially equitable way, they effectively ignore fundamental characteristics of the dyslexia concept that the term was historically coined and subsequently developed to encompass i.e. the specificity and incongruity of the difficulties observed in the presence of average and often above average ability. It is this feature of the dyslexia

concept, focused not only on reading disability but more on the biologically predisposed cognitive processing differences that typically accompany it, that makes dyslexia especially relevant as a meaningful and useful descriptive term for the acknowledged real difficulties experienced by bright students studying at the higher education level. The label may not accurately describe the range and degree of any one student's specific difficulties – that is what the assessment report should do - but it is capable of efficiently communicating, in a shorthand way (Norwich, 2009) the historically understood characteristic nature of these significant difficulties. The term's use and its ability to signify more than “reading disability”, however imprecisely, is a major reason for retaining it in the specific learning difficulties lexicon.

Quantitatively analysed data from the 146 dyslexic students who participated in this study confirmed that the majority of them responded positively to the dyslexia label. Approximately 70% of them preferred it to the more generic “SpLD” (Figure 14, C4 Appendices p.63) and nearly 60% preferred to have a label rather than not have one (Figure 14, C5). Macdonald (2010) found a similarly positive attitude amongst a much broader socio-economic sample of dyslexic adults, prompting him to critically conclude that anti-labeling proposals do not take into consideration the lived personal experiences of dyslexic adults.

Critics have compared the historically accrued positive connotations of the dyslexia label to a “meme”, a culturally transmitted artifact that does not necessarily reflect reality (Kamhi, 2004, cited in Elliott & Grigorenko, 2014). They point out that the label has survived, despite its inaccuracy and the confusion it engenders, because it has become associated with intelligence, a brain disposed to creativity, and because it absolves the individuals conferred with it from accusations of laziness and stupidity. The dyslexia label does perform all these functions for the dyslexic student participants in this study, possibly because in their case the positive connotations it has are accurate. Nevertheless, as intimated by Rice and Brooks (2004), the label has other less positive connotations, many of them associated with

stigmatization. The last cited authors observed that dyslexics appeared to have become the butt of a spate of cruel jokes, and prophesized that the word “dyslexic” might eventually go the way of “spastic”, and for much the same reason. The high achieving dyslexic students who participated in the study were not unaware of such negative connotations of the label. Only 41% of them felt able to agree that their lecturers understood their difficulties and were sympathetic towards them (Figure 15, D6, Appendices, p.64), a statistic pointing to lack of awareness amongst teaching staff that was triangulated by data from the 165 lecturer participants themselves. More pertinently, less than 40% of the talented dyslexic-student cohort would have considered disclosing their dyslexia to all current or future employers, fearing discrimination due to what they knew from experience to be the negative connotations of the label (Figure 27, Appendices p.77). These students realized all too poignantly that inefficient, even if not sub-standard, performance was not a characteristic appreciated in a competitive professional workplace.

If the dyslexia concept is a meme, then its successful propagation has not been entirely uninhibited, as has been demonstrated by studies on the dilemmas of labeling (Riddick, 2000). Awareness amongst the population at large of the concept’s researched challenges as well as its advantages may not have reached the level of academic knowledge in the research field, but the term nevertheless depicts a general notion of something that is real, and not just a one-sided over-hyped positive entity. To abandon use of the term would deny to dyslexic people in general, and to the student participants in this study in particular, a positive and useful marker of both the specificity and seriousness of their difficulties (Wolf, 2014). The current confusion and tensions around the concept is best removed, instead, by the dissemination of a more nuanced understanding of dyslexia’s plurality and complexity (Wolf, 2014) and by assessors’ recognition of the need to use the label cautiously, and in the context of assessment reports, unambiguously (Russell et al., 2012; Bishop, 2012; SASC, 2015). In a way similar to that recommended by DSM-5, “dyslexia” is best used to describe, rather than to scientifically

categorise, a historically developed characteristic pattern of strengths and weaknesses, each of which is individually specified.

Limits of current diagnostic classification and practice

Recognition of the plurality and complexity of the dyslexia concept as understood by different researchers and assessors, and of the need for assessors to use the label cautiously necessitates answers to the questions implicitly posed by this research concerning the limits of current diagnostic classification and practice within the higher education context. Both scientific evidence (Hulme and Snowling, 2009) and robust logistical arguments that complement it (Davis, 2008) support this study's findings demonstrating the dimensional and therefore complex categorical nature of dyslexia as diagnosed by the 118 EP and SpT practitioners. Yet the study has indicated that the practice of at least a third of the assessor practitioners surveyed appears to be based on assumptions that ignore this fact of human dimensionality (Figure 2, C11, Appendices p.51). Additionally, other assessors have intimated in some of the qualitative comments that they have felt pressurized by legislative demands and institutional expectations into pragmatically providing a clear diagnostic label that they realize will be used categorically, and in a generic way, as a passport to additional disability resources and academic reasonable adjustments. Clearly, lack of awareness coupled with a probable desire for ease of administration on the part of legislators and institutions, have contributed to uncomfortable dilemmas for assessors of dyslexia, resulting in labels being applied pragmatically so as to enable students to access funding for support. The classificatory label, useful as it is to denote the specific and characteristic nature of an individual's difficulties, is inappropriately used when it is employed to confirm a qualitative binary divide between individuals who are dyslexic and those who are not. In the HE sector, such use of the dyslexia label has been responsible for much of the criticism of assessment practice, its outcomes, and the educational policies and practices that follow from it.

Eligibility for statutory disability status

A prime example of inappropriate categorical use of the dyslexia label in higher education, and of the confusion, inequity and resource wastage to which it can give rise, has been the label's deployment as automatic eligibility for legal disability status and additional provision. Until the recent announcement of DSA policy changes (Willettts, 2014) it was unthinkingly and/or pragmatically assumed that all assessed dyslexic students were disabled, an assumption overwhelmingly questioned and rejected by 80% of the dyslexic student participants in this study (Figure 14, C1, Appendices p.27), 80% of the non-dyslexic students (Figure 18, C1, Appendices p.36), and by many of the assessors and lecturer participants, particularly the eight assessors interviewed, and others amongst the assessors and lecturers who took the opportunity to expound on and attempt to clarify their complex opinions on this far from straightforward subject. The quantified modal responses to relevant items in the surveys, from all three groups of participants, suggested that although some dyslexic students might be disabled, in the legal sense, the classification could not be applied to all. Over 86% of the assessor cohort agreed that disability, like dyslexia, refers to a continuum of learner differences (Figure 5, E2, Appendices p.54); over 70% of the lecturers thought that some dyslexic students appeared no more functionally disabled than some non-dyslexic students (Figure 19, C4, Appendices p.37); 44% of dyslexic students themselves were of the opinion that disability status depended on the severity of the difficulties, and only 26% disagreed. Whether or not all of these participants understood or were referring to the term "disability" in the legal sense, their opinions should provide thought-provoking evidence for administrators and legislators. It remains to be seen if and how the Government's recent decision to tighten up on the qualificatory criteria for dyslexia disability provision will in the future resolve the confusion and often abuse of policy and practice that has been based on inappropriate use of the dyslexia label to establish disability eligibility.

Eligibility for reasonable adjustments

Another example of inappropriate categorical use of the dyslexia label in higher education is the practice adopted by most institutions of accepting it indiscriminately as evidence of the need for some of the more common reasonable adjustments, like the awarding of extra time in examinations. Ninety-five per cent of the assessors surveyed for this study agreed that a reasonable adjustment for one dyslexic-student might not be “reasonable” for another (Figure 6, F7, Appendices p.55). This professional awareness of the range and degree of individual dyslexic students’ difficulties is substantiated by the student data collected for this study, as well as by that resulting from other similar ones on dyslexic students’ difficulties and support needs (Fuller et al., 2004; Healey et al., 2006; Mortimore & Crozier, 2006; Waterfield & West, 2007; Madriaga et al., 2010). The current study, in common with those cited above, found that some dyslexic students did not perceive themselves as having any difficulties with many, and perhaps all, of the commonly assumed academic and/or cognitive processing skills. (Figure 13, Appendices p.62). For example, not all dyslexic students perceived themselves as experiencing difficulties with fluent processing (Figure 13, B12, Appendices, p.62), or with completing examinations on time (Figure 13, B13). Furthermore, amongst those who did, it is reasonable to assume that not all assessed dyslexics experienced the problem to the same degree with every assessment activity, or across different institutions and subject areas. Additionally, as Figure 17 clearly shows, and is corroborated by Mortimore and Crozier (2006), many non-dyslexic students perceive of themselves as sharing their dyslexic peers’ difficulties with fluency and completing examinations on time. In fact, in terms of absolute numbers of students, as pointed out in the analysis of the findings in Chapter 6, p.255, there are probably more non-dyslexic than assessed dyslexic students in any one institution affected by slow cognitive processing. The quantitatively analysed data and explanatory comments from this study, as well as conclusions derived from similar studies (Mortimore & Crozier, 2006; Healey et al., 2006; Madriaga et al., 2010) point to the need for flexible, non-generic disability provision for dyslexic students that matches the learning needs of individual students, rather than generic provision based solely on a categorical label.

Appropriateness of reasonable adjustments per se

The appropriateness of reasonable adjustments, in principle, was barely questioned by the students who took part in the survey, or by the vast majority of the lecturers. Approximately 90% of students, both dyslexic (Figure 15, D1, Appendices p.64) and non-dyslexic (Figure 19, D1, Appendices, p.68) agreed that it was right that the Equality Act 2010 required their institutions to make reasonable adjustments for dyslexic students, as did 75% of the lecturers (Figure 11, D1, Appendices p.60). These quantified findings are at odds with opinions expressed in qualitative examples of individual dissenting voices from both the student and lecturer groups from the survey, as well as others cited in the literature. It is interesting, though, that it is the individual critical voices rather than the normally silent majority whose opinions attract the most attention. Mention has already been made of theorists such as Davis (2009) and Sharpe and Earle (2000) who argue that any accommodation, like extra time, is actually a modification of examination criteria, and will affect an examination's validity and reliability. Their position is the one held by Elliott (2014) who, in a Conference Flyer for "The End of Dyslexia in Higher Education?" stated that current practices for supporting university students considered to have dyslexia are wholly flawed and urgently require radical reform. At the conference itself (Durham University, 2014) Elliott argued that although supporting students with literacy and processing difficulties through targeted tuition and encouraging use of compensatory strategies was appropriate, allowing them examination accommodations was not, as the cognitive skills deficits routinely cited as evidence for accommodations are the very (normally distributed) skills that academia values. Written examinations, he reminded the conference delegates, are not testing knowledge alone.

Equity issues around reasonable adjustments

Critics of reasonable adjustments *per se* commonly cite equity issues as being an important consideration that is often overlooked. Elliott (2014), for example, opines that within a highly competitive higher education sector, and given the highly subjective basis for a diagnosis of dyslexia, the current position is something of "a national scandal", giving rise to obvious equity

issues. Yet quantitatively analysed data from this survey suggests that equity concerns around reasonable adjustments for dyslexic students worry only a minority of those mostly affected – the assessors who condone them, non-dyslexic students whose academic performance could be regarded as handicapped by them, and lecturers who need to consider their effect on academic assessment criteria. Under a third (30%) of the assessors surveyed agreed that reasonable adjustments for dyslexic students could be unfair to other students (Figure 6, F6, Appendices p.55); only 23% of the 155 non-dyslexic students registered any concern over equity issues (Figure 19, D2, Appendices p.68); even fewer lecturers (19%) thought that extra time in examinations could give dyslexic students an unfair advantage (Figure 11, D2, Appendices p.60).

The non-dyslexic students' apparent lack of concern about the unfairness, to them, of reasonable adjustments for dyslexic students is characteristic of the overall altruistic nature of their attitude towards their dyslexic peers, shown in this study. Approximately 74% of them assumed that dyslexic students experienced difficulties that they themselves did not (Figure 19, D3, Appendices p.68), and 56% thought that it was unfair to dyslexic students that they were required to show evidence of their learning through timed written assessments (Figure 19, D5). Some of these attitudes might be due to the generally high achieving and academically successful nature of this particular student sample for whom competition would pose little threat, and/or to superficial awareness of the experience of dyslexia, but the study data from both lecturers and non-dyslexics students do present a perspective on the equity issues around reasonable adjustments at odds with much critical opinion. Not only are such data at odds with much critical opinion, they also indicate a worrying acceptance amongst the majority of participant lecturers and non-dyslexic students of the dyslexia label as an automatic passport to reasonable adjustments and additional provision, a function that this research has demonstrated to be an inappropriate one.

Interestingly, more assessors than lecturers who took part in the research agreed that reasonable adjustments for some dyslexic students could be

discriminatory towards other students with similar difficulties due to socio-cultural or ethnic background (Table 29, Appendices p.50). Assessors, possibly because of their greater familiarity with current research findings, as well as their professional experience, are more likely than lecturers to be aware of the arbitrary binary divide between dyslexia and non-dyslexia, and to conceptualise “dyslexia” more comprehensively than with the medical model of disability seemingly adopted by most lecturers.

Other commonly cited objections to reasonable adjustments

The quantitatively analysed apparent lack of concern amongst the lecturer cohort in this study about equity issues relating to reasonable adjustments, worrying as it is, also presents another perspective on the subject at odds with what little (mostly qualitative) findings there are from other studies (Mortimore, 2013; Cameron & Nunkoosing, 2011; Madriaga et al, 2010; Griffin & Pollak, 2009; Riddell et al. 2006; Madriaga, 2007; Mortimore & Crozier, 2006; Farmer et al., 2002). For example, few lecturers (14%) feared that statutory reasonable adjustments could erode academic standards (Figure 11, D3, Appendices p.60), and even fewer in number (10%) thought that such adjustments were incompatible with a culture of academic meritocracy (Figure 11, D7). In fact, despite signs of inadequate awareness and knowledge of dyslexia as a learning difficulty, the majority of lecturers who participated in this study were generally positive about, and supportive of, dyslexia and dyslexic students (see Chapter 5, p.225 for a fuller analysis). This quantitative finding from 165 lecturers from a range of 12 different universities, corroborated by a much smaller study by Cameron and Nunkoosing (2011), sits tellingly alongside the qualitative evidence from this and other studies illustrating the critical, negative, often disabling attitudes of some lecturers.

Discriminatory privileging of dyslexic students

In addition to questions around the appropriateness *per se* of reasonable adjustments for dyslexic students, and around the equity issues resulting from their use by students labeled dyslexic, are those concerned with the practice of what is seen as privileging some academically disadvantaged

groups over others (Madriaga et al., 2010). Over 50% of the assessors who took part in the study's survey agreed that it seemed discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills were similarly affected due to their socio-cultural or ethnic backgrounds (Figure 7, F8, Appendices p.56). Such an opinion is possibly influenced by these assessors' professional knowledge of the dimensionality and complex bio-psycho-social etiology of the dyslexia construct. The quantified magnitude of assessor opinion on this subject was noticeably different from that of the lecturers who took part in the study. Only 28% of this group thought that it was discriminatory to prioritise dyslexic students over socially disadvantaged students for reasonable adjustments (Figure 11, D6, Appendices p.60; Table 29, Appendices, p.50). The remaining 72% were either unsure (39%) or else thought that the practice was not discriminatory (32%).

Mention has already been made (Chapter 5) of the tendency for the medical model to predominate in lecturers' concept of dyslexia (Riddell and Weedon, 2006; Madriaga, 2007; Griffin and Pollak, 2009; Madriaga et al., 2010; Mortimore, 2013). It is possible that the majority of the lecturer cohort in this study, in being less aware than assessors of the nuances and complexity of the dyslexia concept, assumed the diagnosed condition to have a more straightforward medical cause, thus legitimizing for the purposes of reasonable adjustments a binary divide between dyslexic students and those who are socially and/or educationally disadvantaged. Nevertheless, simply being in possession of the dyslexia label itself, as arguments based on the data collected for this study have shown, does not offer a valid or reliable criterion with which to differentiate between disability and disadvantage at either the conceptual or practical levels, thereby giving some measure of support to those who argue against the prioritising of dyslexia on social justice grounds (Madriaga et al., 2010). That only a minority (28%) of the 164 lecturers who took part in this study agreed that the prioritising of dyslexic students over other disadvantaged students for reasonable adjustments and additional provision was discriminatory (Figure 11, D6, Appendices p.60) suggests a conventional yet erroneous belief in a simple medical and

explicitly defined categorical model of dyslexia, a state of knowledge that has also already been flagged as worryingly deficient by this and other research on lecturers' awareness of dyslexia.

Assessors' ethical responsibilities

It has been argued, on the basis of this study's analysed data, that educational assessment of higher education students resulting in the descriptive label "dyslexia" is seen by the majority of students concerned as a worthwhile practice in helping them to understand and make sense of experienced difficulties. It also enables such students to conveniently communicate the essential nature of their difficulties in a way that is historically and conceptually meaningful to others and contextually relevant in a high functioning academic environment. It has also been demonstrated, on the basis of quantified data from this study illustrating the diversity represented by the label and the subjectivity involved in its allocation, that the categorical use of the label alone as a passport to differentiated provision for dyslexic students is inappropriate. Such a use is not only based on erroneous and superficial knowledge about the nature of dyslexia as variously assessed, but also gives rise to serious concerns around equity.

It is clear that dyslexia assessors' practice in higher education carries with it important responsibilities beyond identifying, for the purpose of the individual student concerned, an explanation and possible solution for their difficulties. Such responsibilities extend to playing a part in the ethical implementation of both disability and institutional policies, thereby influencing the equitable nature of the provision that stems from them. Unfortunately, though, the work done by assessors forms only one contribution to policy and practice outcomes. Nevertheless it is an important one and, because of the inevitable diversity and subjectivity of dyslexia diagnoses, is one that inadvertently contributes towards much of the above outlined and discussed inconsistencies and equity concerns.

Inclusionary practices

A solution to the equity concerns around differentiated provision emanating from observed diverse and inconsistent dyslexia diagnoses is seen in the already advanced movement of higher education institutions towards more inclusive systems of teaching, learning and assessment. Such systems could, ideally, negate the need for current practices of differentiated disability provision for dyslexic students.

Replacement for bespoke disability provision for dyslexic students

This study, whilst focusing primarily on assessors' practice, did solicit the opinions of each group of participants on whether or not individualized disability provision for dyslexic students could be replaced by institution-wide inclusive practices based on equality of access for all. The responses of each participant group are analysed both quantitatively and qualitatively in Chapters 4, 5, and 6. In general, each group's quantified responses were tempered by so many provisos in the qualitative data that they need to be interpreted very cautiously. Superficially, assessors (50%) and lecturers (60%) appeared more positive, in principle, towards bespoke provision for dyslexic students being replaced by more inclusive provision available to all students, than did dyslexic students (23%). Nevertheless, the quantified responses from each group contained at least a quarter of "unsure" choices, indicating that many participants were uneasy about committing to an unqualified opinion on this complex subject. Amongst assessors and dyslexic students who did qualify their responses were strong feelings that some differentiated provision would always be necessary for those dyslexic students with severe and complex difficulties, a conclusion that appears to have been ratified by both the new guidelines on DSA eligibility (SLC 2016) and the latest HEFCE report on provision for SpLD students (HEFCE, 2015). (See Chapter 2, pp.112-113).

Dyslexic students' responsibility to accommodate to existing system

One unsolicited and surprising finding to emerge from the study's qualitative data, and which has an important bearing on attitudes towards inclusion and reasonable adjustments, was the opinion, across all three groups of

participants, that dyslexic students have a personal responsibility to develop compensatory strategies so as to adapt their skills to the present system of teaching, learning and assessment. This was a surprising attitude to emerge from the assessors' data, particularly from the interviewees, but an even more surprising one when it was reiterated by several of the dyslexic student participants (See Chapter 6, pp.262-264, for examples). It is another finding to emerge from the study's data that is at odds with those in the literature that pinpoint the thwarting effect on dyslexic students' attainment of institutions' disabling barriers (Cooper, 2009; Madriaga, 2007; Healey et al. 2006). Perhaps the finding, like others relating to dyslexic students in this study, can be partly explained by the fact that most of the dyslexic student group were high achievers and probably had the high cognitive ability resources to enable compensation, but it still provides a valuable insight into how some individuals manage to surmount barriers - albeit with tremendous and often debilitating effort - not by having them removed but by rendering them irrelevant.

Stigmatization of differentiated provision

Yet another finding from this study that is at odds with much of the literature advocating inclusive as opposed to bespoke provision for dyslexic students, is illustrated in the quantitatively analysed opinions on what has been argued to be the stigmatizing (Mortimore & Crozier, 2006) or ghettoizing (Madriaga et al., 2010) nature of reasonable adjustments. Very few of the assessors surveyed (17%) (Figure 8, G5, Appendices p.57) thought that adjustments to assessment and examination arrangements, like dyslexia marking policies and separate room accommodation for exams, "ghettoize" dyslexic students by drawing attention to their differences; more pertinently, neither did dyslexic nor non-dyslexic students. Only 23% (Figure 15, D8, Appendices p.30) of dyslexic students and 28% of non-dyslexic students (Figure 19, D7, Appendices p.37) were of the opinion that current arrangements for reasonable adjustments stigmatized dyslexic students as being less able. Of course, viewed from a different perspective these statistics confirm that some students have experienced a stigmatizing effect from reasonable adjustments,

but it is far from the universal effect that some qualitative pro-inclusion research implies.

CONCLUSION

Much knowledge has been gained about the concept of dyslexia and its identification in higher education students from directly asking the individuals most concerned i.e. assessors, lecturers and students. The diversity suspected of being subsumed under the category and its identification has been confirmed, yet interpreted to appear not only inevitable but also positively instructive. A broad consensus amongst assessors concerning the general nature and historical meaning of the term “dyslexia”, or “SpLD”, has been uncovered by analysis of the study’s qualitative data, as have the beneficial effects, for most higher education students, of both the assessment process and the descriptive “dyslexia” label that may or may not follow from it. The categorical nature of dyslexia, in the strict scientific sense, has been shown to be an untenable position if the term continues to be used in its present way, and one, which through its current inappropriate use by legislators and administrators, raises important knowledge and equity issues. Whilst much of the confusion and tensions surrounding all aspects of the dyslexia concept can be removed by greater informed awareness of both the learning difference itself and thus the limitations of current diagnostic classification and practice, such an insight merely clarifies matters at the conceptual level, leaving many of the practical implications for policy and practice still to be resolved. These important practical implications are amongst the issues addressed in the following concluding chapter of the study.

Chapter 8: Conclusion

What we call the beginning is often the end. And to make an end is to make a beginning. And the end is where we start from.

T. S. Eliot

In the introductory chapter to this research the above paradoxical quotation from T.S. Eliot's *Four Quartets* was used as a succinct yet enigmatic explanation for the research's original impetus as well as its theoretical, literature-grounded starting point. In this concluding chapter the same quotation is pressed into service to neatly epitomize, in broad terms, the knowledge gained in the course of the research about dyslexia and its assessment in the higher education context - namely that research into and perceptions of human behavior, although strongly and meaningfully rooted in their historical development, are not static, and that any endings derived from scholarly enquiry into them are unlikely to be definitive.

However, although it is realized that understandings of dyslexia, assessment and related pedagogical issues will continue to "move on" and change, the "endings" arrived at in this research at this point in time have made some contribution towards resolving the personal conceptual and professional dilemmas that existed at the beginning of the research. The resulting understanding gained through critical analysis of the literature and, more importantly, the perceptions of participants, has not only fulfilled personal aims but also gone some way towards clarifying, for the benefit of colleagues and other relevant groups, the current issues around dyslexia, assessment and related social and political implications in higher education. Additionally, such clarification has added new and valuable knowledge not only to the targeted under researched area of dyslexia assessors' practice, but also to the not very extensive extant body of research literature on dyslexia in higher education students. Furthermore, the resulting analysed data has raised serious questions about higher education institutions' policy and practices around disability provision for dyslexic students and has also resulted in conclusions being drawn that suggest a possible practical way forward for

dyslexia assessment within the higher education sector, one much more in tune with both the latest research findings and the prevailing political and social inclusive ethos.

8.1 SUMMARY OF FINDINGS

The study's conclusions are derived from the very relevant and generously offered perceptions of the 118 assessor, 164 lecturer, 146 dyslexic student and 155 non-dyslexic student participants. Summarizing these perceptions into the proverbial nutshell was no easy task considering their complexity and wide ranging implications. Chapters 4, 5, 6 and 7 bear testament to this observation, illustrating, as they do, the importance and far reaching influence of dyslexia assessors' practice.

Assessors' concept of dyslexia

When focused specifically on the study's main subject, the assessment of dyslexia in higher education students, the findings confirm that dyslexia in higher education is most commonly conceptualised as a syndrome of cognitive strengths and weaknesses that usually, but not necessarily, involves some degree of historical and/or current difficulty with at least one aspect of literacy skills. Within this broad syndrome conceptualisation there was no unanimous consensus amongst the assessor participants as to the necessity of any one criterion or set of criteria for a diagnosis of dyslexia, a finding triangulated by data from the dyslexic student participants' self perceptions, as well as by lecturers' and non-dyslexic students' observations. Instead, there appeared to be a complex bi-directional relationship between scientific research findings about dyslexia and individual professional assessors' diagnostic practice, a relationship interpreted by this study as being inevitable, given the nature of professional practice in different contexts.

It is tempting to ratchet up the above conclusion from the study's data to a higher and more philosophically satisfying level of analysis, and to interpret the way dyslexia is perceived by assessors in higher education as a syndrome in the sense of Wittgenstein's family resemblances, as suggested by Siegel & Smythe (2006), and implied by Miles (2006) in his reference to it

being a “disjunctive” concept (pp.141-142) of which there are “*formes frustes*” (p.126) in which poor reading, for example, is not a necessary condition. Such an analysis, though, would be a distortion of the participants’ perceptions at both the group and individual levels. The data contains little evidence that assessors’ understanding of dyslexia is based on a consciously worked out philosophical position on the nature of categories - Aristotelian, medical, Wittgenstein, prototype, or otherwise. Instead they suggested that assessors understood the terms “dyslexia” and “syndrome” more in the sense of everyday language usage, and concomitant with their various different experiences of the term. Additionally, as is emphasized above, although dyslexia was most commonly understood as a syndrome, in a very broad sense, there were also participants whose understanding of the term was more precisely defined.

Reflection on inevitable tensions

Indisputably, the retention of a syndrome concept of dyslexia by many researchers who have examined, and currently examine, the subject in higher education students, and by most of the assessors who took part in this survey, creates tensions within the broader disciplinary field, as well as resulting confusion amongst educators and the general public. Nowhere are these tensions more pronounced than those stemming from the differing emphases given in definitions operationalized for identification, to the relevance of varying aspects of poor reading. The fact that the Rose Report (2009) defines dyslexia first and foremost as difficulties in the acquisition of accurate and fluent word reading and spelling, regardless of intellectual ability, and that most, but not all, higher education assessors conceptualize it more broadly than reading difficulties, also typically clinging to vestiges of historical discrepancy concepts, is just one example of the cause of these tensions.

The existence of such tensions as those referred to above, together with the confusion around different definitions reflecting different purposes and stages of human development, was one of the main instigators of this research; it has been a consistent theme addressed throughout the critical analysis of the

research literature as well as during the analyses of participants' data. Dyslexia definitions tend to operationalize, for assessment, those aspects of research that suit their contextualized purpose (Miles and Miles, 1999). The purpose of assessment in higher education, as has already been discussed in this study, is no longer focused on the prevention of reading and writing problems as it is in the early years of schooling (Nielsen et al., 2016). Research, including the recent last cited study, has repeatedly concluded that the phenotypic behavioural expression of dyslexia changes across the lifespan (Snowling et al., 1997; Hulme & Snowling, 2009; Swanson & Hsieh, 2009; Nielsen et al., 2016). It is thus understandable that assessors of higher education students will conceptualize dyslexia in terms of the observed and researched manifestations of the condition that appear to impede the efficient access of dyslexic individuals to the learning on offer in, and the credentialing benefits of, higher education. That these manifestations generally no longer include below average reading accuracy and comprehension has been borne out in the testament of the dyslexic students who participated in this study.

The fact is that there is as yet no universally agreed definition of dyslexia; with regards to adults, for example, even the validity of the contentious discrepancy model has still to be scrutinized by researchers in the way and extent to which it has been for the identification of children (Swanson & Hsieh, 2009). Accepting that dyslexia is not currently a precisely defined scientific construct, and that the term subsumes within its porous boundaries heterogeneous phenotypic behavioural expression that changes across individuals' development, is intellectually challenging, and perhaps scientifically unsatisfactory, but once acknowledged, allows all interested parties – researchers, assessors, educators and the general public alike – to put the whole subject into perspective and to set about trying to resolve many extant tensions based on previously unexamined assumptions or prejudicially held opinions.

Indirect effects of dyslexia assessors' practice

Whilst informative and instructive as this study's insight into dyslexia and its assessment in higher education is in its own right, its data nevertheless

exposes some substantial indirect effects of assessors' practice on lecturers' and on the general public's above acknowledged confused and often inaccurate knowledge of dyslexia. Such findings not only highlight assessors' roles in disseminating knowledge about dyslexia but also their ethical responsibility towards some of the policy and practices around institutions' disability provision for dyslexic students, particularly those pertaining to the equitable distribution of resources that are commonly based on erroneous assumptions about dyslexia's disability status and a categorical divide between dyslexia and non-dyslexia. Data from all four groups of participants raises questions about the disability status of dyslexic students, and engender concern about the statutory entitlement of some, if not all, dyslexic students to additional provision and reasonable adjustments.

Views on resolving problems around dyslexia assessment

Views on how to resolve what is generally recognized as an unsatisfactory state of affairs vary considerably, with many participants either consciously or unconsciously acknowledging the existing tensions between idealistic solutions and practical realities.

8.2 IMPORTANCE OF FINDINGS

The study's findings are important.

Relationship between research and practice

In the first instance, far from being a damnatory exposé of seemingly inconsistent dyslexia assessment practice in the higher education sector, the findings constitute an interesting positive understanding of the relationship between dyslexia research and assessment practice in the context of higher education, a complex relationship that helps explain much of the observed and often confusing heterogeneity in assessed dyslexic students.

Perspectives hitherto absent from the research literature

The information generated by the research, particularly that emanating from the assessors' data, fills what was hitherto a gap in the research literature i.e. the knowledge, opinions and attitudes of those directly responsible for assessing dyslexia in higher education students. The extant literature

contained much systematic researched information on the theoretical nature of dyslexia, how it was best identified in higher education students, as well as criticism of what were perceived to be some of the resulting shortcomings of such identification, but missing from it was any authentic information on what actually was happening from the point of view of those who did the assessing. The study's data redresses this important omission. Dyslexia assessors, as opposed to researchers and critics from different disciplines and sections of society, have had their privileged voices enabled, and what they have had to say provides a fresh perspective not only on the nature of their practice but also on the concept of dyslexia as assessors perceive it to be manifested in higher education students.

Much of the data from the study's other groups of participants also add new knowledge to the existing literature. The perceptions of the 164 lecturers on aspects of dyslexia and dyslexic students form a much larger and more comprehensive study than any other on the subject. Most of the extant studies directly soliciting lecturers' views have used relatively small samples confined to one department in one university (Cameron & Numkoosing, 2011; Mortimore, 2013), one discipline (Riddick and English, 2007; Evans, 2014) or were part of more comprehensive studies drawing equally small samples of lecturers from a comparatively limited range of institutions and/or departments (Farmer et al., 2002; Riddell, Tinkling and Wilson, 2004). This study's large comprehensive sample allowed insight into the effects on lecturers' knowledge and opinions of such contextual factors as institution type and academic discipline. Additionally, its interpretative emphasis on the effects of dyslexia assessors' practice on lecturers' knowledge and opinions contributes yet another perspective to current understanding in the field.

Data from the study's dyslexic student sample constitute a further unique addition to the literature in that most of it comes from high achieving students in prestigious Pre'92 universities. Similar studies have concentrated on "disabled" students (roughly half of them dyslexic) from Post'92 universities, some in just one subject area in one university (Fuller, Healey & Bradley, 2004; Healey et al., 2006; Waterfield & West, 2007; or one university

(Madriaga et al., 2010). A study that did focus on dyslexic students, Mortimore and Crozier (2006) was restricted to a relatively small number (29) of male students from Pre'92 institutions.

Admittedly, a dyslexic student sample heavily weighted towards Pre'92 students could be seen as a limitation on this study's findings, but what the data from it loses in it not being representative of all dyslexic students it happily gains in being a rare contribution to the knowledge of dyslexia in the sector.

Practice of psychological assessment vindicated

Despite some of its exposed shortcomings, data from this study also does much to vindicate the practice of psychological assessment in the higher education context. As recommended by professional bodies (BPS, 2002; Jones & Kindersley, 2013), and unanimously acknowledged by the eight assessors interviewed for this study (p.204-205), the practice, from the point of view of assessors, primarily aims to help students who are encountering academic difficulties to understand the reasons for them and to identify comparative strengths, strategies and accommodations to help ameliorate the difficulties. The majority of dyslexic student participants (61%) found their assessment a positive experience, with some of them citing the opportunity to be made aware of their personal learning styles and to develop compensatory strategies as key to their success within academia (p.238). The contents of such assessments also have the potential to inform lecturers' awareness of the diversity of learning styles within the student body, invaluable knowledge in assisting them to fulfill their statutory responsibilities to make their teaching and assessment methods accessible to the students accepted onto their courses. Data from the lecturers' and dyslexic students' surveys in this study indicated that lecturers as a group are largely ignorant of many learning differences and of the effects that they can have on different students' learning and achievement.

Tensions and dilemmas exposed and confirmed

Data exposing and confirming the tensions and dilemmas around different dyslexia assessment-related aspects of higher education policy and practice are another important achievement of this research, especially as they point not only to the need for change, but also to possible ways in which it may be achieved. Psychological assessment in higher education has much to recommend it, as outlined above, but its subsidiary, commonly used function to routinely categorise for statutory disability purposes, flying in the face of almost universally recognized research findings about human skills, has been shown to be at the root of much of the disquiet around reasonable adjustments for dyslexic students and the equitable distribution of resources. The study's quantified and textual data from all four groups of participants on the dimensional heterogeneous nature of dyslexia, the condition's questionable disability status and the fairness of legislative and institutional provision made for it, should serve as a wake-up call for policy makers both within and without higher education who seem content to blindly operate on the basis of unexamined erroneous assumptions.

8.3 IMPLICATIONS FOR POLICY AND PRACTICE

Research that produces understanding by revealing and analysing participants' perceptions of the way things are, and by simultaneously highlighting resulting problematic areas of related policy and practice, satisfactorily clarifies matters at the conceptual level. It is, though, no more than a springboard to resolving problems at the practical level. This latter task is not as easily accomplished. It is not within the remit of this study's aims to design detailed practical amendments to dyslexia assessment practice, or to the policies and practices of the institutions within which it is contextualized. Nevertheless, analysis of the participant data recognizing and expressing opinions on perceived problems around dyslexia, its assessment and the academic provision for it, points towards certain recommendations that professional bodies and policy makers might consider in attempting to resolve some of the obvious problems.

Adopt assessment model not aligned to categorical diagnosis

The most obvious recommendation for change in dyslexia assessment practice is to release assessors from their current responsibility of having to diagnose a named specific learning difficulty to establish an individual student's eligibility for needed additional provision and reasonable adjustments as is currently required by professional organizations like PATOSS (Jones & Greenwold, 2010), and explicitly stated by the latest SASC Guidelines (SASC, 2015). Data from this study has not only thrown up the inconsistencies around, and great diversity subsumed within, diagnostic categories like dyslexia, but also the equity issues that result from their unexamined use as an automatic passport to additional funding and differentiated provision.

ICF-type model would remove the need for diagnostic categories

The adoption of a purely functional model of assessment, similar to that of the World Health Organization's International Classification of Functioning (WHO, 2001) would not only remove the need to assign diagnostic categories but, in considering the individual student's educational needs in terms of the interrelatedness of a number of areas, would also be more in keeping with legislative demands on the sector to move towards a more inclusive social model of provision. The interactive "bio-psycho-social" ICF model deftly combines the medical and social models of disability in a way consistent with multi-dimensional research findings in areas like dyslexia and with the Equality Act (2010)'s concept of disability, defined for the purposes of disability provision not by categorical diagnosis but rather by the extent of an individual's contextual functional limitations. A diagnostic label alone, according to current thinking informed by research, reveals little about functional limitations (DSM-V); neither does it capture clinical reality, as the diverse data from this study have illustrated. The study's dyslexic student participants all had the same group diagnosis but, as the data illustrate, their individual abilities and levels of functioning varied considerably both across the group and within each individual, as well as being shared by some of their non-dyslexic peers. Additionally, as attested by several of the assessor and dyslexic student participants, and almost universally accepted by

research findings (Ramus, 2004; Pennington, 2006; Hulme & Snowling, 2009), the characteristics attributed to dyslexia commonly co-occur with those of other recognized specific learning differences; a purely functional psychological assessment would be more able to accurately identify and describe each individual’s profile without having it appear unnecessarily complex by the assigning of multiple labels, or else risk disguising some of the difficulties, and thus opportunities for their potential amelioration, by resorting to a “best fit” label.

Although the ICF model was designed primarily to assess and provide for functional limitations due to health problems, it has been adapted and found useful for assessing and making provision for specific learning differences in some school contexts across Europe (Sanches-Ferreira, Simeonsson, Silveire-Moia & Alves, 2015; Reggie, Meuccia, Leonardia, et al. (2013); Hollenweger, 2012; Riva & Antonietti, 2010). Norwich (2016) has suggested that the model might be adapted without the health considerations to assess special educational needs in English schools. Conceivably it could be similarly adapted to identify, assess and aid decisions about additional provision needed to enhance equality of access to learning for higher education students experiencing academic difficulties.

A prototypic draft of a functional model of HE SpLD assessment

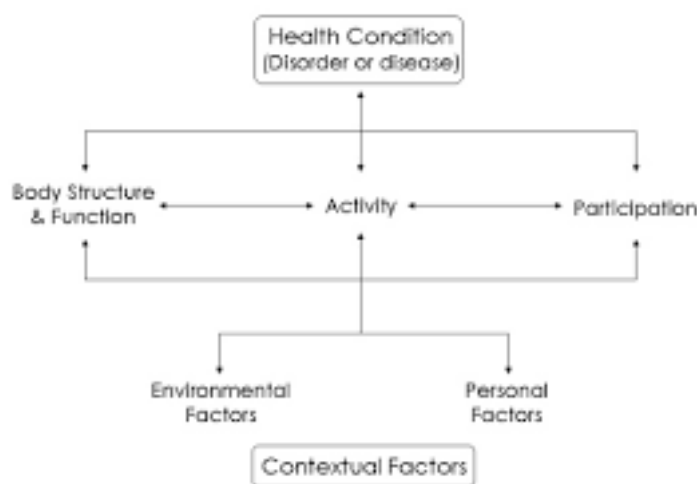


Figure 28: Schematic illustration (WHO, 2001) model of functioning

A simplified prototype of a functional assessment adapted from the ICF WHO (2001) model (illustrated in Figure 28, above) for HE SpLD type difficulties might broadly encompass the following four interconnected areas:

1. BODY FUNCTION

- Underlying ability – both strengths and weaknesses
- Processing skills e.g. aspects of memory function, processing speed, attentional skills
- Affective conditions e.g. stress, low self esteem

2. AFFECT ON EDUCATIONAL ACTIVITIES

- Literacy attainment – reading accuracy, fluency, comprehension; spelling; writing skills

3. AFFECT ON EDUCATIONAL PARTICIPATION

- Difficulty completing examinations within allocated time
- Finds most reading tasks arduous in terms of effort and time required
- Processing/attentional difficulties in lectures
- Writing skills of poor quality
- Opportunities for healthy social life missed due to need to overwork

4. ENVIRONMENTAL AND PERSONAL FACTORS

- Academic strengths/competencies
- Assistive technology
- Study skills support (group and/or individual) provided by institution
- Specialist DSA funded support for strategy/accommodation development
- Reasonable adjustments
- Individual attitude/motivation

The above-simplified prototype, in being a draft example, is not intended to be comprehensive, and would necessarily need to be critically evaluated and accordingly refined by relevant stakeholders. At first glance, it may look little

different from that laid down by the current mandatory SpLD Assessment Standards Committee (SASC, 2015) model. It would examine the same range of academic difficulties, the same underlying cognitive processing skills that research has shown to be associated with them, ascertain how they affect the individual's academic performance, and identify the factors that can be mustered to improve access to learning for the individual student. It would also deploy the same standardized and validated tests to provide evidence of difficulties and establish severity. The emphasis, though, would be purely functional in that it would provide a profile of the individual's current academic functioning, with no attempt to diagnose a named category of specific learning difficulty, at least not for additional provision entitlement. The assessment would instead be purely aligned with determining provision that would better enable the student to access the learning on offer through his/her course at his/her institution. In this sense, the model or framework would cohere with prevailing values around fair and equal access.

The model also allows for the recognition that academic ability and the skills that contribute towards it are dimensional, and that the importance attributed to them is context relative. It would be the responsibility of individual institutions and/or departments within them to make decisions about the kinds of inclusive and/ or differentiated support to which their students would be entitled, and, since institutions' resources are not infinite, to also determine the cut-offs on the various dimensions of functioning that would entitle access to such resources. This study's data, together with analysis of the literature pertaining to inclusive and differentiated provision within the higher education sector, has overwhelmingly pointed towards the unsatisfactory equity consequences for policies and practices that do not take heterogeneity and individual context into account.

Avoids tricky aetiological judgements

Shifting the main focus and purpose of assessment away from categorical diagnosis and onto individual profiles of current academic functioning in the context of what a specific course required, would relieve the assessor of having to make tricky aetiological decisions and oversimplified judgements

(Riva & Antonietti, 2010), trying to distinguish between a deserving medical cause for inefficient study skills (as is required by current disability legislation) and, by implication, less deserving social or cultural causes. This study has produced evidence that assessors do find this task difficult, if not impossible, and that considerable numbers of all three groups of participants had uncomfortable ethical concerns about the prioritizing of dyslexic students for additional funding and support over non-dyslexic students, including overseas and “non-traditional” students, with similar difficulties.

An assessment of contextualized individualised functioning thus could have the desired effect of shifting the focus of additional educational provision away from the concept of “disability”, in the legal sense, and more towards an acknowledgement of educational needs due, in the case of dyslexia-type difficulties, to cognitive difference and/or socio-cultural disadvantage, thereby addressing many of the objections to the discriminatory nature of the present system that have been uncovered both in the literature and by this study’s data.

Uses neutral, non-disablist language

Evidence from both the literature and this study’s data has questioned the disability status of dyslexic students and uncovered much dissatisfaction around the assumed equivalence of the two concepts in current higher education policies. An ICF-type model of assessment, in classifyfunctioning rather than people, uses neutral language (Riva & Antonietti, 2010), that not only avoids unscientific binary divides but also addresses the concerns of those who object to the non-inclusive and disablist assumptions about learning differences perpetuated by medical categorical labels. Emphasis in an ICF type assessment is on what can be achieved in a specific context, taking an individual’s strengths and weaknesses into account, rather than on the severity of “deficits” (Riva & Antonietti, 2010).

A functional model of assessment would be more useful

In summary, apart from addressing some of the identified concerns around the imprecise meanings and inappropriate uses of categorical labels like

dyslexia, a functional model of assessment that focuses primarily on an individual's current academic strengths and weakness in the context of what their specific course of study requires, would be much more useful than the current dual-purpose model for the individual student, for their lecturers, and for informing departmental or institutional decisions about reasonable adjustments. Information produced from such an assessment model would more effectively enable the higher education sector to achieve equality of access and enhanced participation for all students through focusing not on diagnostic labels and severity of "deficits" but rather on functional abilities and limitations and how they can be positively managed at both the individual and institutional level.

"Dyslexia" retained as a meaningful general descriptor

Logically, it could be argued that the adoption of a purely functional model of psychological assessment within the higher education sector would not only negate the need for assigning categorical labels like dyslexia, but that it would also precipitate the demise of such labels by making them redundant. Whether this would happen or not is purely speculative at the present time, considering the current mandatory constraints on assessors' practice within the sector; whether it should happen, given some of the serious implications of this study's data, is a question around which opinions remain divided. What is apparent, though, is that renowned dyslexia researchers, such as those cited in this study's analysis of the literature (Ramus, 2014; Wolf, 2014; Bishop, BishopBlog, 2014) have in the wake of the recent dyslexia debate publically expressed themselves as reluctant, for various reasons, to dispense with the dyslexia label as a descriptive term for what they recognize as a syndrome of characteristic strengths and weaknesses. Furthermore, the majority of assessor and dyslexic student participants in the study were similarly disposed towards abandonment of the label. It is unlikely, then that the term will disappear from higher education practice. Rather, as endorsed by the DSM-V, the retention of "dyslexia" would appear to be a useful descriptive (as opposed to categorical) term used to denote the specific and seriousness nature of certain types of learning differences encountered by higher education students. Providing assessors are careful to explicitly define

their use of the term (Russell et al., 2012) such usage can still aid meaningful everyday communication and understanding once inconsistency and resulting tensions around definitions are openly acknowledged, clarified and hopefully understood.

Require all to fully engage with learning differences

Unfortunately, though, assessors do not work in a vacuum, and a lot of the excellent understanding and fine detail already a feature of their assessment reports goes unread by the individuals whose practice it has the potential to enlighten. Adoption of a functional model of assessment aligned to institutional provision would necessitate educators and policy makers to take note of and attempt to understand the functional difficulties of their students. Much of the current disquiet around dyslexia, dyslexia assessment practice and the provision that has historically stemmed from it, results from the inability and/or unwillingness of policy makers and lecturers to fully engage with learning differences like dyslexia, preferring instead to leave the “glass wall” intact. Sharpe and Earle (2000), for example, point to the unexamined acceptance of routinely allowed reasonable adjustments for dyslexic students, which they argue are often modifications of assessment criteria unfair to other students; the HEFCE (2015) review of inclusionary SpLD provision recognized the contentious disagreement around the issue and stated that it would need to be resolved by discussions on exactly what defines a reasonable adjustment. Data provided by the lecturer participants in this study made it clear that many individuals responsible for teaching and learning within higher education are still to have such discussions. Thus the second most obvious recommendation to emerge from this study for resolving many of the tensions around dyslexia, its assessment and pedagogical provision for it, is that all higher education policy makers and educators be fully informed about learning differences and how they are assessed so that they are in a position to responsibly and actively engage with decisions made about provision considered appropriate for them.

8.4 THE FUTURE

In summarizing findings from participants' data in an earlier section of this chapter reference was made to how they revealed existing tensions between a willingness to accept idealistic solutions and recognition of practical realities. An inclusive purely functional model of psychological assessment neatly and logically aligned with fully inclusive provision, thoughtfully implemented by enthusiastically engaged educators with a high degree of dyslexia awareness, is admittedly a possible resolution to the dyslexia problem based on the researcher's own personal interpretation of the data's implications. However, this is but one interpretation and, as the data from this study's participants makes overwhelming clear, such a resolution is unlikely to be acceptable to all parties. If the data from this study have shown anything it is that individuals have different beliefs, values and assumptions about dyslexia and about the function and nature of higher education: some will inevitably resist, and indeed are resisting, cultural change. In the future, then, practical compromises and the tolerant recognition of plural beliefs are likely to sit, however uncomfortably, alongside movement towards ideal solutions.

Practical compromises

A prime example of a current compromise occasioned by plural beliefs, values and assumptions is the decision by the Department for Business, Innovation and Skills to advocate a mixed model of support for dyslexic students i.e. institution socially inclusionary provision for "mild" dyslexia and bespoke DSA funded medical-model provision for more complex dyslexia (BIS, 2014). Such a compromise was one acknowledged as necessary by most of the assessors and dyslexic students who took part in this study, as well as by recent influential research council funded (Fuller et al., 2008) and government (HEFCE, 2015) reviews on inclusionary practices. It is also a compromise, if the current legislation remains unchanged, that necessitates the continuation, for at least some students, of a pseudo-medical type assessment identifying the cause of an individual's experienced academic

difficulties as a “mental impairment”, as opposed to simply identifying that such difficulties exist and providing appropriate support, regardless of cause.

Acceptance and implication of pluralistic beliefs

Pluralistic beliefs, values and assumptions about the nature of dyslexia, the criteria by which it is identified in higher education students and the provision that should be made for the condition are, on the basis of this study’s findings, likely to continue and unlikely to be reconciled in the immediate future imposed tightening of definitional criteria. The situation is not ideal, as analysis of the study’s data has revealed. Nevertheless, critical awareness of the way things are, and why, is in itself intellectually liberating. Hopefully it will lead to more informed knowledge of the term “dyslexia” as it has developed historically and is currently used in the context of higher education, as well as more cautious use of it by those who assess it and by those who determine eligibility for additional educational resources and reasonable adjustments.

CONCLUSION

In the introductory chapter to this study I reflectively referred to the way in which my research might be affected by certain personal troubling dilemmic perspectives that were the research’s original impetus. Hopefully I have allowed the data from my participants to throw a degree of objective clarificatory light on these problematic issues. What I personally have learnt from the analysed perspectives of my participants is that my own firmly entrenched prejudices need not be held with the intellectual discomfort experienced at the beginning of the study. The term “dyslexia”, as used in the higher education context, appears to have developed in such a way that it is possible for it to simultaneously encompass an intuitively recognized qualitatively distinct category of learning difference and scientific findings regarding the continuous distribution of human cognitive skills. Furthermore, despite the fact that I, along with many of my participants, still conceive of the term as referring to bright academically able students with specific processing weaknesses, I am now able to accept, albeit reluctantly, that Widening Participation, together with the understanding of dyslexia widely

used in mainstream primary education, has extended the term's meaning for some in the sector to include other categories of higher education students with generally poor reading and study skills.

Nevertheless, acknowledging and accepting the way things are is a far step from condoning such beliefs and the practices that stem from them. As this thesis has consistently demonstrated, unexamined erroneous assumptions about the nature of dyslexia can lead, and have led, not only to some dishonest opportunist use of disability legislation but also to non-equitable pedagogical policies and practices. At best, one can hope that the "dyslexia" label, in relation to the highlighting of these unsatisfactory issues, will keep propelling science forward to "unravel the complex interactions between genes, brain and environment" (Cutting, 2014) that seriously thwart the efforts of many individuals to access the learning on offer in higher education institutions and to benefit from the credentialing that such learning confers.

Until such time as science is able to provide any definitive answers, dyslexia assessors in the higher education context face many difficult challenges if their practice is to remain conceptually credible, ethically responsible and thus beneficial to the students and institutions it serves. Not the least of these challenges will be a preparedness to acknowledge the limitations as well as the advantages of diagnostic assessment and to come to terms, both conceptually and practically, with the complex, continuously changing nature of and relationship between research knowledge and professional practice, challenges that the findings from this study have so conspicuously highlighted. Hopefully future research will be able to build on these findings to design and explore the effectiveness of an alternative model of dyslexia assessment, one able to simultaneously accommodate current and changing research knowledge and the often conflicting demands of contextualized professional practice within the higher education sector.

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**Dyslexia assessment practice within the UK
higher education sector:**

Assessor, lecturer and student perspectives

APPENDICES

Volume 2 of 2

**Submitted by Denise Therese Ryder
to the University of Exeter
as a thesis for the degree of
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I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Signature:

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Table 2: 25 UK institutions with largest proportion of students with Specific Learning Difficulties, 2012/13

Institution	Percentage of students with SpLD (%)
Total UK	4.6
Leeds College of Art	25
Falmouth University	23
The Liverpool Institute for Performing Arts	21
Royal Agricultural University	20
University for the Creative Arts	16
Norwich University of the Arts	16
Royal College of Art	15
Rose Bruford College	15
Central School of Speech and Drama	15
University of the Arts, London	15
The Royal Veterinary College	14
Guildhall School of Music and Drama	13
Conservatoire for Dance and Drama	12
Royal Conservatoire of Scotland	12
Ravensbourne	11
Trinity Laban Conservatoire of Music and Drama	11
Writtle College	11
Glasgow School of Art	10
Harper Adams University	10
The University of Chichester	9
Bath Spa University	9
Bournemouth University	9
SRUC	9
The University of Winchester	9
University of St Mark and St John	8

Source: GuildHE analysis of HESA data (submitted to BIS)

Table 3: Demographic characteristics of Pre'92 and Post'92 dyslexic students compared

CRITERION	PRE'92		POST'92	
	N	%	N	%
INSTITUTION CATEGORY	110	75.3	36	24.7
BROAD SUBJECT CATEGORY				
Humanities	48	43.6	5	13.9
STEM	62	56.4	4	11.1
Artistic/Vocational	0	0	27	75
GENDER				
Female	57	51.8	32	88.9
Male	53	48.2	4	11.1
AGE				
Under 25	75	68.2	29	80.6
Over 25	35	31.8	7	19.4
LITERACY DIFFICULTIES IDENTIFIED AT SCHOOL				
Yes	64	58.2	24	66.7
No	46	41.8	12	33.3
STAGE OF FORMAL ASSESSMENT				
Before starting university	63	57.3	21	58.3
After starting university	47	42.7	15	41.7

Table 4. Demographic characteristics of Pre'92 and Post'92 non-dyslexic students compared

CRITERION	PRE'92		POST'92	
	N	%	N	%
INSTITUTION CATEGORY	84	54.2	71	45.8
BROAD SUBJECT CATEGORY				
Humanities	32	38.1	14	19.7
STEM	51	60.7	5	7
Artistic/Vocational	0	0	52	73.2
GENDER				
Female	59	70.2	54	76.1
Male	25	29.8	17	23.9
AGE				
Under 25	66	78.6	59	83.1
Over 25	18	21.4	12	16.9
LITERACY DIFFICULTIES IDENTIFIED AT SCHOOL				
Yes	4	4.8	6	8.5
No	80	95.2	65	9.5

Table 5. Demographic characteristics of dyslexic and non-dyslexic students compared

CRITERION	DYSLEXIC		NON-DYSLEXIC	
	N	%	N	%
INSTITUTION CATEGORY				
Pre'92	110	57	84	43
Post'92	36	34	71	66
BROAD SUBJECT CATEGORY				
Humanities	53	36	46	30
STEM	66	45	56	36
Artistic/Vocational	27	19	52	34
GENDER				
Female	89	61	113	73
Male	57	39	42	27
AGE				
Under 25	104	71	125	80.6
Over 25	57	29	30	19.4
LITERACY DIFFICULTIES IDENTIFIED AT SCHOOL				
Yes	88	60	10	6.5
No	58	40	145	93.5

Table 6 - Part C: Current research positions that influence assessors' practice

There are no widely agreed criteria as to what dyslexia is

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	9	7.6	7.6	7.6
Valid Agree	42	35.6	35.6	43.2
Valid Unsure	3	2.5	2.5	45.8
Valid Disagree	58	49.2	49.2	94.9
Valid Strongly disagree	6	5.1	5.1	100.0
Valid Total	118	100.0	100.0	

There exists a clinically recognizable "essence" of dyslexia that defies explicit definition

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	7	5.9	5.9	5.9
Valid Agree	33	28.0	28.0	33.9
Valid Unsure	39	33.1	33.1	66.9
Valid Disagree	32	27.1	27.1	94.1
Valid Strongly disagree	7	5.9	5.9	100.0
Valid Total	118	100.0	100.0	

Dyslexia, as it presents itself in HE students, is more than just a difficulty with literacy skills

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	52	44.1	44.1	44.1
Valid Agree	52	44.1	44.1	88.1
Valid Unsure	5	4.2	4.2	92.4
Valid Disagree	9	7.6	7.6	100.0
Valid Total	118	100.0	100.0	

Dyslexia is a combination of abilities (often referred to as “gifts”) and difficulties

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	18	15.3	15.3	15.3
Valid Agree	53	44.9	44.9	60.2
Valid Unsure	23	19.5	19.5	79.7
Valid Disagree	19	16.1	16.1	95.8
Valid Strongly disagree	5	4.2	4.2	100.0
Valid Total	118	100.0	100.0	

Dyslexia stems from differences in individual brain structure and function

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	33	28.0	28.0	28.0
Valid Agree	57	48.3	48.3	76.3
Valid Unsure	22	18.6	18.6	94.9
Valid Disagree	6	5.1	5.1	100.0
Valid Total	118	100.0	100.0	

A diagnosis of dyslexia is stable over time – an accurately diagnosed individual will never cease to be dyslexic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	35	29.7	29.7	29.7
Valid Agree	56	47.5	47.5	77.1
Valid Unsure	10	8.5	8.5	85.6
Valid Disagree	15	12.7	12.7	98.3
Valid Strongly disagree	2	1.7	1.7	100.0
Valid Total	118	100.0	100.0	

It is possible to distinguish among the different categories of SpLDs, like dyslexia, dyspraxia, ADD and dyscalculia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	25	21.2	21.2	21.2
Valid Agree	67	56.8	56.8	78.0
Valid Unsure	19	16.1	16.1	94.1
Valid Disagree	6	5.1	5.1	99.2
Valid Strongly disagree	1	.8	.8	100.0
Valid Total	118	100.0	100.0	

WAIS or WRIT scores are a measure of academic potential

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	4	3.4	3.4	3.4
Valid Agree	48	40.7	40.7	44.1
Valid Unsure	30	25.4	25.4	69.5
Valid Disagree	31	26.3	26.3	95.8
Valid Strongly disagree	5	4.2	4.2	100.0
Valid Total	118	100.0	100.0	

Environmental and socio-cultural factors such as poor teaching and impoverished socio-cultural background can be a cause of dyslexia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	3	2.5	2.5	2.5
Valid Agree	12	10.2	10.2	12.7
Valid Unsure	9	7.6	7.6	20.3
Valid Disagree	64	54.2	54.2	74.6
Valid Strongly disagree	30	25.4	25.4	100.0
Valid Total	118	100.0	100.0	

There is inconsistency in the cut-off points used to denote “mental impairment” or “cognitive deficit” on standardized tests of cognitive processing

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	9	7.6	7.6	7.6
Valid Agree	48	40.7	40.7	48.3
Valid Unsure	40	33.9	33.9	82.2
Valid Disagree	18	15.3	15.3	97.5
Valid Strongly disagree	3	2.5	2.5	100.0
Valid Total	118	100.0	100.0	

An individual is either dyslexic or not dyslexic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	4	3.4	3.4	3.4
Valid Agree	38	32.2	32.2	35.6
Valid Unsure	24	20.3	20.3	55.9
Valid Disagree	38	32.2	32.2	88.1
Valid Strongly disagree	14	11.9	11.9	100.0
Valid Total	118	100.0	100.0	

Widening Participation in UK universities has resulted in a broadening of the meaning of dyslexia to include all students with literacy difficulties

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	6	5.1	5.1	5.1
Valid Agree	31	26.3	26.3	31.4
Valid Unsure	38	32.2	32.2	63.6
Valid Disagree	37	31.4	31.4	94.9
Valid Strongly disagree	6	5.1	5.1	100.0
Valid Total	118	100.0	100.0	

Table 7 - Part D: Attitudes towards the assessment of dyslexia

The general description of dyslexia in the DfES Guidelines (2005) is useful in informing an accurate diagnosis of dyslexia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	4	3.4	3.4	3.4
Valid Agree	78	66.1	66.1	69.5
Valid Unsure	20	16.9	16.9	86.4
Valid Disagree	13	11.0	11.0	97.5
Valid Strongly disagree	3	2.5	2.5	100.0
Valid Total	118	100.0	100.0	

I generally have confidence in the validity of the psychometric tests on the SASC list – i.e. that they measure what they purport to measure

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	5	4.2	4.2	4.2
Valid Agree	60	50.8	50.8	55.1
Valid Unsure	29	24.6	24.6	79.7
Valid Disagree	22	18.6	18.6	98.3
Valid Strongly disagree	2	1.7	1.7	100.0
Valid Total	118	100.0	100.0	

Flat profile of below average attainment – no diagnosis of dyslexia or SpLD

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	15	12.7	12.7	12.7
Valid Agree	44	37.3	37.3	50.0
Valid Unsure	32	27.1	27.1	77.1
Valid Disagree	23	19.5	19.5	96.6
Valid Strongly disagree	4	3.4	3.4	100.0
Valid Total	118	100.0	100.0	

Confident distinguishing between dyslexia and poor literacy skills due entirely to environmental factors

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	8	6.8	6.8	6.8
Valid Agree	61	51.7	51.7	58.5
Valid Unsure	36	30.5	30.5	89.0
Valid Disagree	12	10.2	10.2	99.2
Valid Strongly disagree	1	.8	.8	100.0
Valid Total	118	100.0	100.0	

I feel confident in making a dyslexia diagnosis even when quantitative evidence from test scores appears to contradict that gathered qualitatively from background history and behavioural observation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	4	3.4	3.4	3.4
Valid Agree	59	50.0	50.0	53.4
Valid Unsure	24	20.3	20.3	73.7
Valid Disagree	28	23.7	23.7	97.5
Valid Strongly disagree	3	2.5	2.5	100.0
Valid Total	118	100.0	100.0	

I feel confident about using the label “dyslexia” to describe the SpLD of students to whom I assign it

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	18	15.3	15.3	15.3
Valid Agree	69	58.5	58.5	73.7
Valid Unsure	16	13.6	13.6	87.3
Valid Disagree	12	10.2	10.2	97.5
Valid Strongly disagree	3	2.5	2.5	100.0
Valid Total	118	100.0	100.0	

I prefer the generic label “SpLD” rather than “dyslexia”

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	21	17.8	17.8	17.8
Valid Agree	33	28.0	28.0	45.8
Valid Unsure	17	14.4	14.4	60.2
Valid Disagree	39	33.1	33.1	93.2
Valid Strongly disagree	8	6.8	6.8	100.0
Valid Total	118	100.0	100.0	

The standard diagnostic criteria for diagnosing dyslexia are too diverse

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	10	8.5	8.5	8.5
Valid Agree	24	20.3	20.3	28.8
Valid Unsure	33	28.0	28.0	56.8
Valid Disagree	49	41.5	41.5	98.3
Valid Strongly disagree	2	1.7	1.7	100.0
Valid Total	118	100.0	100.0	

Table 8 - Part E: Dyslexia and disability

It is right that the Equality Act 2010 recognizes dyslexia as a disability

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	41	34.7	34.7	34.7
Valid Agree	47	39.8	39.8	74.6
Valid Unsure	17	14.4	14.4	89.0
Valid Disagree	12	10.2	10.2	99.2
Valid Strongly disagree	1	.8	.8	100.0
Valid Total	118	100.0	100.0	

The term “disability”, like “dyslexia”, refers to a continuum of learner differences

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	38	32.2	32.2	32.2
Agree	63	53.4	53.4	85.6
Unsure	9	7.6	7.6	93.2
Disagree	6	5.1	5.1	98.3
Strongly disagree	2	1.7	1.7	100.0
Total	118	100.0	100.0	

The term “disability” is a demeaning and inaccurate way of referring to what is a different or neuro-diverse way of processing information

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	23	19.5	19.5	19.5
Agree	41	34.7	34.7	54.2
Unsure	28	23.7	23.7	78.0
Disagree	24	20.3	20.3	98.3
Strongly disagree	2	1.7	1.7	100.0
Total	118	100.0	100.0	

Legal recognition of dyslexia as a disability has freed affected individuals from humiliating discrimination

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	12	10.2	10.2	10.2
Agree	45	38.1	38.1	48.3
Unsure	33	28.0	28.0	76.3
Disagree	23	19.5	19.5	95.8
Strongly disagree	5	4.2	4.2	100.0
Total	118	100.0	100.0	

Dyslexic students are disabled not by their “impairment”, but by the literacy expectations of academic institutions

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	14	11.9	11.9	11.9
Valid Agree	37	31.4	31.4	43.2
Valid Unsure	39	33.1	33.1	76.3
Valid Disagree	26	22.0	22.0	98.3
Valid Strongly disagree	2	1.7	1.7	100.0
Valid Total	118	100.0	100.0	

Table 9 - Part F: Equity issues and reasonable adjustments (Cont.).

Reasonable adjustments commonly made for dyslexic students, such as additional resources, study support and examination accommodations, can be unfair to other students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	4	3.4	3.4	3.4
Valid Agree	32	27.1	27.1	30.5
Valid Unsure	19	16.1	16.1	46.6
Valid Disagree	46	39.0	39.0	85.6
Valid Strongly disagree	17	14.4	14.4	100.0
Valid Total	118	100.0	100.0	

What is a “reasonable” adjustment for one dyslexic student might not be “reasonable” for another dyslexic student

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	42	35.6	35.6	35.6
Valid Agree	68	57.6	57.6	93.2
Valid Unsure	5	4.2	4.2	97.5
Valid Disagree	2	1.7	1.7	99.2
Valid Strongly disagree	1	.8	.8	100.0
Valid Total	118	100.0	100.0	

It seems discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	14	11.9	11.9	11.9
Valid Agree	46	39.0	39.0	50.8
Valid Unsure	25	21.2	21.2	72.0
Valid Disagree	30	25.4	25.4	97.5
Valid Strongly disagree	3	2.5	2.5	100.0
Valid Total	118	100.0	100.0	

Table 10 - Part G: Inclusive practices

DSAs and reasonable adjustments specifically for dyslexic students should be replaced by institution-wide provision flexible enough to cater for the diverse needs of all students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	28	24.8	24.8	24.8
Valid Agree	28	24.8	24.8	49.6
Valid Unsure	33	29.2	29.2	78.8
Valid Disagree	22	19.5	19.5	98.2
Valid Strongly disagree	2	1.8	1.8	100.0
Valid Total	113	100.0	100.0	

Adjustments to teaching, learning and assessment commonly made for dyslexic students are good practice for all students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	59	50.0	50.0	50.0
Valid Agree	46	39.0	39.0	89.0
Valid Unsure	5	4.2	4.2	93.2
Valid Disagree	8	6.8	6.8	100.0
Valid Total	118	100.0	100.0	

Dyslexic students require specialist rather than generic support for what are very individual needs

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	27	22.9	22.9	22.9
Agree	66	55.9	55.9	78.8
Unsure	18	15.3	15.3	94.1
Disagree	5	4.2	4.2	98.3
Strongly disagree	2	1.7	1.7	100.0
Total	118	100.0	100.0	

Adjustments to assessment and examination arrangements, like dyslexia marking policies and separate room accommodation for exams, “ghettoize” dyslexic students by negatively drawing attention to their differences

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	3	2.5	2.5	2.5
Agree	17	14.4	14.4	16.9
Unsure	28	23.7	23.7	40.7
Disagree	60	50.8	50.8	91.5
Strongly disagree	10	8.5	8.5	100.0
Total	118	100.0	100.0	

Dyslexic students should not be treated as a separate category because they fall along a continuum of learner differences and share similar challenges and difficulties to those faced by many other HE students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	5	4.2	4.2	4.2
Agree	29	24.6	24.6	28.8
Unsure	31	26.3	26.3	55.1
Disagree	46	39.0	39.0	94.1
Strongly disagree	7	5.9	5.9	100.0
Total	118	100.0	100.0	

Equality of opportunity for dyslexic students would be compromised without specifically targeted provision

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	16	13.6	13.6	13.6
Valid Agree	69	58.5	58.5	72.0
Valid Unsure	26	22.0	22.0	94.1
Valid Disagree	6	5.1	5.1	99.2
Valid Strongly disagree	1	.8	.8	100.0
Valid Total	118	100.0	100.0	

Table 11-Part B: Lecturers' knowledge of, and attitudes towards, dyslexia

My institution has provided me with opportunities to attend dyslexia awareness training

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	19	11.8	11.8	11.8
Valid Agree	44	27.3	27.3	39.1
Valid Unsure	46	28.6	28.6	67.7
Valid Disagree	36	22.4	22.4	90.1
Valid Strongly disagree	16	9.9	9.9	100.0
Valid Total	161	100.0	100.0	

I am aware of the cognitive, emotional and social effects that dyslexia can have on HE students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	35	21.7	21.7	21.7
Valid Agree	78	48.4	48.4	70.2
Valid Unsure	29	18.0	18.0	88.2
Valid Disagree	15	9.3	9.3	97.5
Valid Strongly disagree	4	2.5	2.5	100.0
Valid Total	161	100.0	100.0	

I feel confident that I can recognize dyslexia-type difficulties in my students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	26	16.1	16.1	16.1
Agree	58	36.0	36.0	52.2
Unsure	40	24.8	24.8	77.0
Disagree	32	19.9	19.9	96.9
Strongly disagree	5	3.1	3.1	100.0
Total	161	100.0	100.0	

I rely on the student, and/or the Disability Service acting on the student's behalf, to inform me of their dyslexia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	71	44.1	44.1	44.1
Agree	68	42.2	42.2	86.3
Unsure	6	3.7	3.7	90.1
Disagree	15	9.3	9.3	99.4
Strongly disagree	1	.6	.6	100.0
Total	161	100.0	100.0	

I have trouble telling the difference between dyslexic students and those whose literacy and/or study skills are ineffective due to past missed or poor educational opportunities

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	27	16.8	16.8	16.8
Agree	48	29.8	29.8	46.6
Unsure	31	19.3	19.3	65.8
Disagree	47	29.2	29.2	95.0
Strongly disagree	8	5.0	5.0	100.0
Total	161	100.0	100.0	

I have trouble distinguishing some students with dyslexia from educationally disadvantaged students who are not able to meet the intellectual demands of a degree course

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	20	12.4	12.4	12.4
Valid Agree	37	23.0	23.0	35.4
Valid Unsure	28	17.4	17.4	52.8
Valid Disagree	65	40.4	40.4	93.2
Valid Strongly disagree	11	6.8	6.8	100.0
Valid Total	161	100.0	100.0	

I am concerned by the seeming heterogeneous nature of assessed dyslexic students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	23	14.3	14.3	14.3
Valid Agree	42	26.1	26.1	40.4
Valid Unsure	58	36.0	36.0	76.4
Valid Disagree	29	18.0	18.0	94.4
Valid Strongly disagree	9	5.6	5.6	100.0
Valid Total	161	100.0	100.0	

I am prepared to do whatever it takes to make all aspects of my teaching accessible to dyslexic students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	41	25.5	25.5	25.5
Valid Agree	80	49.7	49.7	75.2
Valid Unsure	21	13.0	13.0	88.2
Valid Disagree	17	10.6	10.6	98.8
Valid Strongly disagree	2	1.2	1.2	100.0
Valid Total	161	100.0	100.0	

There have been occasions when I have doubted the validity of a particular student's dyslexia diagnosis

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	16	9.9	9.9	9.9
Valid Agree	41	25.5	25.5	35.4
Valid Unsure	25	15.5	15.5	50.9
Valid Disagree	52	32.3	32.3	83.2
Valid Strongly disagree	27	16.8	16.8	100.0
Valid Total	161	100.0	100.0	

Higher Education is no place for those who still have problems with reading and writing

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	5	3.1	3.1	3.1
Valid Agree	6	3.7	3.7	6.8
Valid Unsure	17	10.6	10.6	17.4
Valid Disagree	32	19.9	19.9	37.3
Valid Strongly disagree	101	62.7	62.7	100.0
Valid Total	161	100.0	100.0	

Table 12: Part C: Lecturers' frequencies dyslexia and disability

I do not tend to think of dyslexic students as being disabled

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	21	13.0	13.0	13.0
Valid Agree	50	31.1	31.1	44.1
Valid Unsure	28	17.4	17.4	61.5
Valid Disagree	50	31.1	31.1	92.5
Valid Strongly disagree	12	7.5	7.5	100.0
Valid Total	161	100.0	100.0	

Dyslexic students are disabled not by their "impairment", but by literacy expectations of academia

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	11	6.8	6.8	6.8
Valid Agree	24	14.9	14.9	21.7
Valid Unsure	41	25.5	25.5	47.2
Valid Disagree	71	44.1	44.1	91.3
Valid Strongly disagree	14	8.7	8.7	100.0
Valid Total	161	100.0	100.0	

It is right that the Equality Act 2010 recognizes dyslexia as a disability

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	38	23.6	23.6	23.6
Valid Agree	64	39.8	39.8	63.4
Valid Unsure	51	31.7	31.7	95.0
Valid Disagree	7	4.3	4.3	99.4
Valid Strongly disagree	1	.6	.6	100.0
Valid Total	161	100.0	100.0	

Some dyslexic students appear to be no more functionally disabled within the context of HE than some other non-dyslexic students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	31	19.3	19.3	19.3
Valid Agree	87	54.0	54.0	73.3
Valid Unsure	35	21.7	21.7	95.0
Valid Disagree	6	3.7	3.7	98.8
Valid Strongly disagree	2	1.2	1.2	100.0
Valid Total	161	100.0	100.0	

An increasing number of students are “playing the system” and claiming to be dyslexic in order to receive special treatment

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	15	9.3	9.3	9.3
Valid Agree	20	12.4	12.4	21.7
Valid Unsure	67	41.6	41.6	63.4
Valid Disagree	42	26.1	26.1	89.4
Valid Strongly disagree	17	10.6	10.6	100.0
Valid Total	161	100.0	100.0	

Table 13: Part D: Lecturers’ frequencies equity and reasonable adjustments

It is appropriate that dyslexic students are entitled to more favourable treatment (Eq.A. S.13(13))

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	28	17.4	17.4	17.4
Valid Agree	92	57.1	57.1	74.5
Valid Unsure	23	14.3	14.3	88.8
Valid Disagree	13	8.1	8.1	96.9
Valid Strongly disagree	5	3.1	3.1	100.0
Valid Total	161	100.0	100.0	

Additional time in examinations for all dyslexic students can give some of them an unfair advantage

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	6	3.7	3.7	3.7
Valid Agree	25	15.5	15.5	19.3
Valid Unsure	24	14.9	14.9	34.2
Valid Disagree	82	50.9	50.9	85.1
Valid Strongly disagree	24	14.9	14.9	100.0
Valid Total	161	100.0	100.0	

I fear that academic standards in my subject are being eroded by legal duty to make reasonable adjustments

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	7	4.3	4.3	4.3
Valid Agree	16	9.9	9.9	14.3
Valid Unsure	16	9.9	9.9	24.2
Valid Disagree	83	51.6	51.6	75.8
Valid Strongly disagree	39	24.2	24.2	100.0
Valid Total	161	100.0	100.0	

Comfortable with Dyslexia Marking Policies - marking for content without unduly penalising spelling, grammar, sentence structure, punctuation or vocabulary usage

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	35	21.7	21.7	21.7
Valid Agree	69	42.9	42.9	64.6
Valid Unsure	20	12.4	12.4	77.0
Valid Disagree	27	16.8	16.8	93.8
Valid Strongly disagree	10	6.2	6.2	100.0
Valid Total	161	100.0	100.0	

I would seriously consider, or persuade my department to consider, the request from a dyslexic student for an alternative to written exams or coursework

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	21	13.0	13.0	13.0
Valid Agree	64	39.8	39.8	52.8
Valid Unsure	37	23.0	23.0	75.8
Valid Disagree	30	18.6	18.6	94.4
Valid Strongly disagree	9	5.6	5.6	100.0
Valid Total	161	100.0	100.0	

It seems discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	12	7.5	7.5	7.5
Valid Agree	34	21.1	21.1	28.6
Valid Unsure	63	39.1	39.1	67.7
Valid Disagree	41	25.5	25.5	93.2
Valid Strongly disagree	11	6.8	6.8	100.0
Valid Total	161	100.0	100.0	

Reasonable adjustments such as those made for dyslexic students are incompatible with a university culture of academic meritocracy

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	9	5.6	5.6	5.6
Valid Agree	6	3.7	3.7	9.3
Valid Unsure	29	18.0	18.0	27.3
Valid Disagree	75	46.6	46.6	73.9
Valid Strongly disagree	42	26.1	26.1	100.0
Valid Total	161	100.0	100.0	

Table 14 - Part E: Lecturers' frequencies inclusion

Fully inclusive systems of teaching, learning and assessment preferable to targeted differentiated provision

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	29	18.0	18.0	18.0
Valid Agree	68	42.2	42.2	60.2
Valid Unsure	46	28.6	28.6	88.8
Valid Disagree	14	8.7	8.7	97.5
Valid Strongly disagree	4	2.5	2.5	100.0
Valid Total	161	100.0	100.0	

Inclusive agendas demand time and financial resources that are currently in short supply

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	28	17.4	17.4	17.4
Valid Agree	62	38.5	38.5	55.9
Valid Unsure	25	15.5	15.5	71.4
Valid Disagree	40	24.8	24.8	96.3
Valid Strongly disagree	6	3.7	3.7	100.0
Valid Total	161	100.0	100.0	

It would be possible for me to design equivalent alternative modes to written exams and assessments

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	18	11.2	11.2	11.2
Valid Agree	54	33.5	33.5	44.7
Valid Unsure	34	21.1	21.1	65.8
Valid Disagree	34	21.1	21.1	87.0
Valid Strongly disagree	21	13.0	13.0	100.0
Valid Total	161	100.0	100.0	

I can't help thinking that high literacy standards are central to academic learning

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	33	20.5	20.5	20.5
Valid Agree	74	46.0	46.0	66.5
Valid Unsure	26	16.1	16.1	82.6
Valid Disagree	23	14.3	14.3	96.9
Valid Strongly disagree	5	3.1	3.1	100.0
Valid Total	161	100.0	100.0	

There is nothing wrong with the traditional system of including dyslexic students i.e. providing them with reasonable adjustments like extra time in exams and equipment to record lectures, so that they can manage with existing approaches to teaching, learning and assessment

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	27	16.8	16.8	16.8
Agree	75	46.6	46.6	63.4
Unsure	42	26.1	26.1	89.4
Disagree	13	8.1	8.1	97.5
Strongly disagree	4	2.5	2.5	100.0
Total	161	100.0	100.0	

It is idealistic and unrealistic to think that one all inclusive system of teaching, learning and assessment could satisfy the diverse needs of all students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	20	12.4	12.4	12.4
Agree	65	40.4	40.4	52.8
Unsure	40	24.8	24.8	77.6
Disagree	31	19.3	19.3	96.9
Strongly disagree	5	3.1	3.1	100.0
Total	161	100.0	100.0	

Institution-wide inclusive systems of teaching and learning would remove the stigma associated with specialist differentiated provision for dyslexic students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	11	6.8	6.8	6.8
Agree	57	35.4	35.4	42.2
Unsure	70	43.5	43.5	85.7
Disagree	20	12.4	12.4	98.1
Strongly disagree	3	1.9	1.9	100.0
Total	161	100.0	100.0	

Dyslexic students should not be treated as a separate category because they fall along a continuum of learner differences and share similar challenges and difficulties to those faced by most HE students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	23	14.3	14.3	14.3
Valid Agree	46	28.6	28.6	42.9
Valid Unsure	46	28.6	28.6	71.4
Valid Disagree	39	24.2	24.2	95.7
Valid Strongly disagree	7	4.3	4.3	100.0
Valid Total	161	100.0	100.0	

There is an irreconcilable tension between Widening Participation and the need to maintain competency standards

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	16	9.9	9.9	9.9
Valid Agree	32	19.9	19.9	29.8
Valid Unsure	45	28.0	28.0	57.8
Valid Disagree	41	25.5	25.5	83.2
Valid Strongly disagree	27	16.8	16.8	100.0
Valid Total	161	100.0	100.0	

Table 15 - Part C: Dyslexic students' frequencies Dyslexia and Disability
As a diagnosed dyslexic student I regard myself as a disabled person

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	5	3.4	3.4	3.4
Agree	21	14.4	14.4	17.8
Unsure	35	24.0	24.0	41.8
Disagree	43	29.5	29.5	71.2
Strongly disagree	42	28.8	28.8	100.0
Total	146	100.0	100.0	

Dyslexia is a category of disability alongside more obvious disabilities like blindness and cerebral palsy

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	7	4.8	4.8	4.8
Agree	20	13.7	13.7	18.5
Unsure	31	21.2	21.2	39.7
Disagree	50	34.2	34.2	74.0
Strongly disagree	38	26.0	26.0	100.0
Total	146	100.0	100.0	

Dyslexia is a processing difference, not a processing “difficulty” or “disability”

	Frequency	Percent		Cumulative Percent
Strongly agree	33	22.6	22.6	22.6
Agree	52	35.6	35.6	58.2
Unsure	36	24.7	24.7	82.9
Disagree	21	14.4	14.4	97.3
Strongly disagree	4	2.7	2.7	100.0
Total	146	100.0	100.0	

I would prefer that my individual learning needs were not given a label like “dyslexia”

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	11	7.5	7.5	7.5
Agree	10	6.8	6.8	14.4
Unsure	40	27.4	27.4	41.8
Disagree	55	37.7	37.7	79.5
Strongly disagree	30	20.5	20.5	100.0
Total	146	100.0	100.0	

I prefer the label “dyslexia” to “Specific Learning Difficulty”

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	43	29.5	29.5	29.5
Agree	58	39.7	39.7	69.2
Unsure	32	21.9	21.9	91.1
Disagree	9	6.2	6.2	97.3
Strongly disagree	4	2.7	2.7	100.0
Total	146	100.0	100.0	

I am proud to be a dyslexic person

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	30	20.5	20.5	20.5
Agree	36	24.7	24.7	45.2
Unsure	43	29.5	29.5	74.7
Disagree	25	17.1	17.1	91.8
Strongly disagree	12	8.2	8.2	100.0
Total	146	100.0	100.0	

I am proud of my identity as a disabled person

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly agree	8	5.5	5.5	5.5
Agree	9	6.2	6.2	11.6
Unsure	45	30.8	30.8	42.5
Disagree	42	28.8	28.8	71.2
Strongly disagree	42	28.8	28.8	100.0
Total	146	100.0	100.0	

Whether or not a dyslexic student is disabled depends on the severity of the effects of their cognitive differences on their academic skills

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	17	11.6	11.6
	Agree	48	32.9	44.5
	Unsure	43	29.5	74.0
	Disagree	23	15.8	89.7
	Strongly disagree	15	10.3	100.0
	Total	146	100.0	100.0

Table 16: Frequencies of dyslexic students' responses Part D Equity Issues and Reasonable Adjustments

It is appropriate that the Equality ACT 2010 regards dyslexia as a disability for which educational institutions must make reasonable adjustments, such as providing dyslexic students with assistive technology and allowing them extra time in exams

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	87	59.6	59.6
	Agree	46	31.5	91.1
	Unsure	8	5.5	96.6
	Disagree	3	2.1	98.6
	Strongly disagree	2	1.4	100.0
	Total	146	100.0	100.0

[I have noticed that some of the problems I experience due to my dyslexia appear to be shared by non-dyslexic friends and fellow students] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	11	7.5	7.5
	Agree	63	43.2	50.7
	Unsure	45	30.8	81.5
	Disagree	22	15.1	96.6
	Strongly disagree	5	3.4	100.0
	Total	146	100.0	100.0

I feel comfortable with receiving, or being eligible for, extra time in exams, and a DSA

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	79	54.1	54.1	54.1
Agree	44	30.1	30.1	84.2
Unsure	14	9.6	9.6	93.8
Disagree	6	4.1	4.1	97.9
Strongly disagree	3	2.1	2.1	100.0
Total	146	100.0	100.0	

I sometimes feel bad about having, or being eligible for, DSA funding and reasonable adjustments, like extra time in exams, when some of my friends and fellow students do not get them

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	10	6.8	6.8	6.8
Agree	41	28.1	28.1	34.9
Unsure	21	14.4	14.4	49.3
Disagree	40	27.4	27.4	76.7
Strongly disagree	34	23.3	23.3	100.0
Total	146	100.0	100.0	

I get the impression that some students resent the fact that I benefit, or could benefit from, DSA funding and reasonable adjustments like extra time

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	39	26.7	26.7	26.7
Agree	50	34.2	34.2	61.0
Unsure	21	14.4	14.4	75.3
Disagree	25	17.1	17.1	92.5
Strongly disagree	11	7.5	7.5	100.0
Total	146	100.0	100.0	

[Most of my lecturers appear to understand my difficulties and are sympathetic towards them]

To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	15	10.3	10.3	10.3
Valid Agree	45	30.8	30.8	41.1
Valid Unsure	45	30.8	30.8	71.9
Valid Disagree	25	17.1	17.1	89.0
Valid Strongly disagree	16	11.0	11.0	100.0
Valid Total	146	100.0	100.0	

I feel discriminated against by the university system that requires me to be assessed via written assignments and examinations

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	13	8.9	8.9	8.9
Valid Agree	15	10.3	10.3	19.2
Valid Unsure	41	28.1	28.1	47.3
Valid Disagree	45	30.8	30.8	78.1
Valid Strongly disagree	32	21.9	21.9	100.0
Valid Total	146	100.0	100.0	

Table 17- Part E: Dyslexic students' frequencies Inclusive Practices

Disabled Student Allowances (DSAs) given individually to dyslexic students should be replaced by carefully designed university-wide provision that takes account of the needs of all students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	15	10.3	10.3	10.3
Valid Agree	25	17.1	17.1	27.4
Valid Unsure	57	39.0	39.0	66.4
Valid Disagree	33	22.6	22.6	89.0
Valid Strongly disagree	16	11.0	11.0	100.0
Valid Total	146	100.0	100.0	

Reasonable adjustments currently available to dyslexic students, like the use of extra time and word-processors in exams, should be available to any student who needs them

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	17	11.6	11.6	11.6
Valid Agree	37	25.3	25.3	37.0
Valid Unsure	45	30.8	30.8	67.8
Valid Disagree	36	24.7	24.7	92.5
Valid Strongly disagree	11	7.5	7.5	100.0
Valid Total	146	100.0	100.0	

Table 18 - Part C: Non-dyslexic students' frequencies dyslexia and disability

I tend to think of dyslexic students as disabled

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	3	1.9	1.9	1.9
Valid Agree	29	18.7	18.7	20.6
Valid Unsure	23	14.8	14.8	35.5
Valid Disagree	64	41.3	41.3	76.8
Valid Strongly disagree	36	23.2	23.2	100.0
Valid Total	155	100.0	100.0	

In my opinion dyslexia is often an excuse for laziness or lack of ability

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	1	.6	.6	.6
Valid Agree	9	5.8	5.8	6.5
Valid Unsure	15	9.7	9.7	16.1
Valid Disagree	37	23.9	23.9	40.0
Valid Strongly disagree	93	60.0	60.0	100.0
Valid Total	155	100.0	100.0	

Some dyslexics might be disabled but most appear to me to be no different from the rest of us

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	33	21.3	21.3	21.3
Valid Agree	69	44.5	44.5	65.8
Valid Unsure	32	20.6	20.6	86.5
Valid Disagree	10	6.5	6.5	92.9
Valid Strongly disagree	11	7.1	7.1	100.0
Valid Total	155	100.0	100.0	

I am glad that I am not dyslexic!

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	42	27.1	27.1	27.1
Valid Agree	61	39.4	39.4	66.5
Valid Unsure	35	22.6	22.6	89.0
Valid Disagree	10	6.5	6.5	95.5
Valid Strongly disagree	7	4.5	4.5	100.0
Valid Total	155	100.0	100.0	

Table 19 - Part D: Non-dyslexic students' frequencies Equity issues and reasonable adjustments

It is right that the law requires universities to make some allowances for dyslexic students, like giving them extra time to complete exams.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	72	46.5	46.5	46.5
Valid Agree	67	43.2	43.2	89.7
Valid Unsure	7	4.5	4.5	94.2
Valid Disagree	6	3.9	3.9	98.1
Valid Strongly disagree	3	1.9	1.9	100.0
Valid Total	155	100.0	100.0	

[Extra time in exams and funding for one-to-one study skills support give some dyslexics an unfair advantage] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	10	6.5	6.5	6.5
Valid Agree	25	16.1	16.1	22.6
Valid Unsure	22	14.2	14.2	36.8
Valid Disagree	62	40.0	40.0	76.8
Valid Strongly disagree	36	23.2	23.2	100.0
Valid Total	155	100.0	100.0	

[Dyslexic students face difficulties with large amounts of reading, concentration in lectures and writing assignments, that are not experienced by non-dyslexic students] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	41	26.5	26.5	26.5
Valid Agree	73	47.1	47.1	73.5
Valid Unsure	24	15.5	15.5	89.0
Valid Disagree	14	9.0	9.0	98.1
Valid Strongly disagree	3	1.9	1.9	100.0
Valid Total	155	100.0	100.0	

[I object to public funding being spent on giving dyslexic students their own computers, printers and internet access when all students need this equipment] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	29	18.7	18.7	18.7
Valid Agree	43	27.7	27.7	46.5
Valid Unsure	23	14.8	14.8	61.3
Valid Disagree	35	22.6	22.6	83.9
Valid Strongly disagree	25	16.1	16.1	100.0
Valid Total	155	100.0	100.0	

[I object to public funding being spent on giving dyslexic students their own computers, printers and internet access when all students need this equipment] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	29	18.7	18.7	18.7
Valid Agree	43	27.7	27.7	46.5
Valid Unsure	23	14.8	14.8	61.3
Valid Disagree	35	22.6	22.6	83.9
Valid Strongly disagree	25	16.1	16.1	100.0
Valid Total	155	100.0	100.0	

[Some dyslexic students appear to “play the system” by getting free laptops and extra time in exams when they don’t really need them] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	27	17.4	17.4
	Agree	37	23.9	41.3
	Unsure	50	32.3	73.5
	Disagree	25	16.1	89.7
	Strongly disagree	16	10.3	100.0
	Total	155	100.0	100.0

[I think that treating dyslexic students differently stigmatizes them as less able] To what extent do you agree or disagree with each of the following statements?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	15	9.7	9.7
	Agree	28	18.1	27.7
	Unsure	54	34.8	62.6
	Disagree	49	31.6	94.2
	Strongly disagree	9	5.8	100.0
	Total	155	100.0	100.0

Dyslexia is a category of disability alongside more obvious disabilities like blindness and cerebral palsy

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	7	4.5	4.5
	Agree	44	28.4	32.9
	Unsure	48	31.0	63.9
	Disagree	35	22.6	86.5
	Strongly disagree	21	13.5	100.0
	Total	155	100.0	100.0

Table 20 - Part E: Non-dyslexic students’ frequencies inclusive practices

Disabled Student Allowances (DSAs) given individually to dyslexic students should be replaced by carefully designed university-wide provision that takes account of the needs of all students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	31	20.0	20.0
	Agree	45	29.0	49.0
	Unsure	55	35.5	84.5
	Disagree	19	12.3	96.8
	Strongly disagree	5	3.2	100.0
	Total	155	100.0	100.0

Reasonable adjustments currently available to dyslexic students, like the use of extra time and word-processors in exams, should be available to any student who needs them

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	36	23.2	23.2	23.2
Valid Agree	57	36.8	36.8	60.0
Valid Unsure	33	21.3	21.3	81.3
Valid Disagree	26	16.8	16.8	98.1
Valid Strongly disagree	3	1.9	1.9	100.0
Valid Total	155	100.0	100.0	

Table 21: Chi-square tests on selected items from assessors' survey

Item	Chi	p.	Phi	Interpretation
B2	16.61	.00	.38	EPs more inclined to regard current difficulties with literacy necessary for diagnosis
B12	6.26	.044	.23	EPs less inclined to use "spiky" profile
C3	19.65	.000	.41	EPs less likely to regard dyslexia as more than just a difficulty with literacy skills
C4	13.45	.001	.34	EPs less likely to conceptualise dyslexia as a combination of abilities and difficulties
C5	15.25	.000	.36	EPs less likely to place emphasis on the neurological causes of dyslexia
C6	33.07	.000	.53	EPs less likely to believe that a dyslexia diagnosis is stable over time
C9	16.62	.000	.38	EPs more likely to regard environmental factors as a cause of dyslexia
D1	12.56	.002	.33	EPs less likely to think the DfES guidelines descriptive definition helpful
D8	11.64	.003	.31	EPs more likely to consider the standard diagnostic criteria as too diverse
F1	8.96	.011	.28	EPs less likely to believe that dyslexic students need to be disabled within the framework of the Equality Act to qualify for DSA
F3	10.74	.005	.30	EPs less likely to know that dyslexics do not need a DSA to qualify for RAs
G1	10.15	.006	.29	EPs more likely to think that DSAs and RAs for dyslexics should be replaced by inclusive provision
G3	6.60	.037	.24	EPs less likely to regard removal of bespoke disability provision for dyslexics as a backwards step
G4	19.14	.000	.40	EPs less likely to agree that dyslexics need specialist rather than generic support
G6	11.41	.003	.31	EPs more likely to regard dyslexics' difficulties as part of a continuum
G7	12.72	.002	.33	EPs less likely to agree that equality of opportunity for dyslexics would be compromised without specifically targeted provision

Table 22: Chi-square tests on selected items from lecturers' survey showing significant differences between Pre and Post'92 groups

Item	Chi	p	Phi	Interpretation
B1	12.58	0.002	0.277	Post '92 lecturers more likely to be offered dyslexia awareness training
B3	12.11	0.002	0.272	Post'92 lecturers more confident in being able to recognise students' dyslexia-type difficulties
C2	8.83	0.012	0.232	Post '92 lecturers more likely to adopt social model of disability for dyslexia
E5	9.74	0.008	0.224	Post'92 lecturers more likely to be happy with current system of reasonable adjustments for dyslexics
E6	10.86	0.004	0.257	Pre'92 lecturers more likely to be unsure about practicality of inclusive system
E7	6.86	0.032	0.205	Pre'92 lecturers more likely to be unsure about stigma
E8	6.3	0.043	0.196	Post '92 lecturers more likely to regard dyslexia as non-categorical
E9	12.09	0.002	0.272	Post '92 more likely to be aware of tension between WP and competency standards

Table 23: Chi-square tests on selected items from lecturers' survey showing significant differences between groups based on academic discipline: STEM, Humanities and Artistic/Vocational

Item	Chi	Cramer's V	p	Interpretation
B2	9.897	.176	.042	STEM group less likely to be aware and more likely to be unsure of the cognitive, emotional and social effects of dyslexia, than Humanities or Artistic/Vocational groups
B3	13.199	.203	.010	STEM group less likely to be confident and more likely to be unsure about recognising the dyslexia-type difficulties of students, than Humanities or Artistic/Vocational groups
B6	10.236	.179	.037	STEM group more likely to have trouble, or to be unsure, about distinguishing between dyslexic students and those who lack ability for the course, than Humanities or Artistic/Vocational groups. The Artistic/Vocational group had least difficulty distinguishing between the two.
C5	12.385	.197	.015	STEM group least likely to disagree and more likely to be unsure that an increasing number of students are "playing the system", than Humanities or Artistic/Vocational
D2	13.411	.205	.009	STEM group more likely to agree and less likely to disagree that additional time can give some dyslexics an unfair advantage. Humanities least likely to disagree.
D5	9.717	.175	.045	STEM group least likely to agree, and more unsure than Humanities and Artistic/Vocational groups, about responding to request for alternatives to written assessments

Table 24: Results of Crosstabulation on pairs of selected items from Lecturers' Survey that indicate inconsistent opinions

Items	% Agree/disagree with both
E1: Inclusion preferable to differentiated provision E5: Nothing wrong with current system of RAs	63.4% who agreed with E1 also agreed with E5
E1: Inclusion preferable to differentiated provision E6: One inclusive system idealistic and unrealistic	53% who agreed with E1 also agreed with E6
E4: High literacy standards central to academic learning B10: HE is no place for those with literacy problems	82% who agreed with E4 also disagreed with B10
E1: Inclusion preferable to differentiated provision E2: Inclusive agendas heavy on scarce time and financial resources	55% who agreed with E1 also agreed with E2
B8: Prepared to make teaching accessible E3: Prepared to design alternatives to written assessments	Only 52% who agreed with B8 also agreed with E3

Table 25: Results of Chi- square tests for independence indicating group differences in students' self-perceived experiences of some of the functional effects commonly attributed to dyslexia

Item	Groups compared		Chi	p	Phi	Interpretation
B16	Dyslexic	Non-Dyslexic	.913	.633	.055	No significant difference between Pre' and Post' dyslexics in experience of lack of confidence or self esteem
B2	Pre'92 dyslexic	Post'92 dyslexic	11.34	.003	.279	Post'92 dyslexics more likely to have difficulties with reading comprehension
B7	Pre'92 dyslexic	Post'92 dyslexic	6.08	.048	.204	Post '92 dyslexics more likely to experience difficulties with word finding
B8	Pre'92 dyslexic	Post '92 dyslexic	7.24	.027	.223	Post'92 dyslexics more likely to experience difficulties with comprehension in social situations than Pre'92 dyslexics
B14a	Post'92 dyslexic	Post'92 non-dyslexic	3.71	.156	.156	No significant difference between Post'92 dyslexic and Post'92 non-dyslexic students in self perceived difficulties with organisational skills
B14b	Pre'92 dyslexic	Pre'92 non-dyslexic	13.72	.001	.266	Pre'92 dyslexics significantly more likely to have difficulties with organisational skills than Pre'92 non-dyslexics
B15a	Post'92 dyslexic	Post'92 non-dyslexic	4.39	.112	.202	No significant difference between Post'92 dyslexic and non-dyslexic students in self perceived difficulties with meeting own academic expectations
B15b	Pre'92 dyslexic	Pre'92 non-dyslexic	3.82	.140	.148	No significant difference between Pre'92 dyslexic and non-dyslexic students in self perceived difficulties with meeting own academic expectations
B16a	Pre'92 dyslexic	Pre'92 non-dyslexic	3.82	.148	.140	No significant difference in the experience of lack of confidence or self esteem between Pre'92 dyslexic and Pre'92 non-dyslexic groups of students

B16b	Post'92 dyslexic	Post'92 non-dyslexic	1.12	.571	.102	No significant difference between Post'92 dyslexic and non-dyslexic students in self perceived lack of confidence and/or self esteem
B17a	Pre'92 dyslexic	Pre'92 non-dyslexic	6.00	.050	.176	Pre'92 dyslexics significantly more likely to experience stress
B17b	Post'92 dyslexic	Post'92 non-dyslexic	5.09	.079	.218	No significant difference between Post'92 dyslexic and non-dyslexic students in self perceived experience of stress related to deadlines and examinations
B18a	Pre'92 dyslexic	Pre'92 non-dyslexic	12.23	.002	.251	Pre'92 dyslexic students more likely to experience self disappointment and frustration due to failure to live up to expectations
B18b	Post'92 dyslexic	Post'92 non-dyslexic	1.21	.545	.106	No significant difference between Post'92 dyslexic and non-dyslexic students in self perceived experience of self disappointment and frustration due to failure to live up to expectation

Table 26: Results of Chi- square tests for independence on similar items from dyslexic and non-dyslexic students' surveys

Item		Chi	p	Phi	Interpretation
Dyslexic	Non-dyslexic				
C2	C5	19.96	.001	.257	Dyslexic students less likely to regard dyslexia as a disability in the same category as blindness or cerebral palsy
D2	D3	26.47	.000	.297	Dyslexic students more likely to recognise the continuity of dyslexia-like difficulties in the wider student population
D5	D2	54.33	.000	.425	Dyslexic students more likely to experience equity concerns over perceived preferential provision
D7	D5	60.20	.000	.447	Dyslexic students less likely to regard written assessment as unfairly discriminatory for dyslexics than do non-dyslexic students
E1	E1	20.60	.000	.262	Dyslexic students less likely to want DSAs abandoned in favour of university-wide inclusive practice
E1	E1	18.85	.001	.250	Dyslexic students less likely to want RAs extended to all students who need them

Table 27: Assessors' Interviews - Summary

ID	Uses Discrepancy Concept	Importance	Environmental Factors	Disability Status of Dyslexia
EP1	<ul style="list-style-type: none"> * Ability/processing * Ability/reading * Approx. 15 SS difference * "A big issue for me" 	<ul style="list-style-type: none"> * Form part of diagnostic process * No mitigating circumstances for diagnosis 	<ul style="list-style-type: none"> * Reluctantly accepts "disabled" within the context of academia" * Pragmatic compliance with legislation for resources 	<ul style="list-style-type: none"> * Reluctantly accepts "disabled" within the context of academia" * Pragmatic compliance with legislation for resources
EP2	<ul style="list-style-type: none"> * Ability/processing * "The discrepancy is incredible important" 	<ul style="list-style-type: none"> * Intuits indirectly through background information/testing/observation * Considers suitability of student for HE study 	<ul style="list-style-type: none"> * Different, not disabled * "Gut feeling at odds with disability legislation", but resigned to pragmatic acceptance of term for resources 	<ul style="list-style-type: none"> * Different, not disabled * "Gut feeling at odds with disability legislation", but resigned to pragmatic acceptance of term for resources
EP3	<ul style="list-style-type: none"> * Absolute, not relative, difficulties with literacy skills, regardless of ability 	<ul style="list-style-type: none"> * Can influence identification of SpLD, but not diagnosis of dyslexia 	<ul style="list-style-type: none"> * "It's about time they rethought that name – Disabled Students Allowance" * Pragmatic compliance with legislation for resources 	<ul style="list-style-type: none"> * "It's about time they rethought that name – Disabled Students Allowance" * Pragmatic compliance with legislation for resources
EP4	<ul style="list-style-type: none"> * Rose definition * Assesses only with a view to identify problems and look at solutions 	<ul style="list-style-type: none"> * Irrelevant to diagnosis of dyslexia * Important as part of a holistic assessment 	<ul style="list-style-type: none"> * Prefers "difficulties with learning" * Accepts legislative description for severe, as opposed to mild, dyslexia 	<ul style="list-style-type: none"> * Prefers "difficulties with learning" * Accepts legislative description for severe, as opposed to mild, dyslexia
ST1	<ul style="list-style-type: none"> * Ability/ processing, particularly phonological skills * Struggles to reconcile with Rose definition 	<ul style="list-style-type: none"> * Influence interpretation of all tests * Consideration of could result in pragmatic labelling to obtain resources 	<ul style="list-style-type: none"> * "Disabled" - a category that we are forced to accept to secure DSA funding * Prefers "disadvantaged" 	<ul style="list-style-type: none"> * "Disabled" - a category that we are forced to accept to secure DSA funding * Prefers "disadvantaged"
ST2	<ul style="list-style-type: none"> * Unable to ignore discrepancy, despite misgivings * Uses spiky profile 	<ul style="list-style-type: none"> * Influences interpretation of all tests * Could "bend" diagnostic decision, if student sufficiently motivated 	<ul style="list-style-type: none"> * "More at home with <i>disadvantaged</i> . . . <i>disability</i> sounds more severe than I am usually seeing in the people that I assess" 	<ul style="list-style-type: none"> * "More at home with <i>disadvantaged</i> . . . <i>disability</i> sounds more severe than I am usually seeing in the people that I assess"
ST3	<ul style="list-style-type: none"> * Within-profile discrepancy model based on processing 	<ul style="list-style-type: none"> * Influences interpretation of all tests * Does not affect diagnostic decisions 	<ul style="list-style-type: none"> * University literacy demands can be <i>disabling</i> for some dyslexics * Term <i>mental impairment</i> is tricky for dyslexia! 	<ul style="list-style-type: none"> * University literacy demands can be <i>disabling</i> for some dyslexics * Term <i>mental impairment</i> is tricky for dyslexia!
ST4	<ul style="list-style-type: none"> * Ability/processing * "Daft not to use discrepancy concept" 	<ul style="list-style-type: none"> * Influences interpretation of all tests * Excluded from diagnostic decision 	<ul style="list-style-type: none"> * Disabled in the context of an academic setting * - Case can be made for legal disability 	<ul style="list-style-type: none"> * Disabled in the context of an academic setting * - Case can be made for legal disability

EP: Educational Psychologist ST: Specialist Teacher Assessor

Table 28: Chi-square analyses comparing self-perceived difficulties of dyslexic and non-dyslexic students

ITEM	Chi	p	Phi
B1 Accurate reading	95.45	.000	.563
B2 Understanding what is read	74.01	.000	.496
B3 Spelling	114.99	.000	.618
B4 Written expression	81.64	.000	.521
B5 Mispronouncing words	56.83	.000	.434
B6 Remembering what has been read and/or said	66.95	.000	.472
B7 Word finding	54.61	.000	.426
B8 Remembering dates, times and appointments	31.82	.000	.325
B9 Concentration	71.36	.000	.487
B10 Understanding in social situations	18.00	.000	.245
B11 Expressing thoughts coherently to other people	27.29	.000	.301
B12 Fluency, especially reading	154.15	.000	.716
B13 Completing exams on time	82.06	.000	.522
B14 Organisational skills	17.02	.000	.238
B15 Meeting own academic expectations	25.29	.000	.290
B16 Lack of confidence and/or self esteem	.91	.633	.055
B17 Stress, especially re deadlines and exams	9.75	.008	.180
B18 Self disappointment/frustration	11.61	.003	.196
B19 Inconsistency between good and bad days	24.10	.000	.283

Table 29: Difference in percentage responses of assessor and lecturer participants to survey item soliciting attitude towards an equity issue around reasonable adjustments

It seems discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background

ASSESSORS

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Agree	60	50.8	50.8	50.8
Valid Unsure	25	21.2	21.2	72.0
Valid Disagree	33	28.0	28.0	100.0
Total	118	100.0	100.0	

LECTURERS

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Agree	46	28.0	28.0	28.0
Valid Unsure	64	39.0	39.0	67.1
Valid Disagree	54	32.9	32.9	100.0
Total	164	100.0	100.0	

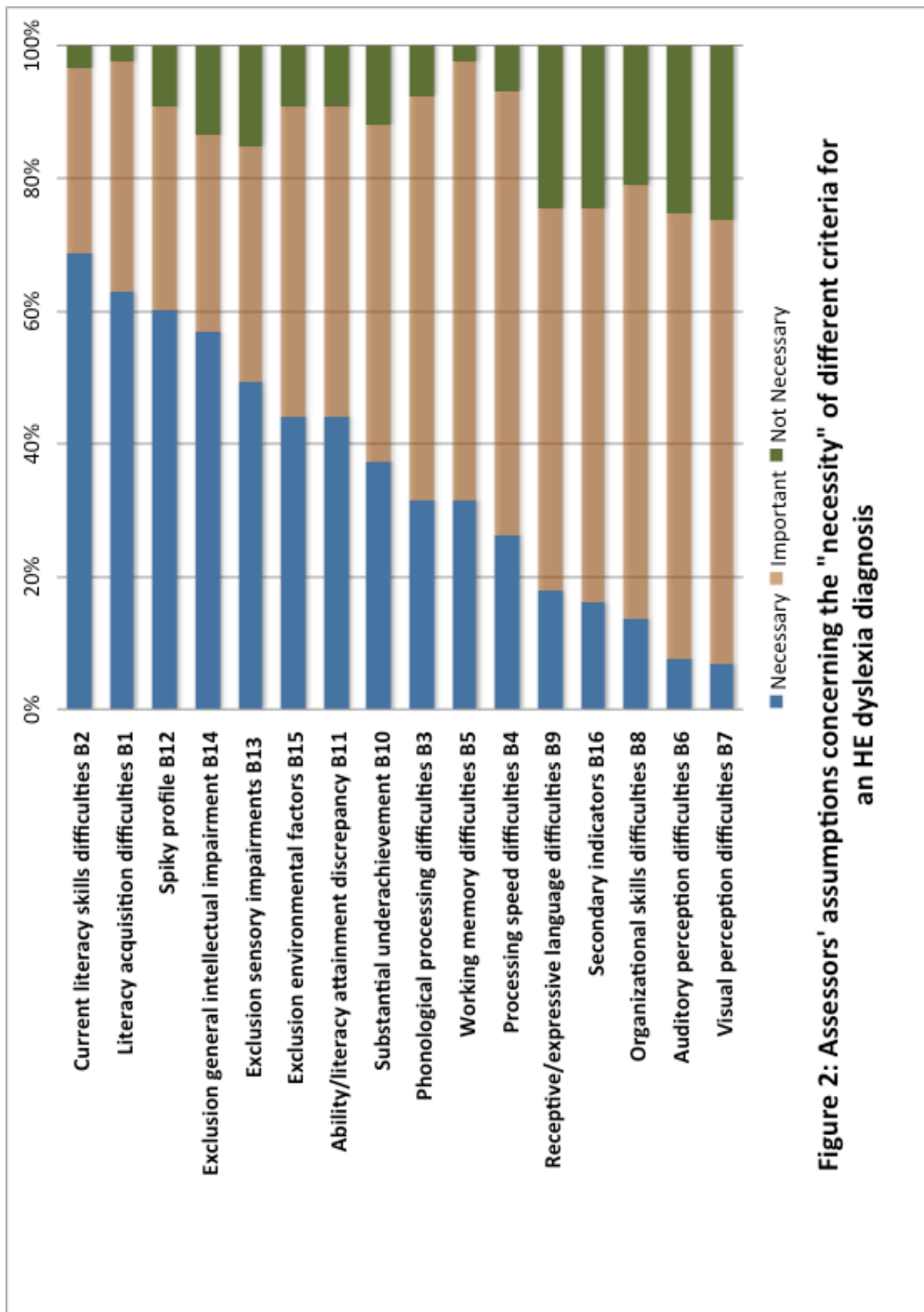


Figure 2: Assessors' assumptions concerning the "necessity" of different criteria for an HE dyslexia diagnosis

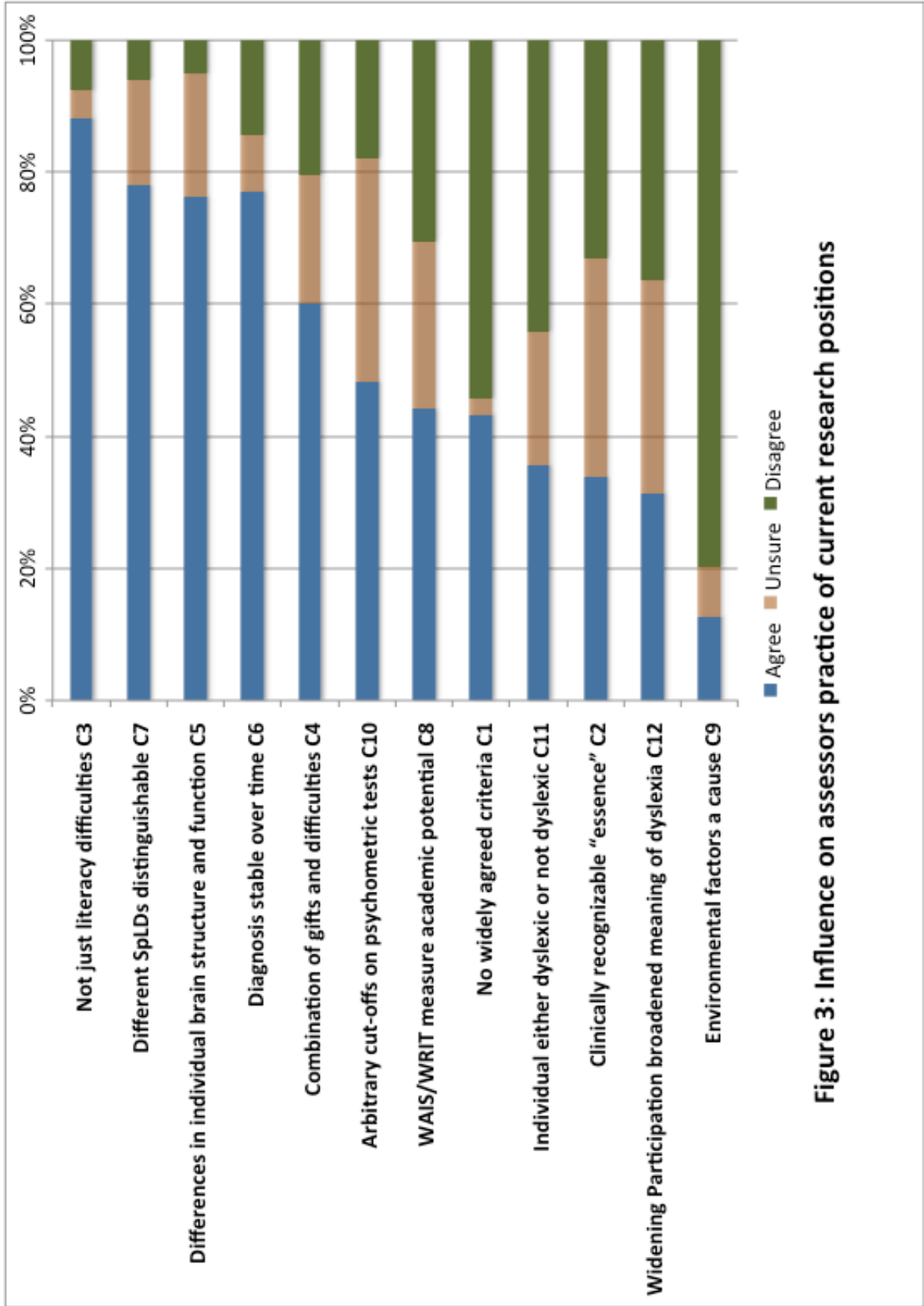


Figure 3: Influence on assessors practice of current research positions

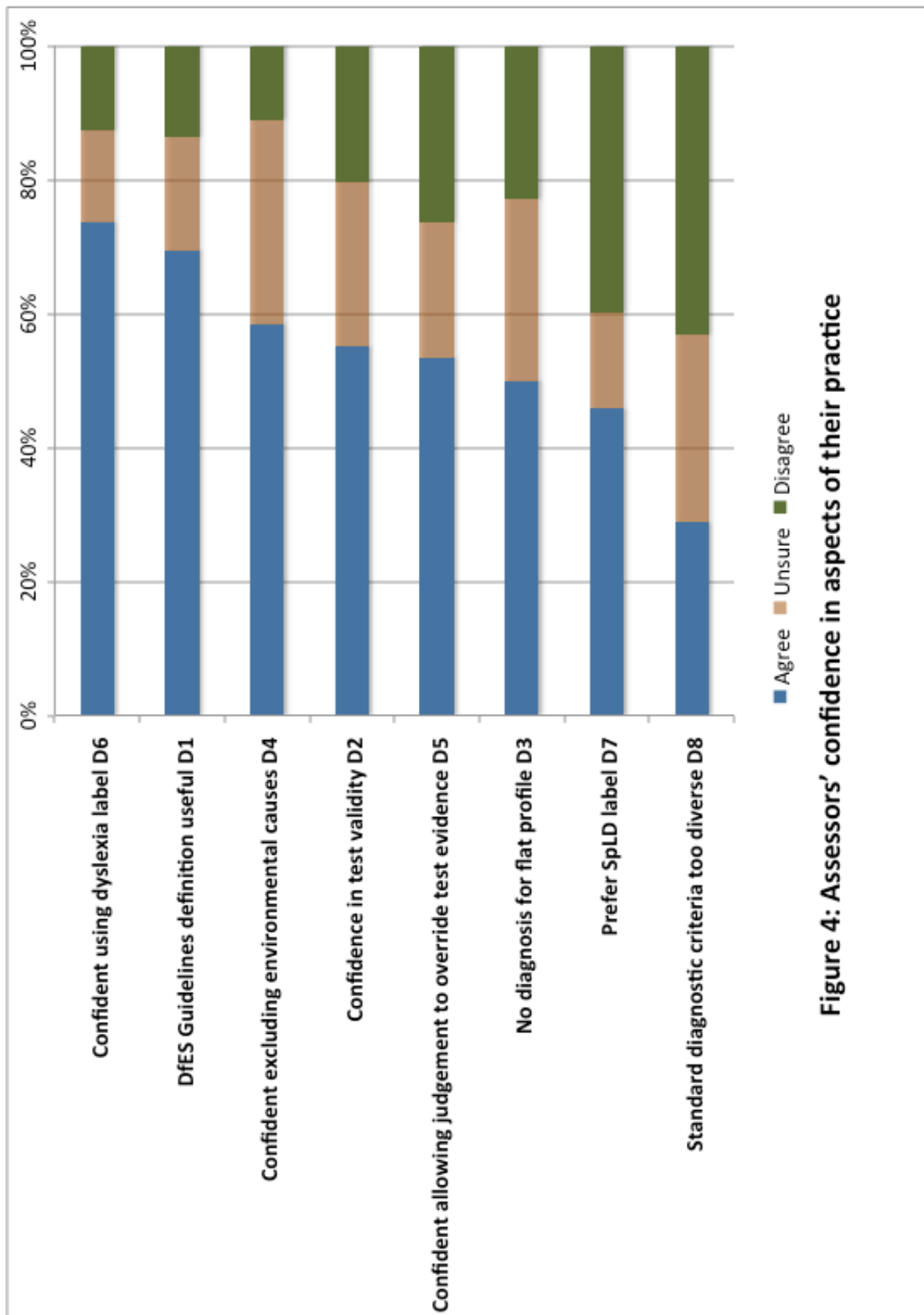


Figure 4: Assessors' confidence in aspects of their practice

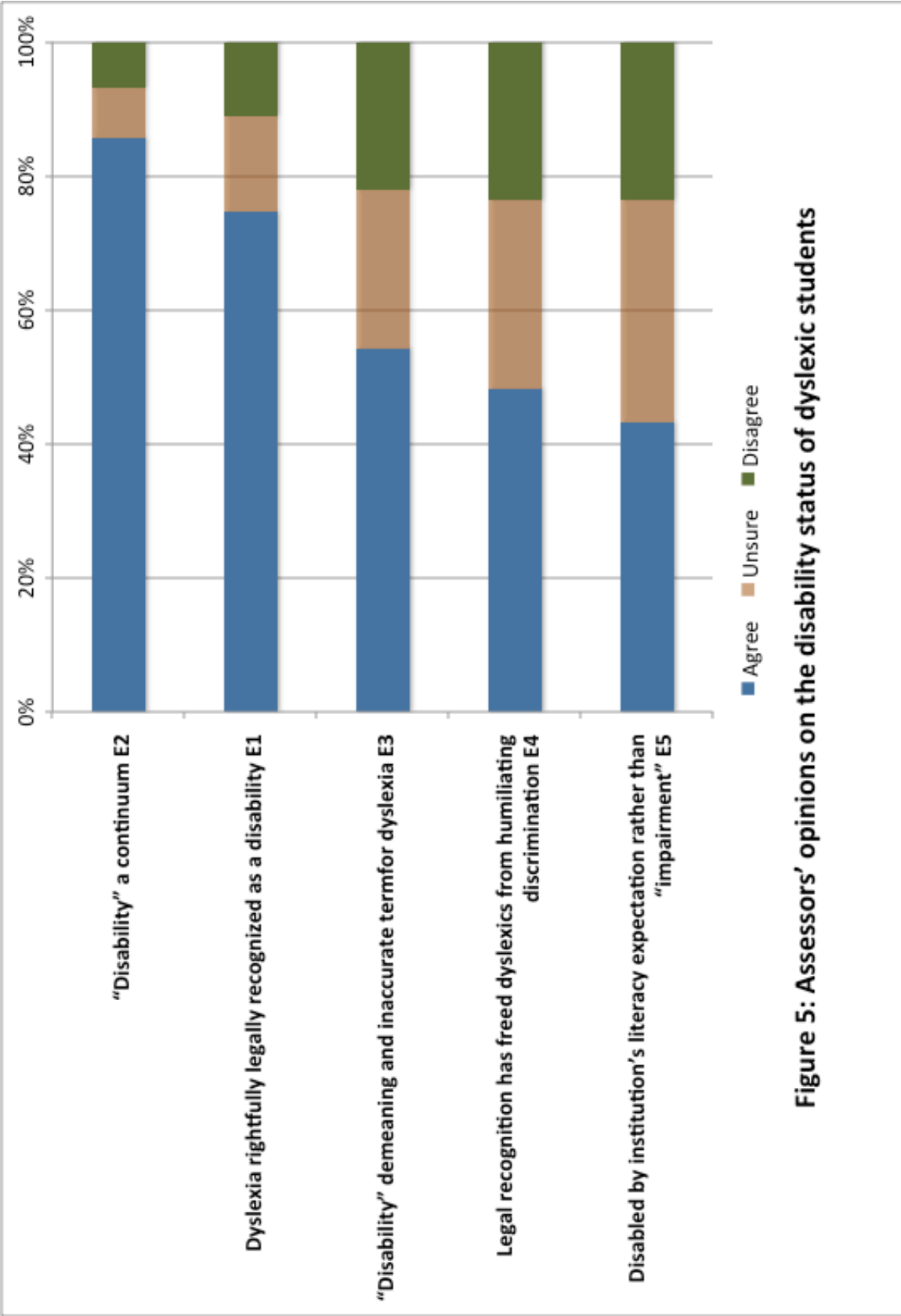


Figure 5: Assessors' opinions on the disability status of dyslexic students

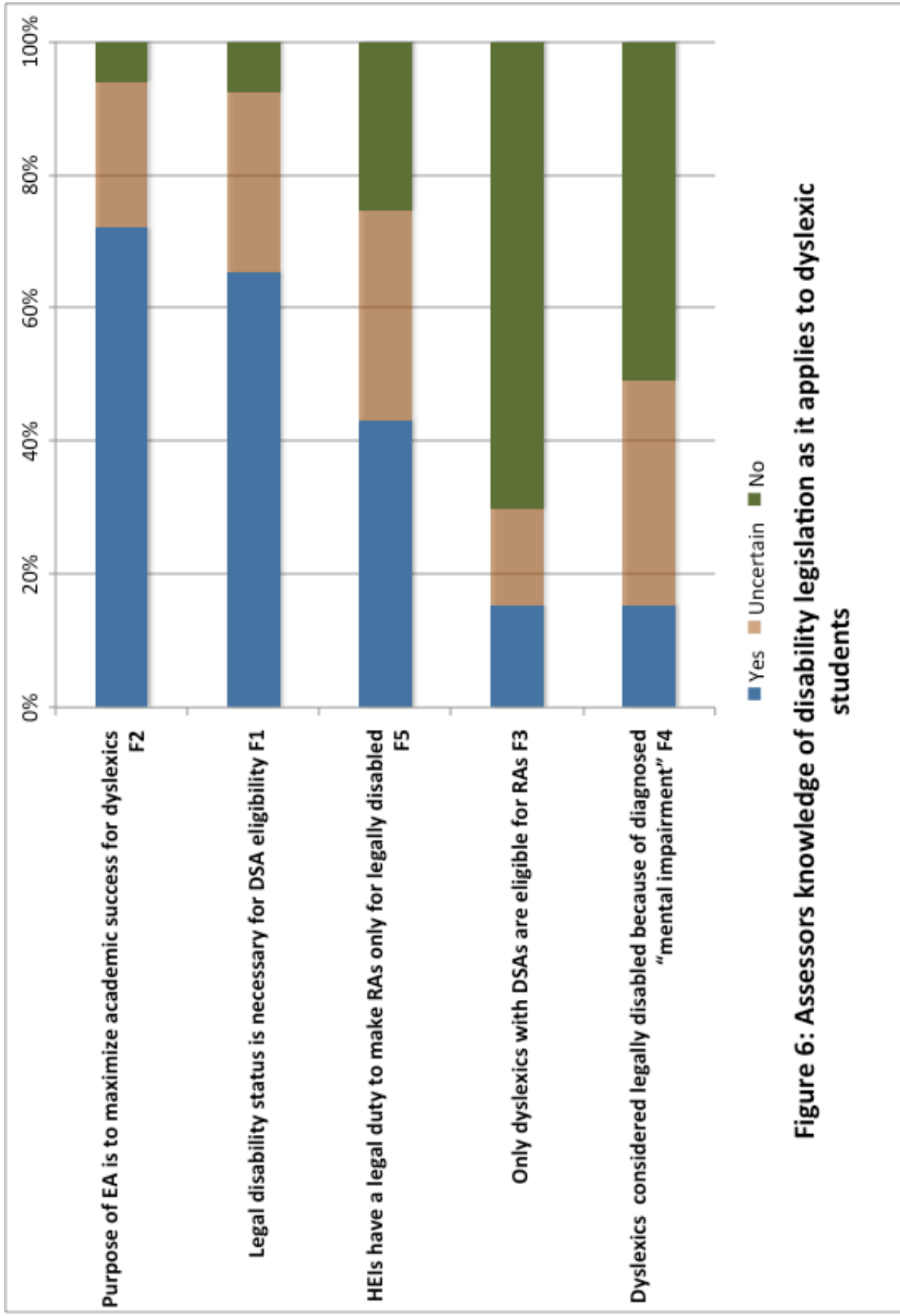


Figure 6: Assessors knowledge of disability legislation as it applies to dyslexic students

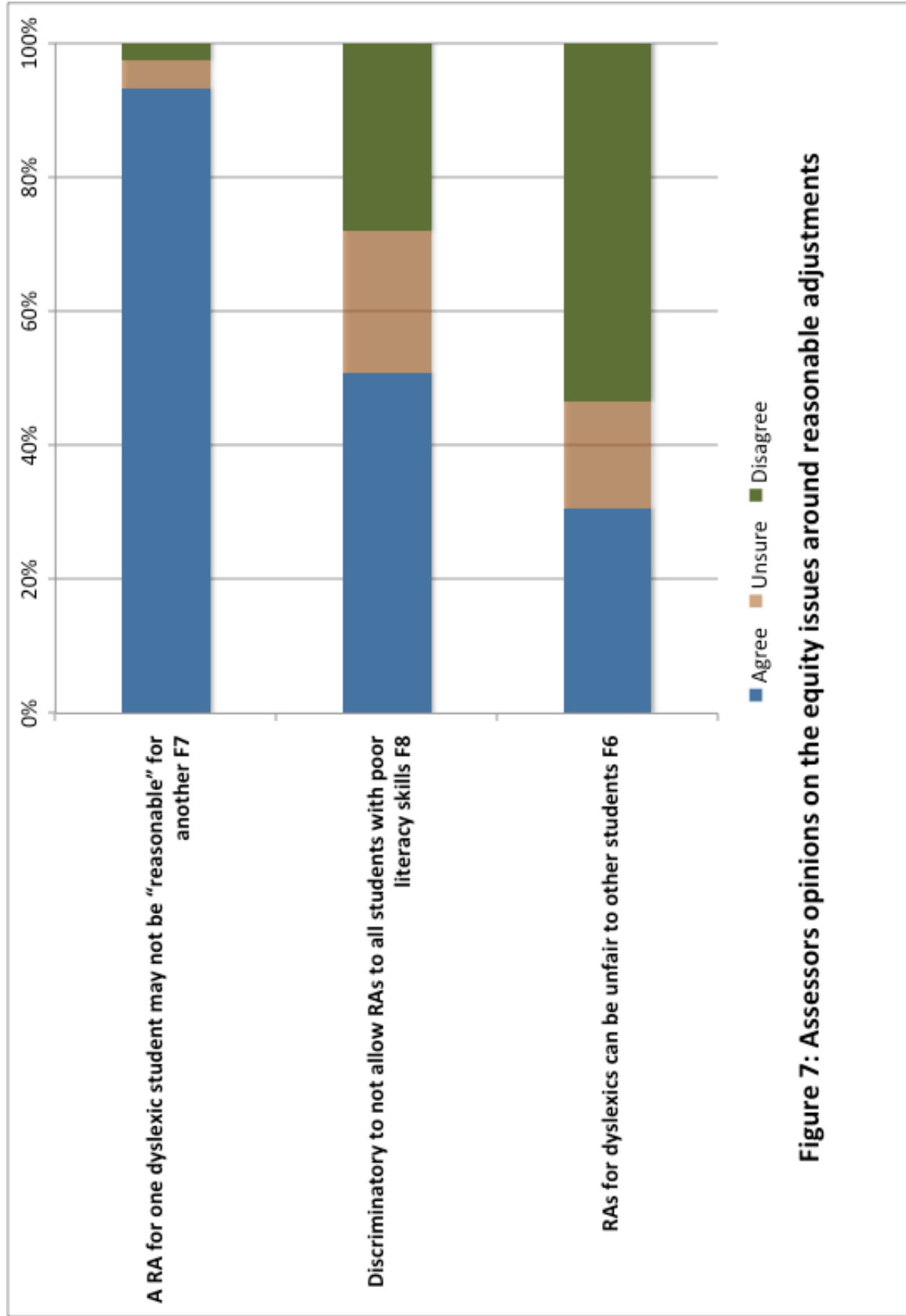


Figure 7: Assessors opinions on the equity issues around reasonable adjustments

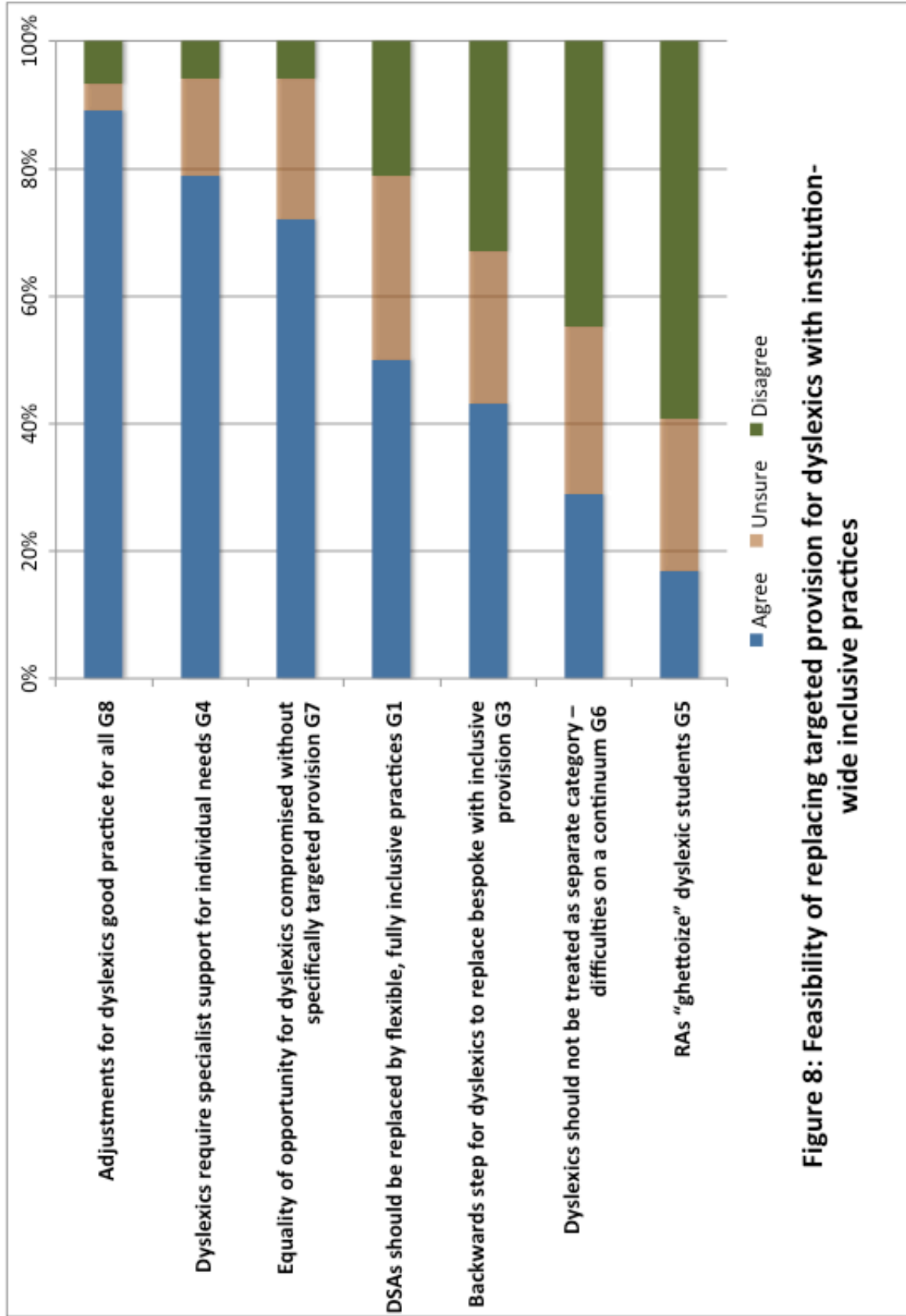


Figure 8: Feasibility of replacing targeted provision for dyslexics with institution-wide inclusive practices

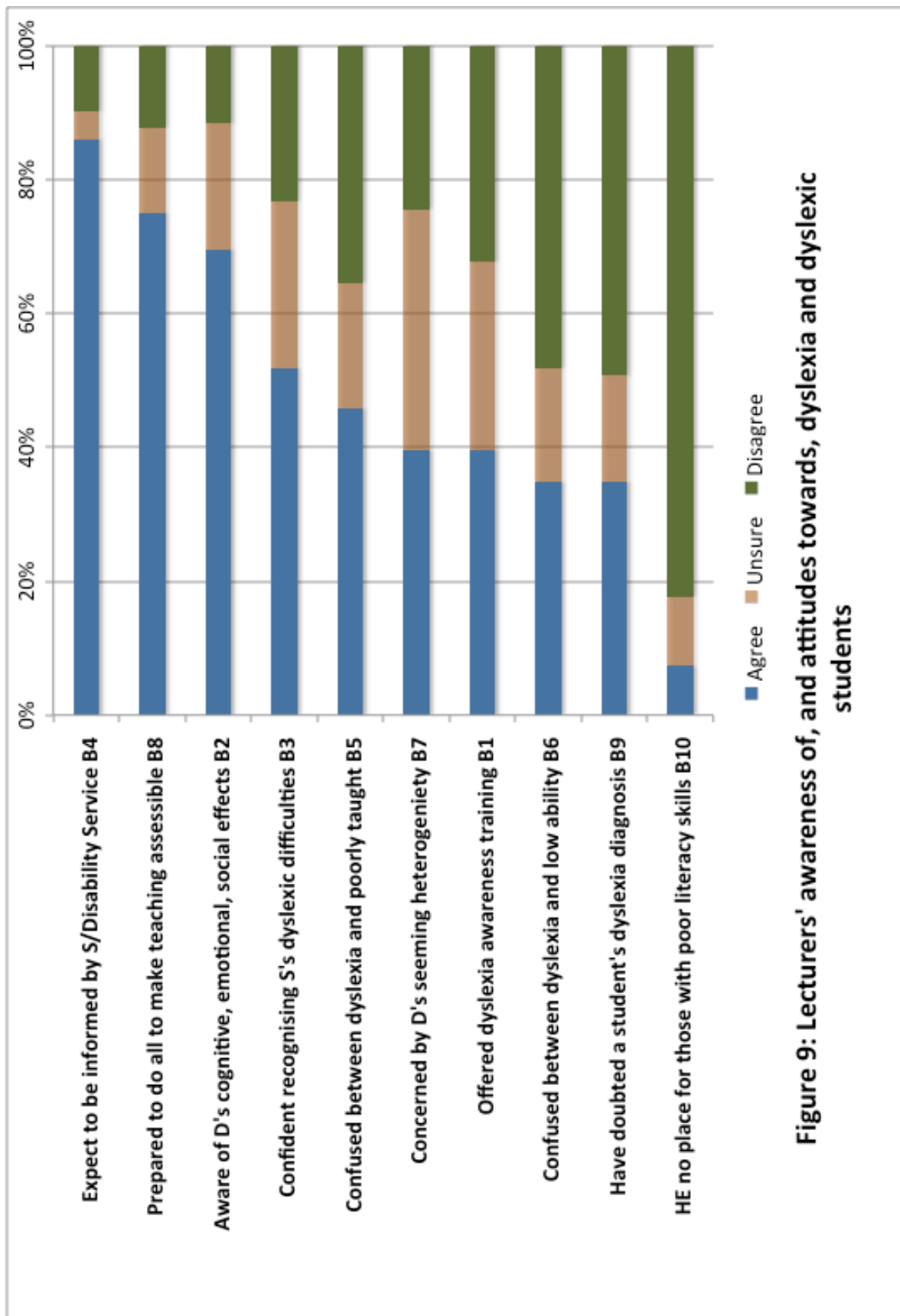


Figure 9: Lecturers' awareness of, and attitudes towards, dyslexia and dyslexic students

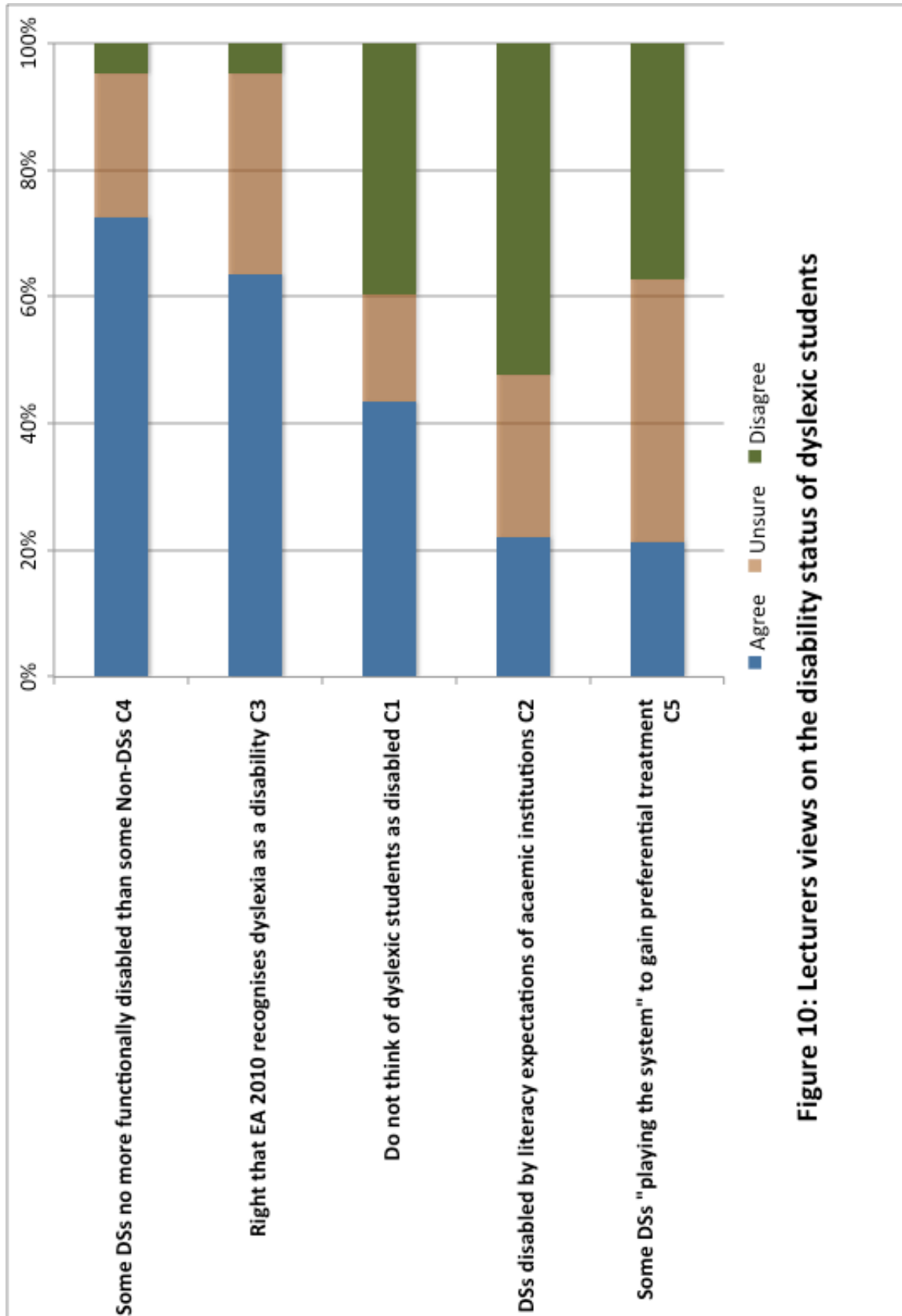


Figure 10: Lecturers views on the disability status of dyslexic students

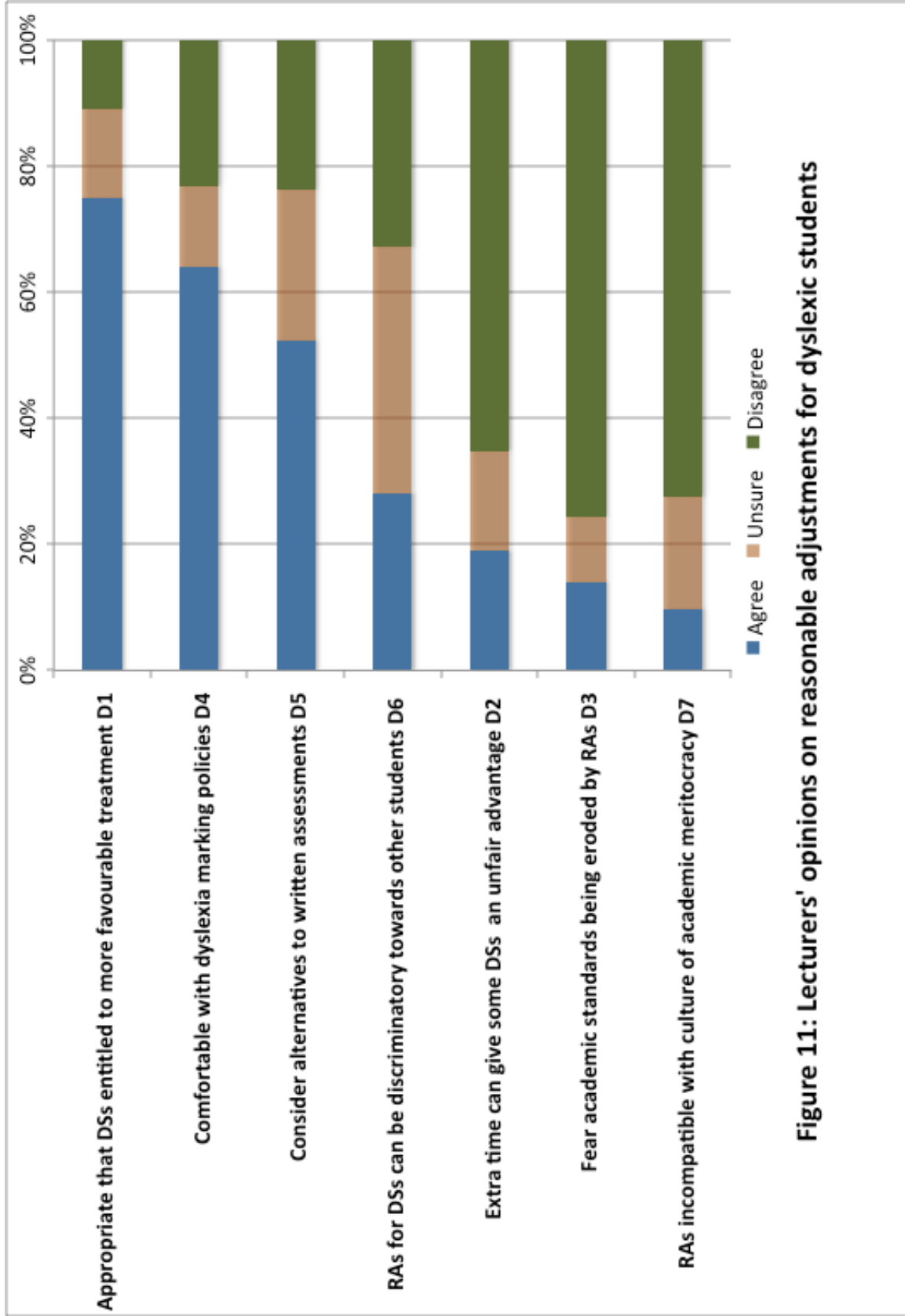


Figure 11: Lecturers' opinions on reasonable adjustments for dyslexic students

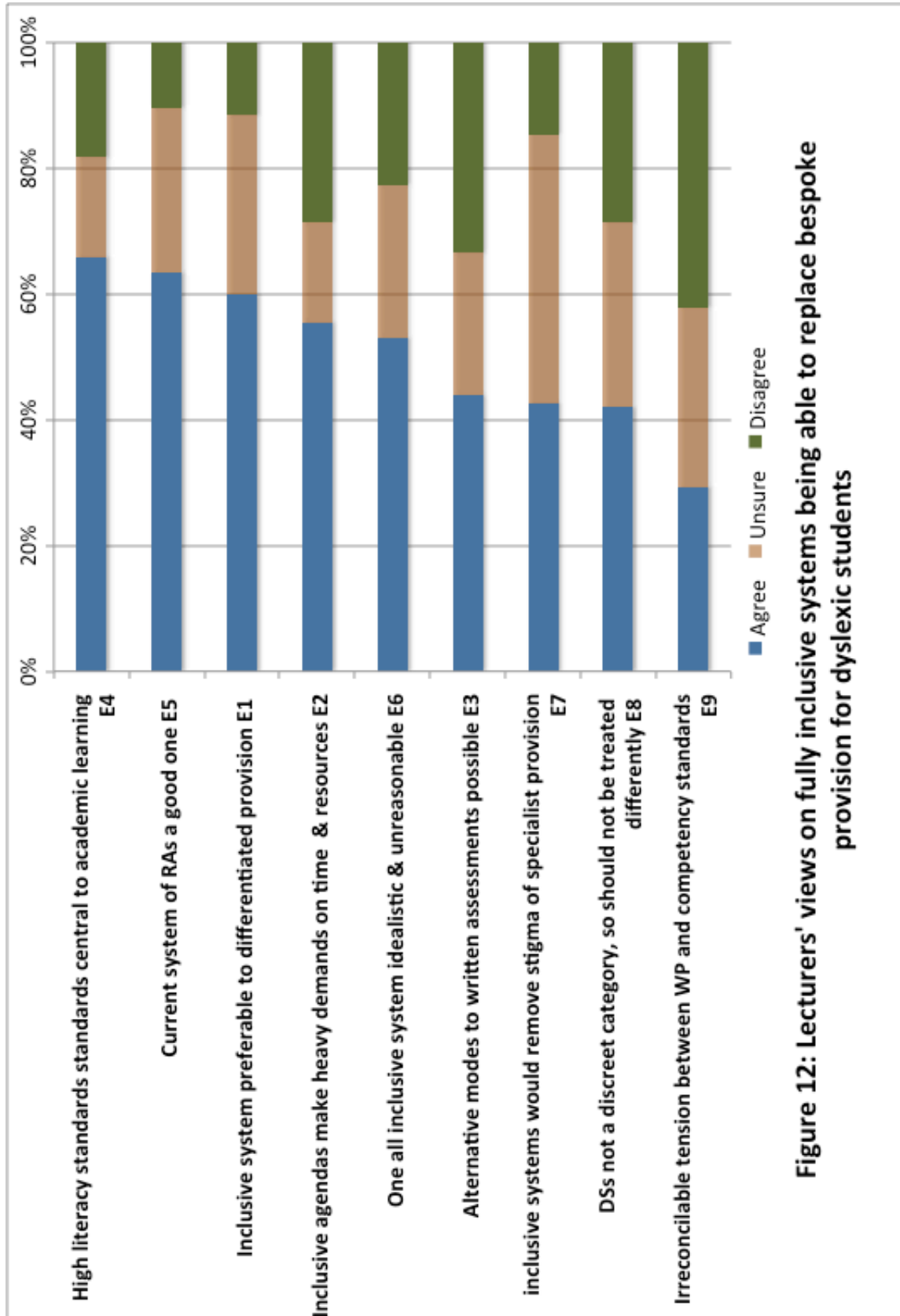


Figure 12: Lecturers' views on fully inclusive systems being able to replace bespoke provision for dyslexic students

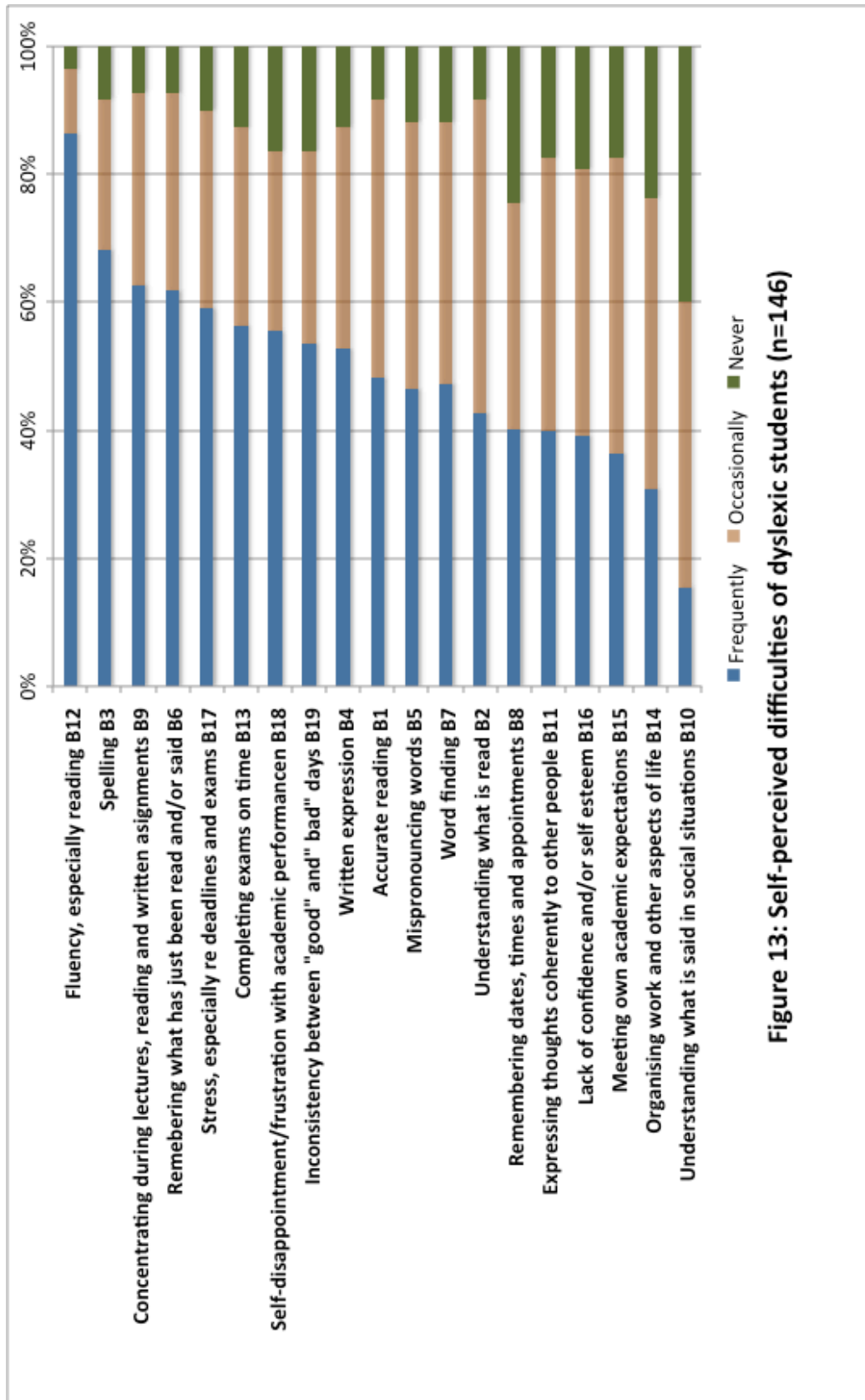


Figure 13: Self-perceived difficulties of dyslexic students (n=146)

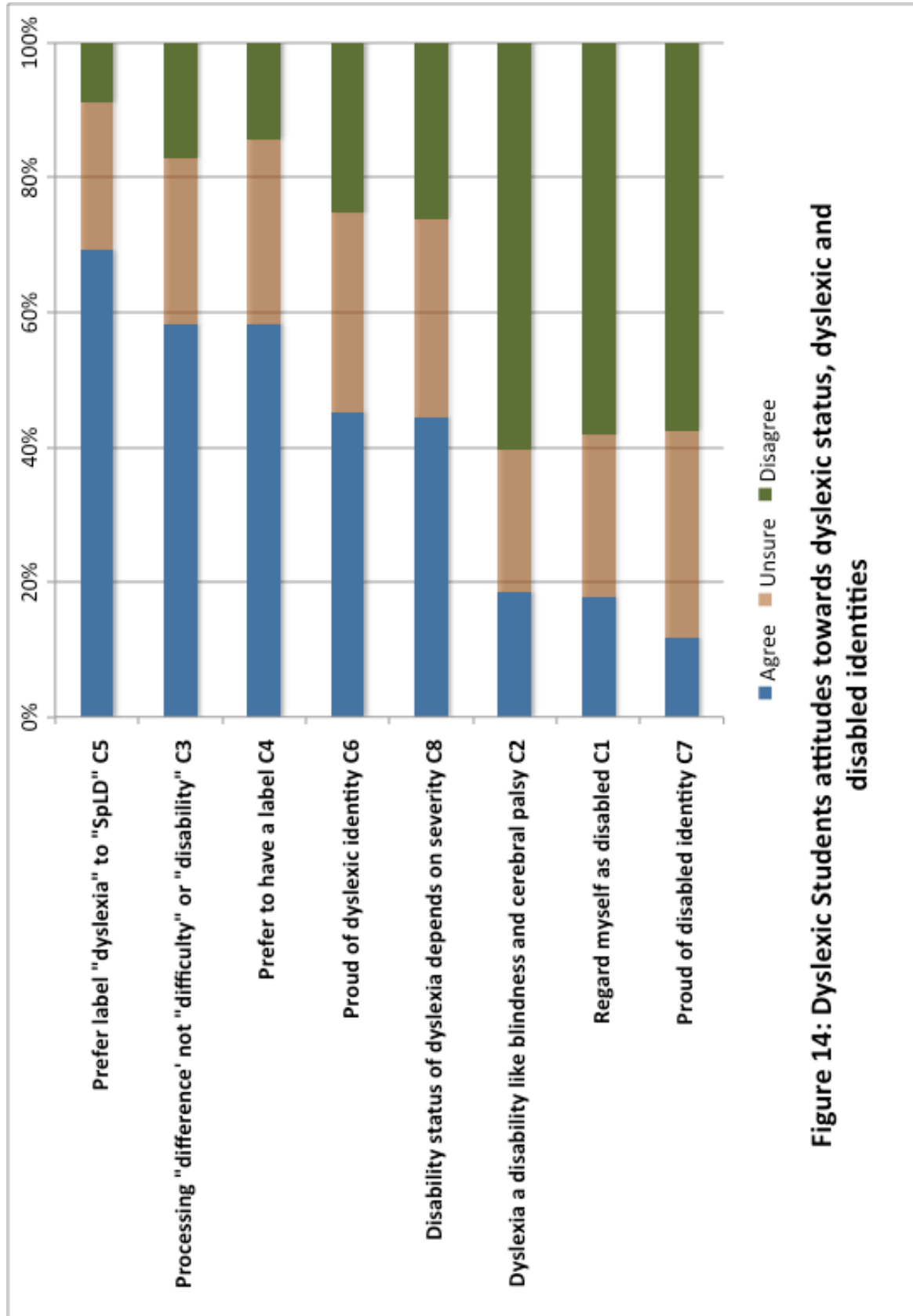


Figure 14: Dyslexic Students attitudes towards dyslexic status, dyslexic and disabled identities

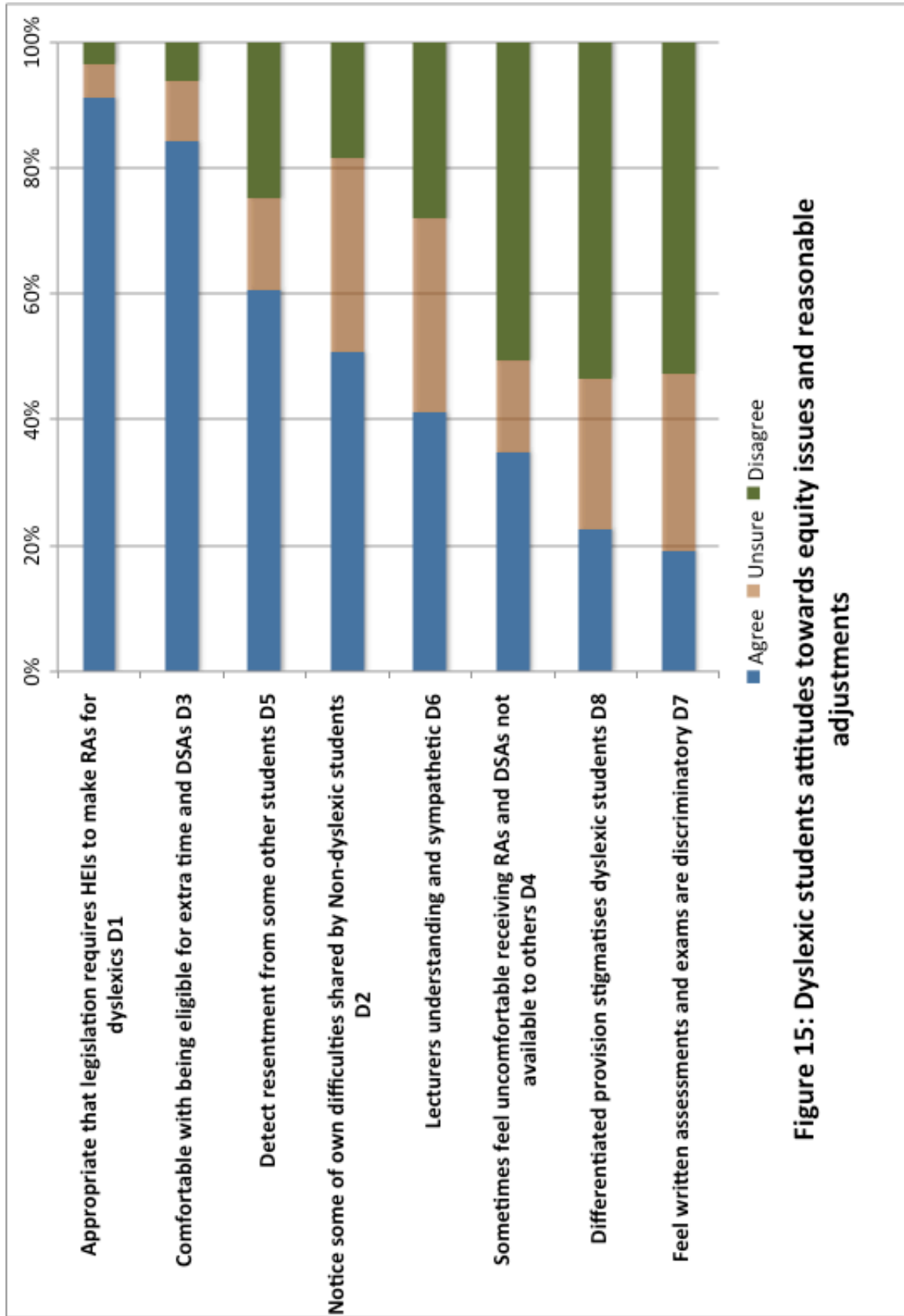


Figure 15: Dyslexic students attitudes towards equity issues and reasonable adjustments

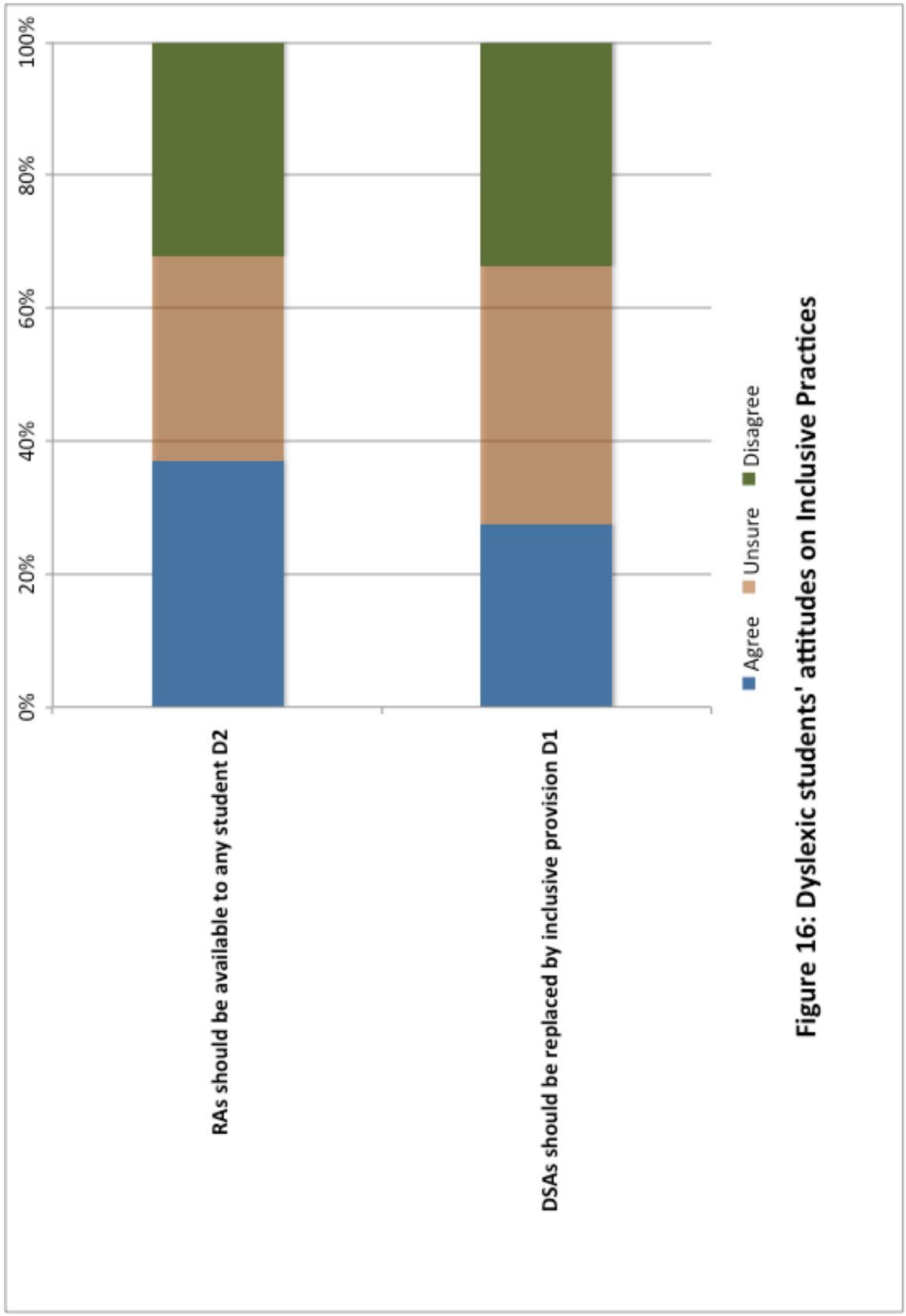


Figure 16: Dyslexic students' attitudes on Inclusive Practices

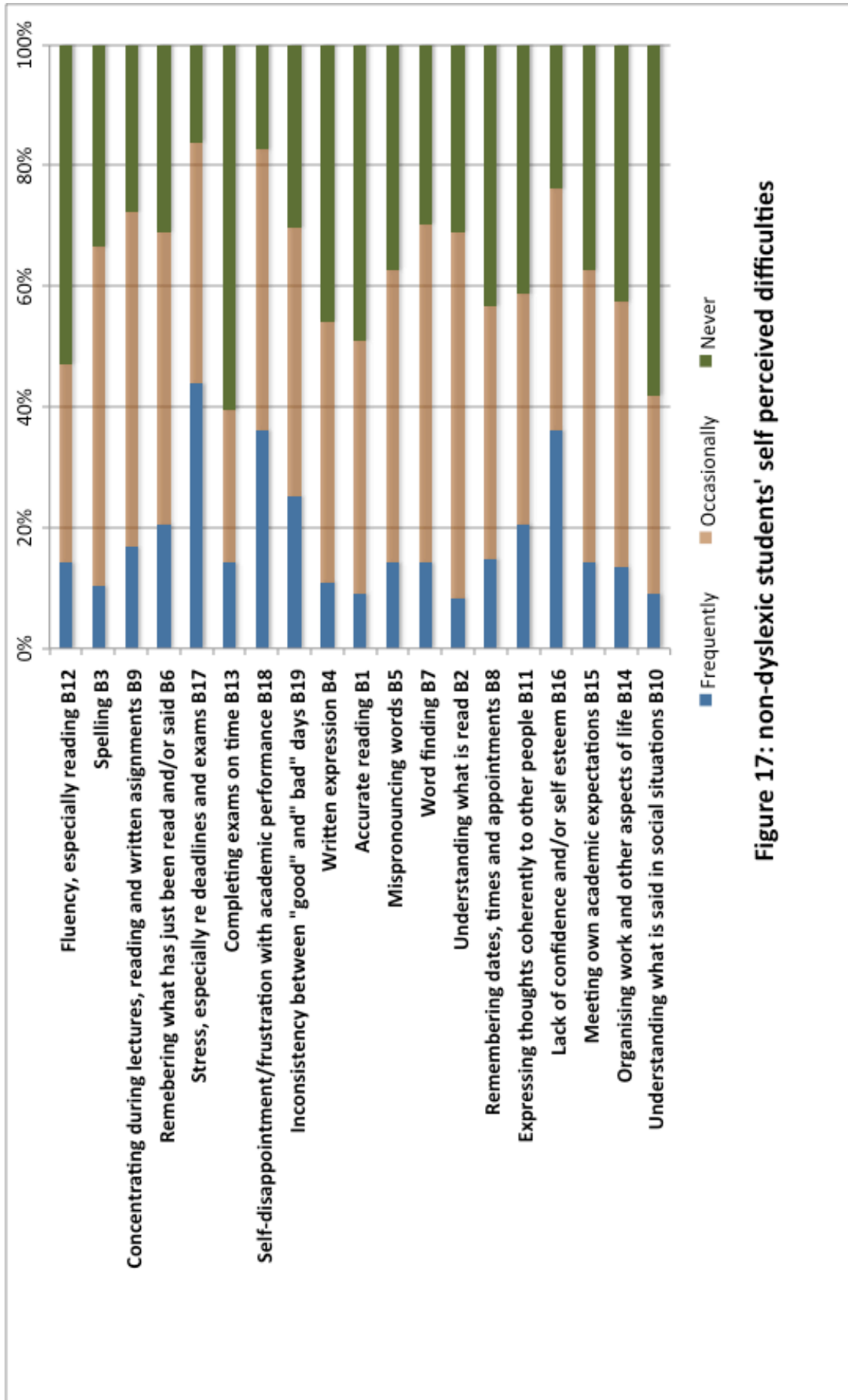


Figure 17: non-dyslexic students' self perceived difficulties

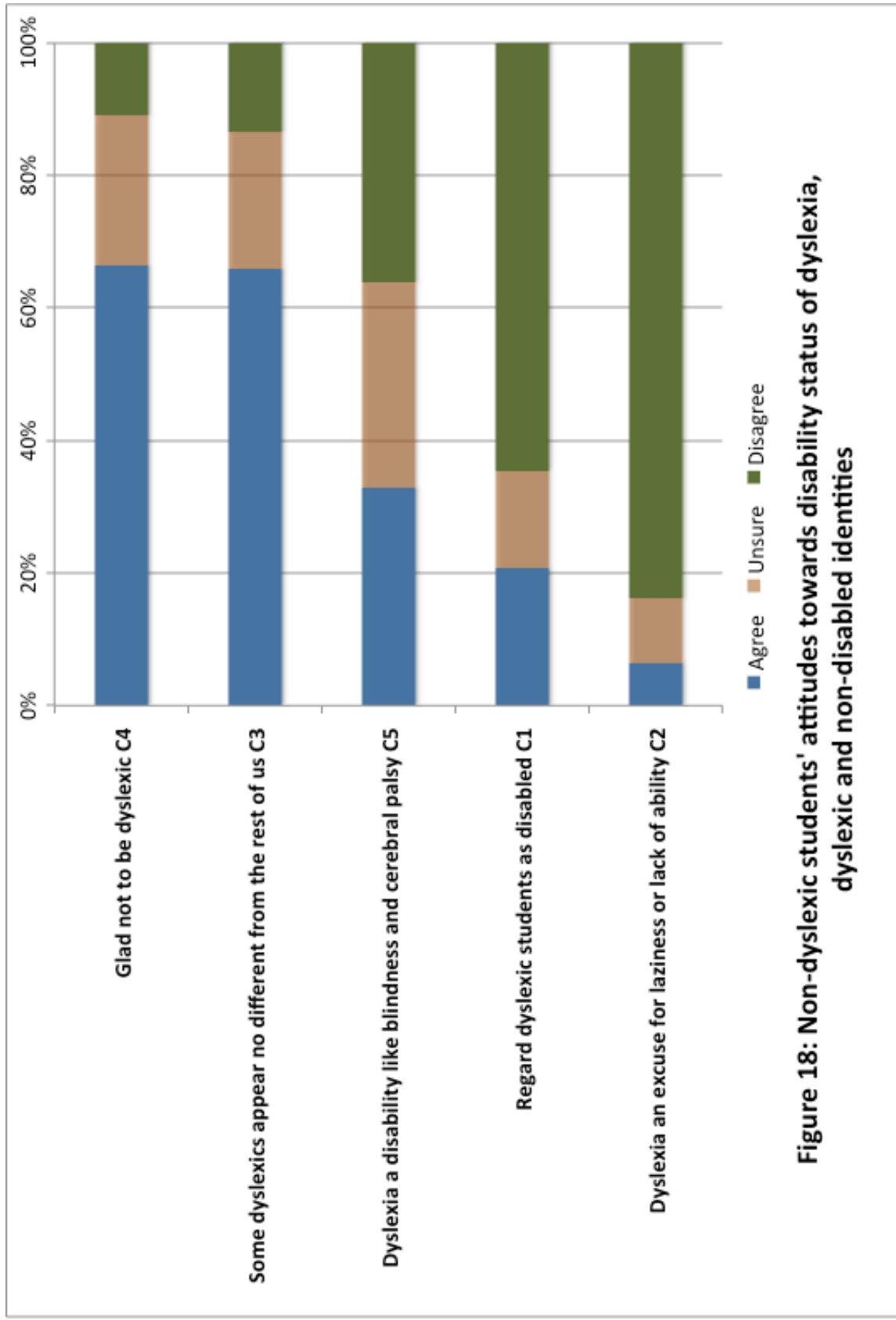


Figure 18: Non-dyslexic students' attitudes towards disability status of dyslexia, dyslexic and non-disabled identities

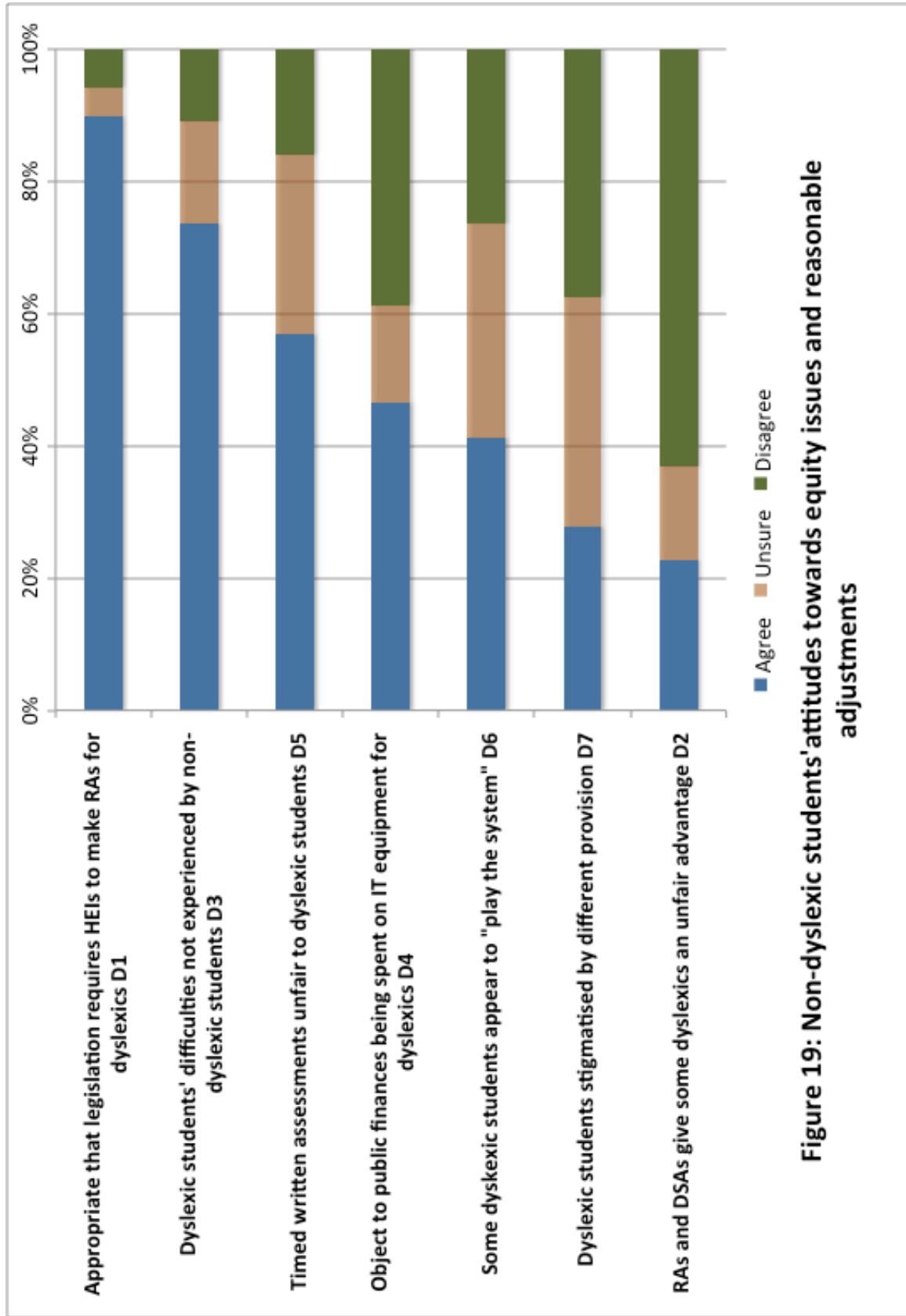


Figure 19: Non-dyslexic students' attitudes towards equity issues and reasonable adjustments

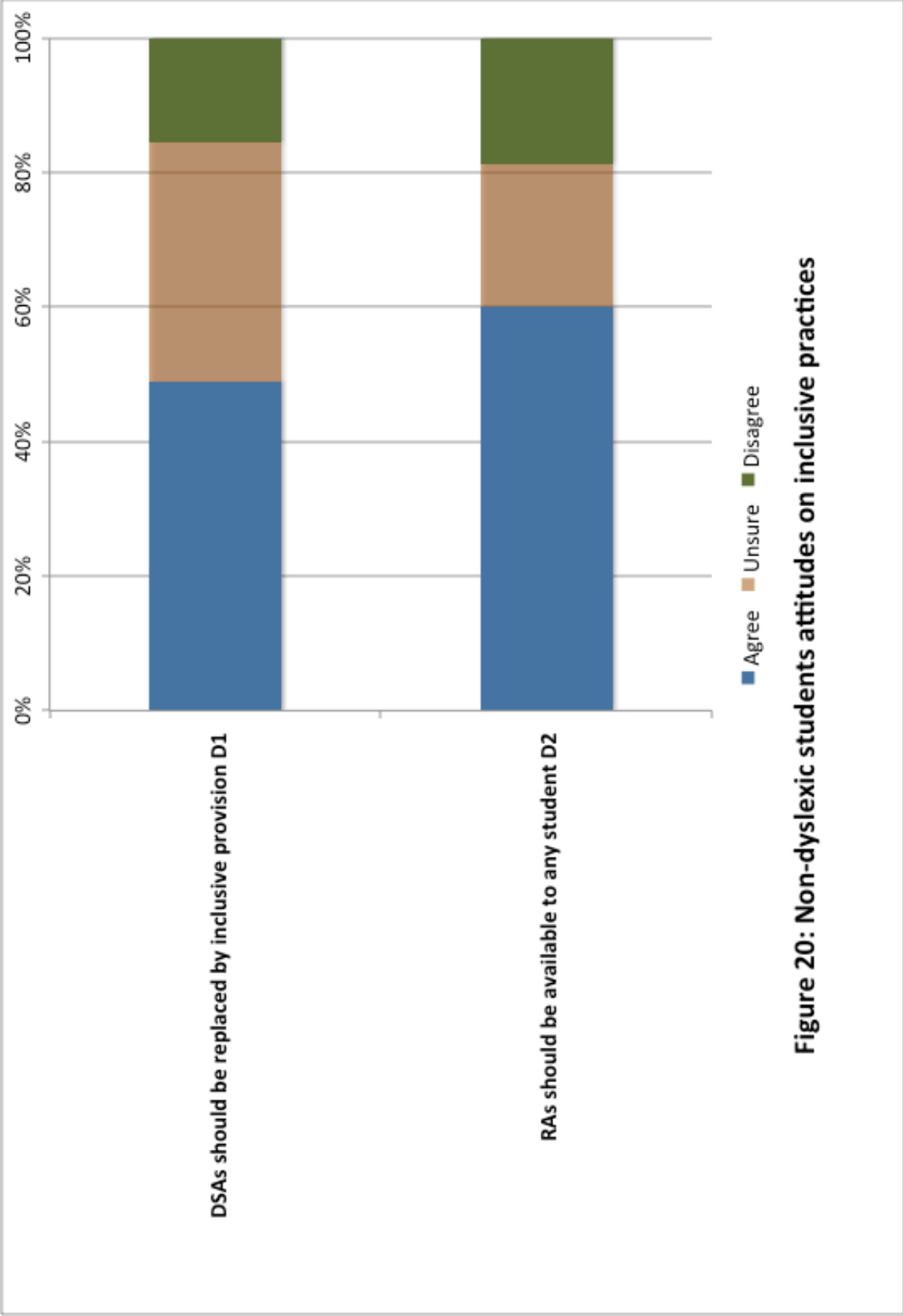
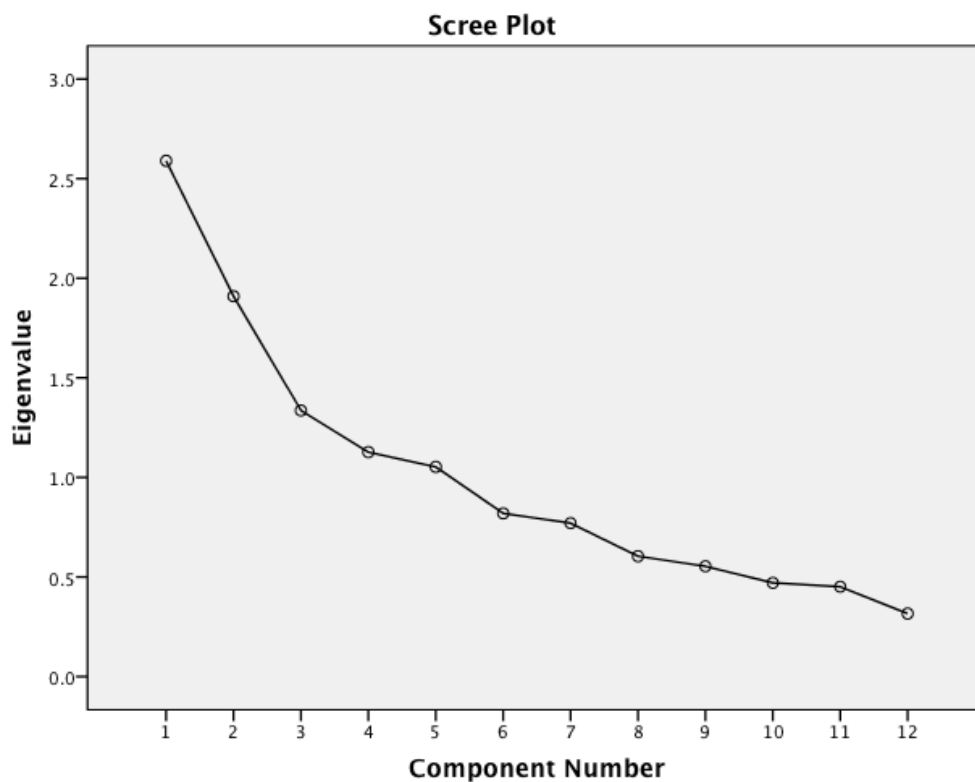


Figure 20: Non-dyslexic students attitudes on inclusive practices

Figure 21: SPSS data output supporting factor analysis interpretation of assessors' survey (Part C) – agreement with current research positions



Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.590	21.581	21.581	2.590	21.581	21.581
2	1.910	15.913	37.493	1.910	15.913	37.493
3	1.336	11.132	48.626			
4	1.127	9.391	58.016			
5	1.053	8.772	66.788			
6	.820	6.829	73.618			
7	.770	6.419	80.036			
8	.604	5.035	85.072			
9	.554	4.613	89.685			
10	.471	3.921	93.606			
11	.451	3.757	97.364			
12	.316	2.636	100.000			

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

Variable	Component		Variable description
	1	2	
research positions_1	.603		No agreed criteria
respos_12	.558		WP changed meaning of dyslexia
respos_5	-.542	.461	Biological/neurological cause
respos_7	-.514		Different SpLDs distinguishable
respos_11	-.504		Dyslexic or not dyslexic
respos_9	.486	-.366	Environmental factors can cause
respos_10	.400		Arbitrary cut-off points
repos_8	-.313		WAIS/WRIT measure academic potential
respos_3		.813	More than difficulty with literacy skills
respos_4		.652	Combination of abilities and difficulties
respos_6	-.404	.567	Diagnosis stable over time
respos_2	.379	.559	Clinically recognizable essence

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 3 iterations.

Component Transformation Matrix

Component	1	2
1	-.753	.658
2	.658	.753

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

Interpretation:

- Factors loading above .4 on **Component 1** are in keeping with an **interactive, bio-psych-social model of dyslexia**
-
- Factors loading above .4 on **Component 2** are in keeping with the **biological categorical syndrome model of dyslexia**

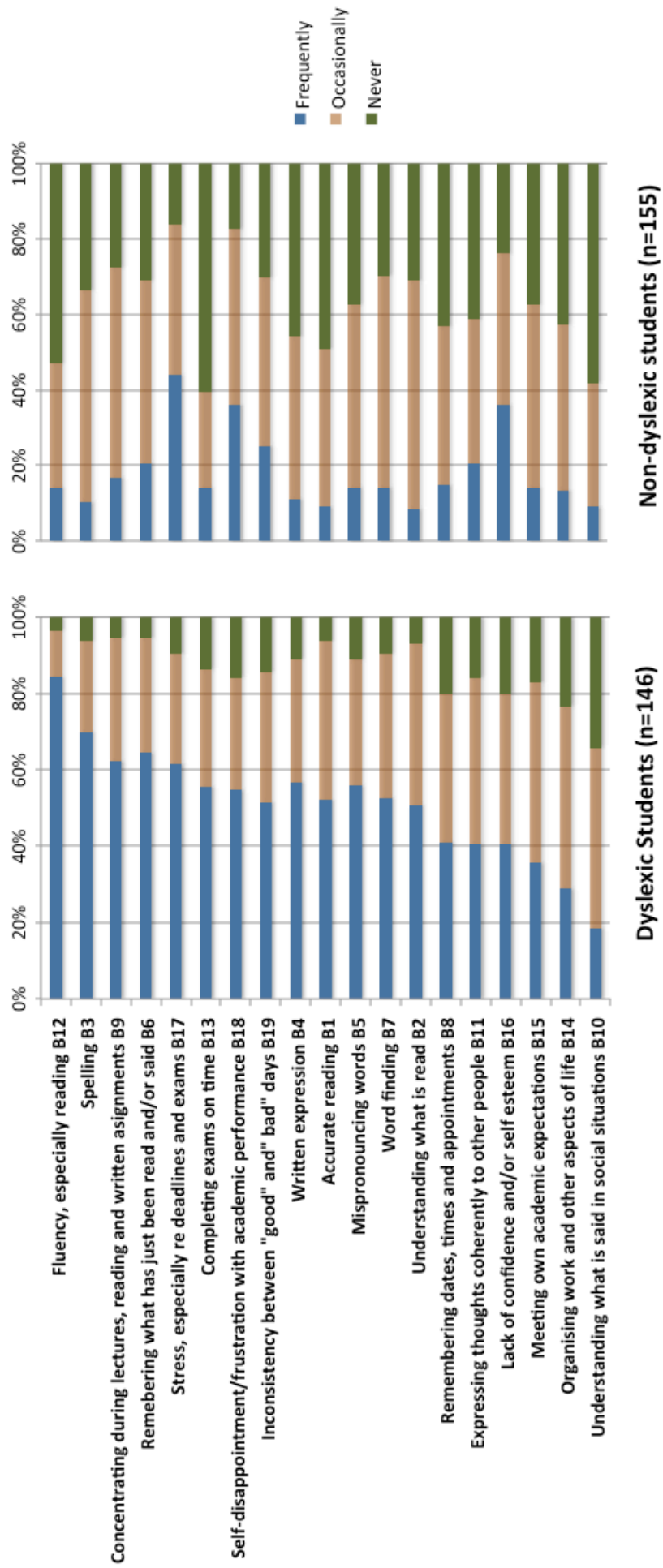


Figure 22: Self-perceived difficulties of dyslexic and non-dyslexic students

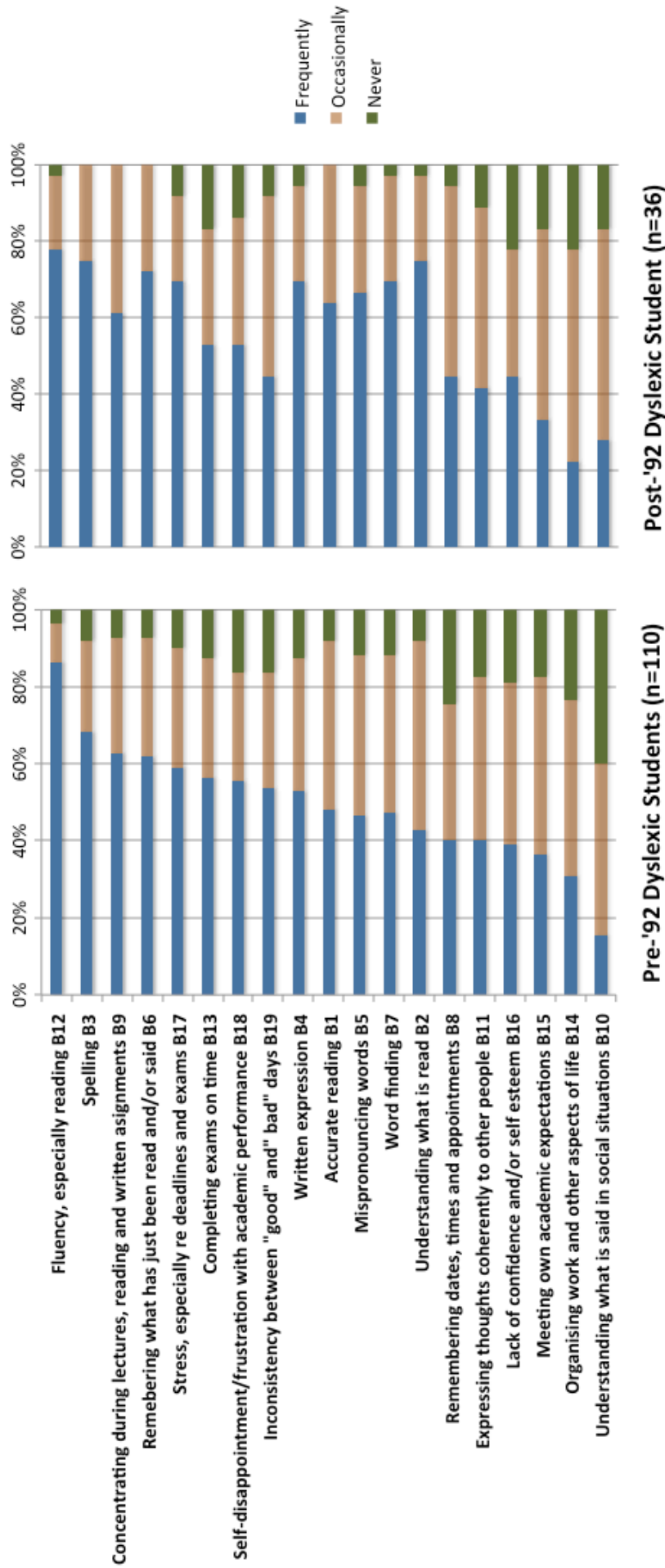


Figure 23: Self-perceived difficulties of Pre'92 dyslexic and Post'92 dyslexic students

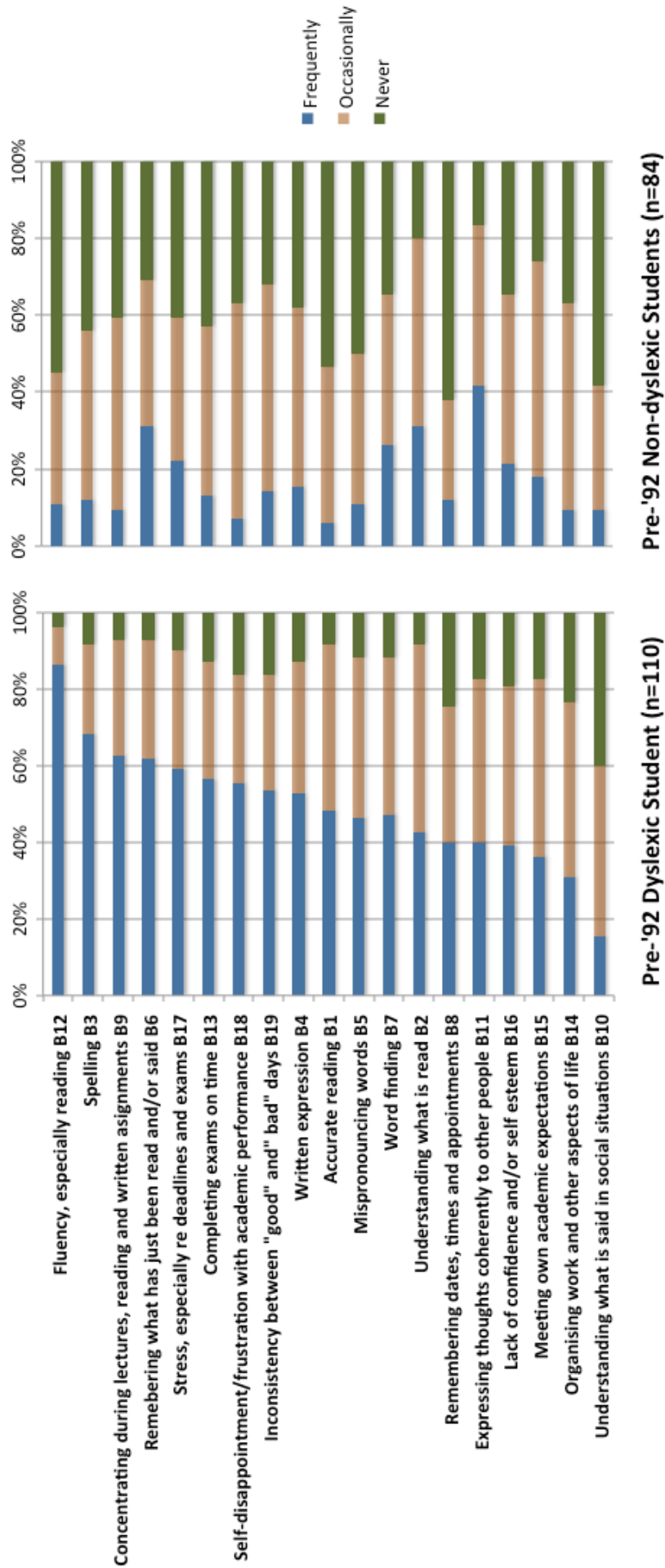


Figure 24: Self-perceived difficulties of Pre'92 dyslexic and Pre'92 non-dyslexic students

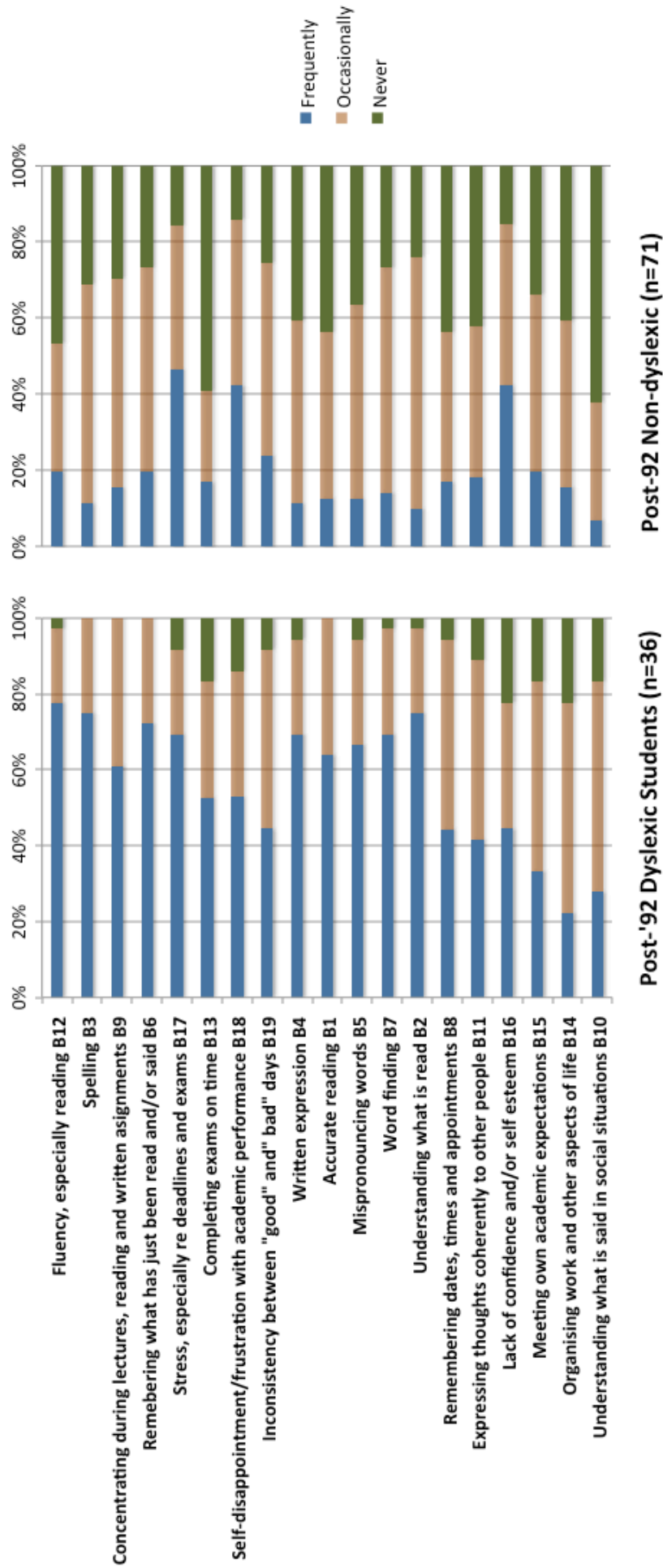


Figure 25: Self-perceived difficulties of Post'92 dyslexic and Post'92 non-dyslexic students

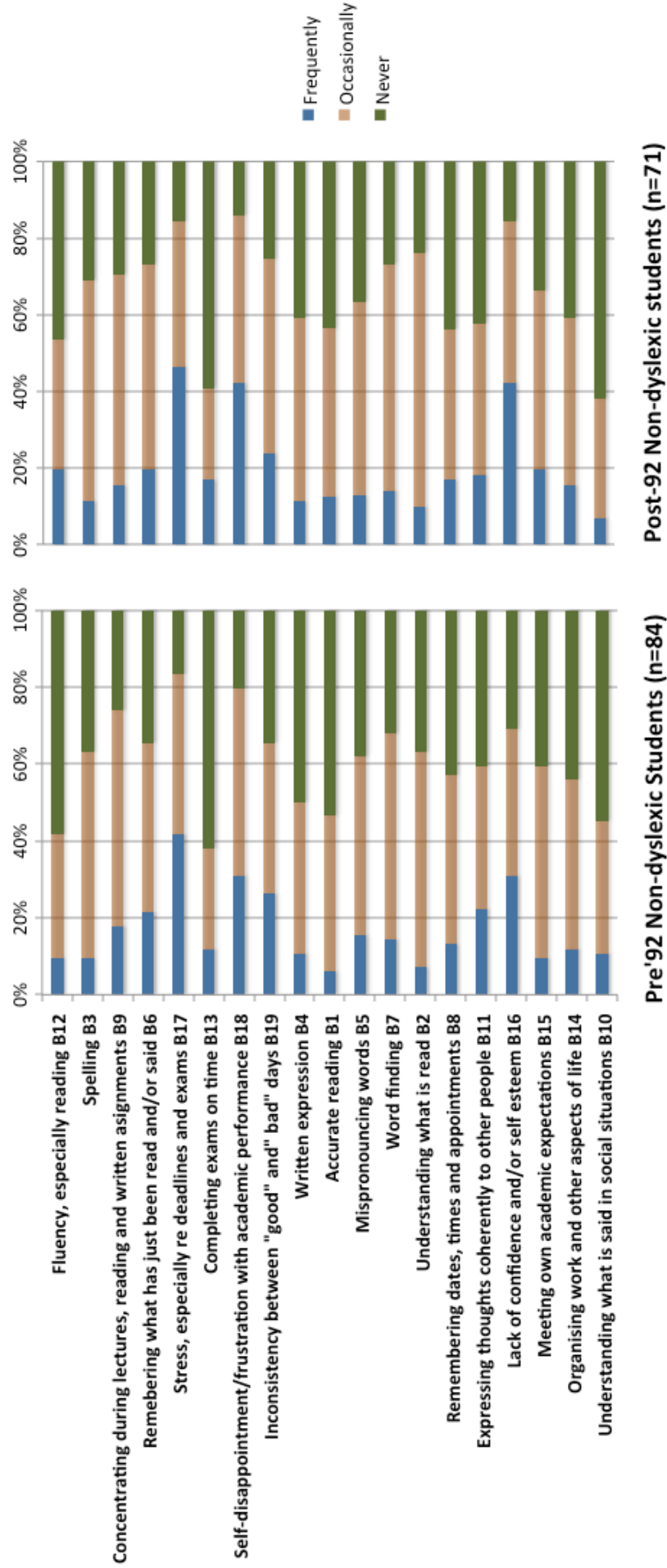


Figure 26: Self-perceived difficulties Pre'92 non-dyslexic and Post '92 non- dyslexic students

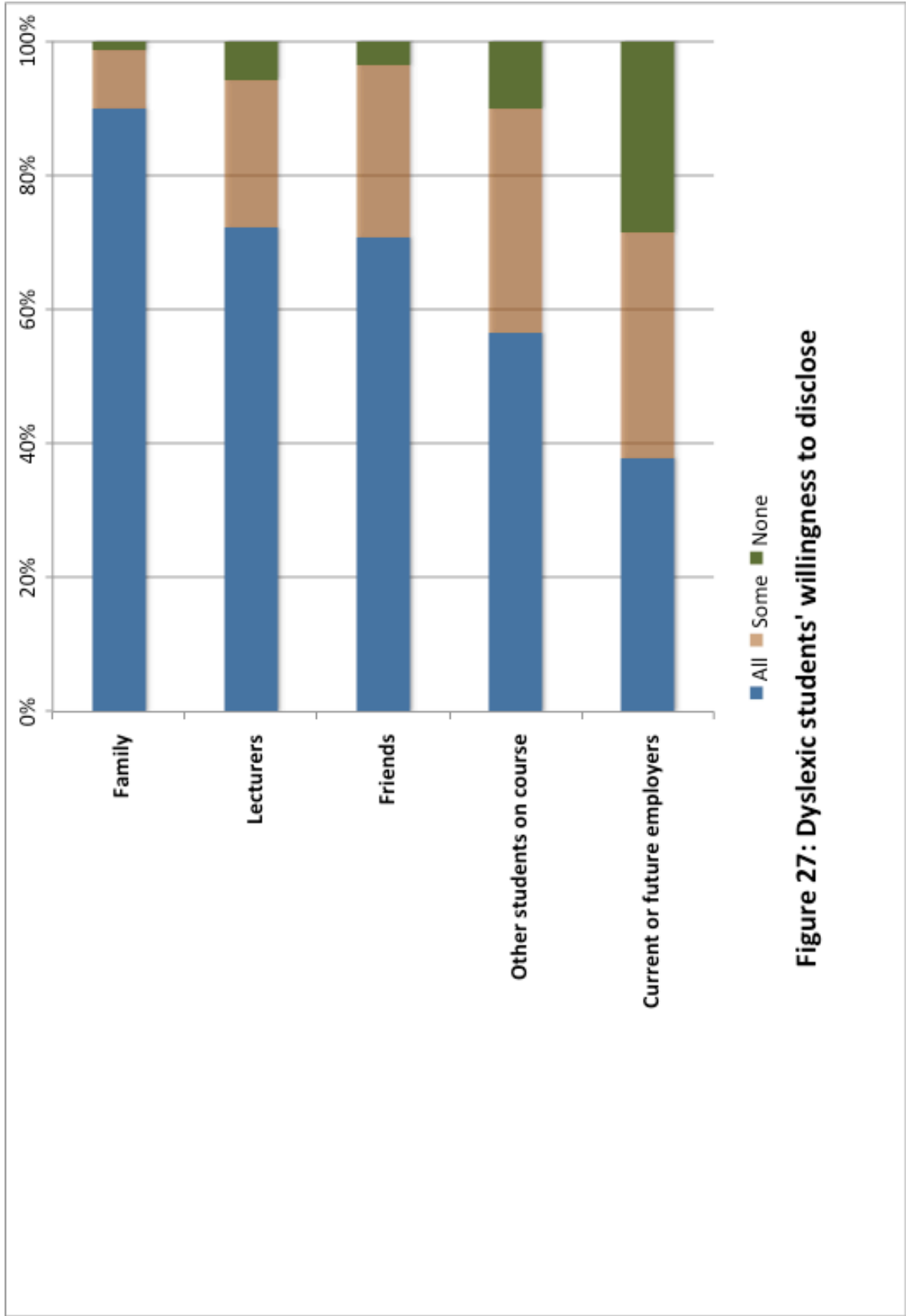


Figure 27: Dyslexic students' willingness to disclose

Document 1: Research Aims

1. RESEARCH AND PRACTICE: dyslexia and the assessment process

- a) What are assessors' assumptions about the behavioural and cognitive characteristics of dyslexia?
- b) To what extent is assessors' practice influenced by current research positions?
- c) What confidence do assessors have in their assessment practices and diagnostic conclusions?
- d) What is lecturers' awareness of, and attitude towards, dyslexia and dyslexic students?
- e) To what extent do dyslexic and non-dyslexic students experience the functional effects commonly attributed to dyslexia?
- f) What are the attitudes of dyslexic students towards the assessment process?

2. DYSLEXIA AND DISABILITY

- a) What are the opinions of assessors, lecturers, dyslexic and non-dyslexic students with regards to the disability status of dyslexic HE students?
- b) What are the attitudes of dyslexic students towards dyslexic and disabled identities?

3. EQUITY ISSUES AND REASONABLE ADJUSTMENTS

- a) What knowledge do assessors have of current disability legislation as it applies to dyslexic students in HE?
- b) How fair do assessors, lecturers, dyslexic and non-dyslexic students consider reasonable adjustments to be to dyslexic and non-dyslexic students?

4. INCLUSIVE PRACTICES

- a) What are the attitudes of assessors, lecturers, dyslexic and non-dyslexic students to individualized disability provision for dyslexic students being replaced by institution-wide inclusive practices focused on equality of access for all?
- b) What reasons do the above groups give for their attitudes on the above matter

Document 2: Questionnaire for Assessors

Assessment of dyslexia in higher education students

This questionnaire is designed to collect data that will contribute towards an important research topic. It aims to survey the hitherto unheard views of assessor practitioners with regards to various aspects of their practice, as well as about some of the important issues that emanate from this practice.

Completion of the questionnaire will take between 20 and 30 minutes of your time. Hopefully, though, you will find the time invested in completing it an interesting and professionally valuable opportunity to reflect on your own work. Your responses, in return, could prove to be a valuable contribution towards informing future policy and practice in the field. Dyslexia researchers and educational policy makers rarely seek the views of practitioner assessors about their important practice or the individuals they assess. This state of affairs is regrettable since practitioner assessors are in a privileged position to provide them with some very valuable information.

The information that you provide via the online survey program will remain confidential and anonymous. It is not possible for your response to be identified by even the researcher, unless you voluntarily supply your email address. Whilst supplying your email address is entirely optional, doing so would greatly assist the administrative process of tracking returns and issuing reminders, as well as making it possible to send you a summary of the results. No individual will be publically identifiable by name, professional association or institution.

I am really grateful for the information with which you are able to supply me, as well as for the time you need to expend in doing so.

Denise Ryder

dtr202@exeter.ac.uk

There are 20 questions in this survey

Part A: Personal Details

In order to assist with the analysis of the data could you please answer the following questions.

1 Which of the alternatives below best describes your professional affiliation ? *

Please choose **only one** of the following:

- Educational Psychologist
- A Specialist Teacher Assessor

2 For how many years have you been carrying out diagnostic assessments on HE students? *

Please write your answer here:

3 Do you have experience of working with and/or assessing school age children with literacy difficulties? *

Please choose **only one** of the following:

- Yes
 No

4 If you are happy to do so, please provide me with your email address (optional).

Please write your answer here:

Part B: Assumptions about the nature of dyslexia

5

For each of the following criteria, to what extent do you consider evidence is necessary for an HE student to be given a diagnosis of dyslexia?

Indicate your response using the following rating code:

- 1. Necessary**
- 2. An important indicator but not always necessary**
- 3. Not necessary**

If you feel that the statements and/or answering format of any item constrains your response then an open box is provided at the end of each section for you to add additional clarification or comments. *

Please choose the appropriate response for each item:

	1	2	3
A history of difficulties with the acquisition of literacy skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current and persistent difficulties with literacy skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Below average difficulties with aspects of phonological processing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Below average difficulties with processing speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Below average difficulties with aspects of working memory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Below average difficulties with auditory perception	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Below average difficulties with visual perception	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-reported and/or observed difficulties with organisational skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self reported and /or observed difficulties with receptive and/or expressive language skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The student's processing weaknesses are causing substantial underachievement relative to their academic peer group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A discrepancy between observed and/or measured underlying ability and aspects of literacy attainment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A pattern of strengths and weaknesses as evidenced by an individual spiky profile of underlying ability, cognitive processing and literacy attainment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exclusion of sensory impairments as a cause of literacy difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exclusion of general intellectual impairment as a cause of literacy difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exclusion of poor educational experience and/or opportunities as a cause of literacy difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A range of secondary indicators such as stress, low self esteem and lack of confidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below

Please write your answer here:

Part C: Current research positions that influence assessors' practice

7

To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
There are no widely agreed criteria as to what dyslexia is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There exists a clinically recognizable "essence" of dyslexia that defies explicit definition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexia, as it presents itself in HE students, is more than just a difficulty with literacy skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexia is a combination of abilities (often referred to as "gifts") and difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexia stems from differences in individual brain structure and function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A diagnosis of dyslexia is stable over time – an accurately diagnosed individual will never cease to be dyslexic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is possible to distinguish among the different categories of SpLDs, like dyslexia, dyspraxia, ADD and dyscalculia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAIS or WRIT scores are a measure of academic potential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental and socio-cultural factors such as poor teaching and impoverished socio-cultural background can be a cause of dyslexia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is inconsistency in the cut-off points used to denote "mental impairment" or "cognitive deficit" on standardized tests of cognitive processing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An individual is either dyslexic or not dyslexic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Widening Participation in UK universities has resulted in a broadening of the meaning of dyslexia to include all students with literacy difficulties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8 If you would like to comment further on any of the above statements, or clarify any of your responses to them, please do so below:

Please write your answer here:

Part D: Attitudes towards the assessment of dyslexia

9

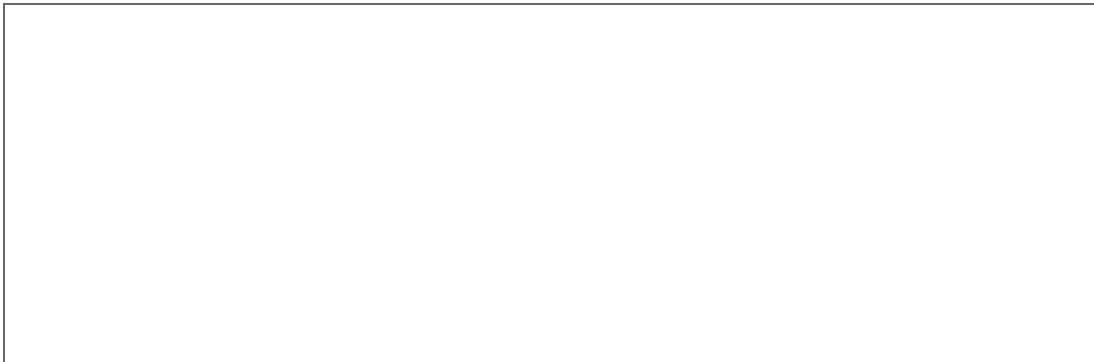
To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
The general description of dyslexia in the DfES Guidelines (2005) is useful in informing an accurate diagnosis of dyslexia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I generally have confidence in the validity of the psychometric tests on the SASC list – i.e. that they measure what they purport to measure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An HE student who achieved a flat profile of below average attainment on standardized assessments of literacy, cognitive processing and underlying ability skills would not be given a diagnosis of dyslexia or SpLD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can distinguish between dyslexia and poor literacy skills due entirely to environmental factors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident in making a dyslexia diagnosis even when quantitative evidence from test scores appears to contradict that gathered qualitatively from background history and behavioural observation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident about using the label “dyslexia” to describe the SpLD of students to whom I assign it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer the generic label “SpLD” rather than “dyslexia”	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The standard diagnostic criteria for diagnosing dyslexia are too diverse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below

Please write your answer here:

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Part E: Dyslexia and Disability

11

To what extent do you agree or disagree with each of the following statements?

*

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
It is right that the Equality Act 2010 recognizes dyslexia as a disability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The term "disability", like "dyslexia", refers to a continuum of learner differences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The term "disability" is a demeaning and inaccurate way of referring to what is a different or neuro-diverse way of processing information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal recognition of dyslexia as a disability has freed affected individuals from humiliating discrimination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students are disabled not by their "impairment", but by the literacy expectations of academic institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below

Please write your answer here:

Part F: Equity issues and reasonable adjustments

13 Please indicate 'Yes', 'No' or 'Uncertain' to each of the following statements. *

Please choose the appropriate response for each item:

	Yes	Uncertain	No
Dyslexic students need to be disabled within the framework of the Equality Act 2010 to qualify for DSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Equality Act 2010, in promoting equality of opportunity for disabled dyslexic students, strives to maximize their academic success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To be eligible for reasonable adjustments a dyslexic student must be in receipt of a DSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students are considered disabled within the framework of the Equality Act 2010 because of a diagnosed mental impairment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HEIs have a legal duty to make reasonable adjustments only for those students who meet the Equality Act's definition of disability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below

Please write your answer here:

Equity issues and reasonable adjustments (cont.)

15

To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Reasonable adjustments commonly made for dyslexic students, such as additional resources, study support and examination accommodations, can be unfair to other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is a "reasonable" adjustment for one dyslexic student might not be "reasonable" for another dyslexic student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It seems discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below

Please write your answer here:

Part G: Inclusive practices

17

To what extent do you agree or disagree with each of the following statements?

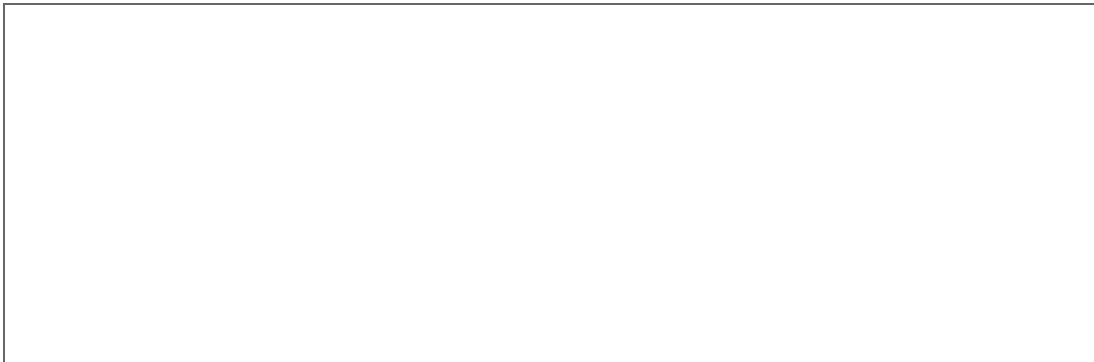
*

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
DSAs and reasonable adjustments specifically for dyslexic students should be replaced by institution-wide provision flexible enough to cater for the diverse needs of all students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjustments to teaching, learning and assessment commonly made for dyslexic students are good practice for all students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be a step backwards for dyslexic students if bespoke disability provision for them were to be removed and replaced by institution-wide inclusive practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students require specialist rather than generic support for what are very individual needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjustments to assessment and examination arrangements, like dyslexia marking policies and separate room accommodation for exams, "ghettoize" dyslexic students by negatively drawing attention to their differences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students should not be treated as a separate category because they fall along a continuum of learner differences and share similar challenges and difficulties to those faced by many other HE students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equality of opportunity for dyslexic students would be compromised without specifically targeted provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below

Please write your answer here:

A large, empty rectangular box with a thin black border, intended for the respondent to write their answer to question 18.

Request for Personal Details

Thank you for giving up your valuable time to supply me with data for my research. The data will contribute towards a first phase survey of at least 50 dyslexia assessors, both specialist teachers and educational psychologists.

A second phase data collection, consisting of semi-structured interviews with a smaller number of the initial survey participants, is planned for the first half of 2014. If you are willing to participate in this part of my research would you kindly let me have your preferred contact details, below.

The interviews will be up to an hour in length and will be conducted at a time and place that suits you. Any information that you supply will be anonymised, treated as confidential, and used only after you have been given the opportunity to approve a transcript of the interview.

19 Name

Please write your answer here:

20 Contact Details

Please write your answer here:

Document 3: Questionnaire for Lecturers

Lecturers' Questionnaire

Dyslexia assessment in The Higher Education Context

This questionnaire is designed to collect data for important research on issues around the assessment of dyslexia in higher education. The study focuses primarily on the views of dyslexia assessors about their practice, but the perspectives of other groups directly affected by this practice, such as lecturers, dyslexic and non-dyslexic students, are also being sought.

Completion of the questionnaire will take between 5 and 10 minutes of your time. Hopefully you will find the time invested in completing it an interesting and professionally valuable opportunity to reflect on your attitudes towards some of the important issues around dyslexia, disability and equality legislation, and how these affect your own practice. Your responses, in return, could prove to be a valuable contribution towards informing future policy and practice in the field.

The information that you provide via the online survey program will remain confidential and anonymous. It is not possible for your response to be identified by even the researcher, unless you voluntarily supply your email address. Whilst supplying your email address is entirely optional, doing so would greatly assist the administrative process of tracking returns and issuing reminders, as well as making it possible to send you a summary of the results. No individual will be publically identifiable by name, professional association or institution. .

Thank you for your generous support and expenditure of time.

Denise Ryder

dtr202@exeter.ac.uk

There are 12 questions in this survey

Part A: Personal Details

In order to assist with the analysis of the data could you please answer the following questions.

1 Name of university *

Please write your answer here:

2 Subject area

Please write your answer here:

Part B: Awareness of, and attitudes towards, dyslexia

3

To what extent do you agree or disagree with each of the following statements?


If you feel that the statements and/or answering format of any item constrains your response then an open box is provided at the end of each section for you to add additional clarification or comments. *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
My institution has provided me with opportunities to attend dyslexia awareness training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of the cognitive, emotional and social effects that dyslexia can have on HE students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can recognize dyslexia-type difficulties in my students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rely on the student, and/or the Disability Service acting on the student's behalf, to inform me of their dyslexia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble telling the difference between dyslexic students and those whose literacy and/or study skills are ineffective due to past missed or poor educational opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble distinguishing some students with dyslexia from educationally disadvantaged students who are not able to meet the intellectual demands of a degree course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned by the seeming heterogeneous nature of assessed dyslexic students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am prepared to do whatever it takes to make all aspects of my teaching accessible to dyslexic students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There have been occasions when I have doubted the validity of a particular student's dyslexia diagnosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Higher Education is no place for those who still have problems with reading and writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below:

Please write your answer here:

A large, empty rectangular box with a thin black border, intended for the respondent to write their answer to question 4.

Part C: Dyslexia and disability

5

To what extent do you agree or disagree with each of the following statements?

If you feel that the statements and/or answering format of any item constrains your response then an open box is provided at the end of each section for you to add additional clarification or comments. *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
I do not tend to think of dyslexic students as being disabled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students are disabled not by their "impairment", but by the literacy expectations of academic institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is right that the Equality Act 2010 recognizes dyslexia as a disability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some dyslexic students appear to be no more functionally disabled within the context of HE than some other non-dyslexic students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An increasing number of students are "playing the system" and claiming to be dyslexic in order to receive special treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Part D: Equity issues and reasonable adjustments

7

To what extent do you agree or disagree with each of the following statements?

If you feel that the statements and/or answering format of any item constrains your response then an open box is provided at the end of each section for you to add additional clarification or comments. *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
It is appropriate that dyslexic students are entitled to more favourable treatment (Eq.A. S.13(13)) than non-dyslexic students e.g. more individual contact time with lecturers, extended loans on library books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional time in examinations for all dyslexic students can give some of them an unfair advantage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I fear that academic standards in my subject are being eroded by the legal duty to make reasonable adjustments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable with the practice of Dyslexia Marking Policies, which require that a dyslexic student's work be marked sympathetically for content without unduly penalising spelling, grammar, sentence structure, punctuation or vocabulary usage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would seriously consider, or persuade my department to consider, the request from a dyslexic student for an alternative to written exams or coursework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It seems discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reasonable adjustments such as those made for dyslexic students are incompatible with a university culture of academic meritocracy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8 If you would like to comment further on any of the above statements, or clarify your responses to them, then please do so below:

Please write your answer here:

Part E: Inclusive practices

9

To what extent do you agree or disagree with each of the following statements?

If you feel that the statements and/or answering format of any item constrains your response then an open box is provided at the end of each section for you to add additional clarification or comments. *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Fully inclusive systems of teaching, learning and assessment that cater for the diverse needs of all students are preferable to targeted differentiated provision for dyslexic students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inclusive agendas based on Equality and Diversity are all very well but they demand time and financial resources that are currently in short supply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be possible for me to design alternative modes to written exams and assessments in my subject that were genuinely equivalent in terms of knowledge and skills assessed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can't help thinking that high literacy standards are central to academic learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is nothing wrong with the traditional system of including dyslexic students i.e. providing them with reasonable adjustments like extra time in exams and equipment to record lectures, so that they can manage with existing approaches to teaching, learning and assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is idealistic and unrealistic to think that one all inclusive system of teaching, learning and assessment could satisfy the diverse needs of all students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institution-wide inclusive systems of teaching and learning would remove the stigma associated with specialist differentiated provision for dyslexic students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students should not be treated as a separate category because they fall along a continuum of learner differences and share similar challenges and difficulties to those faced by most HE students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is an irreconcilable tension between Widening Participation and the need to maintain competency standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Request for Personal Details

Thank you for giving up your valuable time to supply me with data for my research.

Although the main focus of my research is dyslexia assessors and issues around their practice within the higher education context, I am also seeking the views of other groups directly affected by assessors' practice, like yourselves, dyslexic students and non-dyslexic students. The data that you have provided will be an important contribution towards this study.

A second phase data collection, consisting of semi-structured interviews with a smaller number of the initial survey participants, is planned. If you would be prepared to participate in this part of my research would you kindly let me have your preferred contact details, below.

The interviews, which will take place after Easter 2014, will be up to an hour in length and will be conducted at a time and place that suits you. Any information that you supply will be anonymised, treated as confidential, and used only after you have been given the opportunity to approve a transcript of the interview.

11 Name

Please write your answer here:

12 Contact Details

Please write your answer here:

Document 4: Questionnaire for Dyslexic Students

Dyslexic Students' Questionnaire

Dyslexia assessment in the Higher Education Context

This questionnaire is designed to collect data on your knowledge of, and attitudes towards, dyslexia assessment and the current provision for dyslexic students in higher education.

The data produced will contribute towards an important study on issues around the assessment of dyslexia in higher education. Although the main focus of the study is on dyslexia assessors, their practice has important implications for students who are, or might be, dyslexic, as well as for less obvious groups like non-dyslexic students and lecturers.

The questionnaire will take you between 10 and 15 minutes to complete. In addition to providing me with invaluable data for my study, answering the questionnaire will hopefully give you the opportunity to make your views heard on subjects about which they are rarely sought.

The information that you provide via the online survey program will remain confidential and anonymous. It is not possible for your response to be identified by even the researcher, unless you voluntarily supply your email address. Whilst supplying your email address is entirely optional, doing so would greatly assist the administrative process of tracking returns and issuing reminders, as well as making it possible to send you a summary of the results. No individual will be publically identifiable by name, professional association or institution.

Thank you for your generous support and expenditure of time.

Denise Ryder

dtr202@exeter.ac.uk

There are 29 questions in this survey

Part A: Personal and assessment details

In order to assist with the analysis of the data could you please answer the following questions:

1 Name of university *

Please write your answer here:

2 Course *

Please write your answer here:

3 Gender *

Please choose **only one** of the following:

- Female
 Male

4 Age *

Please choose **only one** of the following:

- Under 25 years
- Over 25 years

5 How would you rate the quality of your school education before going to university? *

Please choose **only one** of the following:

- Very good
- Good
- Mediocre
- Poor
- Very poor

6 How did you gain access to university? *

Please choose **only one** of the following:

- A-level Qualifications
- NVQs or similar vocational qualifications
- Other (Please Specify)

Make a comment on your choice here:

7 Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties? *

Please choose **only one** of the following:

- Yes
- No

8 Were you offered additional support from your school? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '7 [A7]' (Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties?)

Please choose **only one** of the following:

- Yes
- No

9 Did you accept additional support from your school? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '7 [A7]' (Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties?) *and* Answer was 'Yes' at question '8 [A8]' (Were you offered additional support from your school?)

Please choose **only one** of the following:

- Yes
- No

10 Did your parents arrange for private dyslexia tuition? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '7 [A7]' (Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties?)

Please choose **only one** of the following:

- Yes
- No

11 When were you formally assessed as dyslexic? *

Please choose **only one** of the following:

- Before my university course
- After the start of my university course

12 Was the purpose of each step of your assessment, and its findings, carefully explained to you in a way that you understood? *

Please choose **only one** of the following:

- Yes
- No
- Not entirely
- Can't remember

13 Do you think you understand what dyslexia is? *

Please choose **only one** of the following:

- Yes
- No
- Not entirely

14 Is there any activity at which others perceive you to be talented? *

Please choose **only one** of the following:

- Yes (Please specify)
- No
- Unsure

Make a comment on your choice here:

15 Which of the following expressions best describes your initial feelings immediately after being diagnosed as dyslexic? *

Please choose **only one** of the following:

- Upset and confused
- Relieved at finally having an explanation for your difficulties
- Other (Please Specify)

Make a comment on your choice here:

16 Which of the following expressions best describes your current feelings about being diagnosed as dyslexic? *

Please choose **only one** of the following:

- Comfortable with the label ascribed to my individual processing style
- Pleased that my learning differences have been formally recognized and provided for
- Other (Please Specify)

Make a comment on your choice here:

Part B: Difficulties with learning

17


How frequently do you have problems with any of the following activities and emotional states? *

Please choose the appropriate response for each item:

	Frequently	Occasionally	Never
Accurate reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding what you read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spelling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expressing yourself in written prose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mispronouncing words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering what has just been read and/or said	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering the words you want to use when speaking and/or writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering dates, times and appointments accurately	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentrating during lectures, reading and written assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding what other people are saying e.g. in social groups or seminars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expressing your thoughts coherently to other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking longer than other students to complete tasks, including reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Completing exams within the time allocated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizing work and other aspects of your life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Achieving the grades that you feel you deserve and/or are expected of you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lack of confidence and/or self esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stress, especially related to deadlines and examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-disappointment and frustration due to failure to live up to expectation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noticeable inconsistency between what can be achieved on "good" and "bad" days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below:

Please write your answer here:

A large, empty rectangular box with a thin black border, intended for the respondent to write their answer to question 18.

Part C: Dyslexia and Disability

19 To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
As a diagnosed dyslexic student I regard myself as a disabled person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexia is a category of disability alongside more obvious disabilities like blindness and cerebral palsy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexia is a processing difference, not a processing "difficulty" or "disability"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would prefer that my individual learning needs were not given a label like "dyslexia"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer the label "dyslexia" to "Specific Learning Difficulty"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to be a dyslexic person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of my identity as a disabled person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not a dyslexic student is disabled depends on the severity of the effects of their cognitive differences on their academic skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20 Are you generally happy for people in the following categories to know that you are dyslexic? *

Please choose the appropriate response for each item:

	All	Some	None
Family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other students on your course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current or future employers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Part D: Equity issues and reasonable adjustments

22 To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
It is appropriate that the Equality ACT 2010 regards dyslexia as a disability for which educational institutions must make reasonable adjustments, such as providing dyslexic students with assistive technology and allowing them extra time in exams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have noticed that some of the problems I experience due to my dyslexia appear to be shared by non-dyslexic friends and fellow students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable with receiving, or being eligible for, extra time in exams, and a DSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes feel bad about having, or being eligible for, DSA funding and reasonable adjustments, like extra time in exams, when some of my friends and fellow students do not get them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get the impression that some students resent the fact that I benefit, or could benefit from, DSA funding and reasonable adjustments like extra time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of my lecturers appear to understand my difficulties and are sympathetic towards them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel discriminated against by the university system that requires me to be assessed via written assignments and examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that treating dyslexic students differently stigmatizes them as less able	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Part E: Inclusive practices: non-dyslexic students

24 Have you heard of the term “inclusive practices” in reference to teaching, learning and assessment in higher education? *

Please choose **only one** of the following:

- Yes
 No

25 Do you think that you know what the term 'Inclusive Practices' means in this context? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '24 [E1]' (Have you heard of the term “inclusive practices” in reference to teaching, learning and assessment in higher education?)

Please choose **only one** of the following:

- Yes
 Not entirely
 No

26 To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Disabled Student Allowances (DSAs) given individually to dyslexic students should be replaced by carefully designed university-wide provision that takes account of the needs of all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reasonable adjustments currently available to dyslexic students, like the use of extra time and word-processors in exams, should be available to any student who needs them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disabled Student Allowances (DSAs) entitle dyslexic students to additional provision such as their own laptops, printers, digital recorders, assistive software and funding for individualized study skills support.					

27 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Request for Personal Details

Thank you for giving up your valuable time to supply me with data for my research. The data will contribute towards a first phase survey of dyslexia assessors, lecturers, dyslexic students and non-dyslexic students.

A second phase data collection, consisting of semi-structured interviews with a smaller number of the initial survey participants, is planned. If you would be prepared to participate in this part of my research would you kindly let me have your preferred contact details, below.

The interviews, which will take place before Easter 2015, will be up to an hour in length and will be conducted at a time and place that suits you. Any information that you supply will be anonymised, treated as confidential, and used only after you have been given the opportunity to approve a transcript of the interview.

Many thanks,
Denise Ryder
dtr202@exeter.ac.uk

28 Name

Please write your answer here:

29 Contact Details

Please write your answer here:

Questionnaire for Non-dyslexic Students

Non-dyslexic Students' Questionnaire

Dyslexia assessment in the Higher Education Context

This questionnaire is designed to collect data on your knowledge of, and attitudes towards, dyslexia assessment and the current provision for dyslexic students in higher education.

The data produced will contribute towards an important study on issues around the assessment of dyslexia in higher education. Although the main focus of the study is on dyslexia assessors, their practice has important implications for students without the dyslexic label, as well as for more obvious groups like dyslexic students and lecturers.

The questionnaire will take you between 10 and 15 minutes to complete. In addition to providing me with invaluable data for my study, answering the questionnaire will hopefully give you the opportunity to make your views heard on subjects about which they are rarely sought.

The information that you provide via the online survey program will remain confidential and anonymous. It is not possible for your response to be identified by even the researcher, unless you voluntarily supply your email address. Whilst supplying your email address is entirely optional, doing so would greatly assist the administrative process of tracking returns and issuing reminders, as well as making it possible to send you a summary of the results. No individual will be publically identifiable by name, professional association or institution.

Thank you for your generous support and expenditure of time.

Denise Ryder

dtr202@exeter.ac.uk

There are 25 questions in this survey

Part A: Personal and assessment details

In order to assist with the analysis of the data could you please answer the following questions:

1 Name of university *

Please write your answer here:

2 Course *

Please write your answer here:

3 Gender *

Please choose **only one** of the following:

Female

Male

4 Age *

Please choose **only one** of the following:

- Under 25 years
- Over 25 years

5 How would you rate the quality of your school education before going to university? *

Please choose **only one** of the following:

- Very good
- Good
- Mediocre
- Poor
- Very poor

6 How did you gain access to university? *

Please choose **only one** of the following:

- A-level Qualifications
- NVQs or similar vocational qualifications
- Other (Please Specify)

Make a comment on your choice here:

7 Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties? *

Please choose **only one** of the following:

- Yes
- No

8 Were you offered additional support from your school? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '7 [A7]' (Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties?)

Please choose **only one** of the following:

- Yes
- No

9 Did you accept additional support from your school? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '7 [A7]' (Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties?) *and* Answer was 'Yes' at question '8 [A8]' (Were you offered additional support from your school?)

Please choose **only one** of the following:

- Yes
- No

10 Did your parents arrange for private dyslexia tuition? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '7 [A7]' (Were you identified at any stage of your schooling as having literacy or dyslexia-type difficulties?)

Please choose **only one** of the following:

- Yes
- No

11 Do you know any students who are dyslexic? *

Please choose **only one** of the following:

- Yes
- No

12 Do you think you understand what dyslexia is? *

Please choose **only one** of the following:

- Yes
- No
- Not entirely

13 If you feel that your answers to any of the above questions have been constrained by the answering format, then please use the space below to add any clarification

Please write your answer here:

Part B: Difficulties with learning

14

How frequently do you have problems with any of the following activities and emotional states? *

Please choose the appropriate response for each item:

	Frequently	Occasionally	Never
Accurate reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding what you read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spelling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expressing yourself in written prose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mispronouncing words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering what has just been read and/or said	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering the words you want to use when speaking and/or writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering dates, times and appointments accurately	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentrating during lectures, reading and written assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding what other people are saying e.g. in social groups or seminars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expressing your thoughts coherently to other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking longer than other students to complete tasks, including reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Completing exams within the time allocated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizing work and other aspects of your life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Achieving the grades that you feel you deserve and/or are expected of you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lack of confidence and/or self esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stress, especially related to deadlines and examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-disappointment and frustration due to failure to live up to expectation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Noticeable inconsistency between what can be achieved on "good" and "bad" days	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15 If you would like to comment further on any of the above statements, or clarify any of your responses to them, then please do so below:

Please write your answer here:

Part C: Dyslexia and Disability

16 To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
I tend to think of dyslexic students as disabled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my opinion dyslexia is often an excuse for laziness or lack of ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some dyslexics might be disabled but most appear to me to be no different from the rest of us	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am glad that I am not dyslexic!	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexia is a category of disability alongside more obvious disabilities like blindness and cerebral palsy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Part D: Equity issues and reasonable adjustments

18 To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
It is right that the law requires universities to make some allowances for dyslexic students, like giving them extra time to complete exams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Extra time in exams and funding for one-to-one study skills support give some dyslexics an unfair advantage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dyslexic students face difficulties with large amounts of reading, concentration in lectures and writing assignments, that are not experienced by non-dyslexic students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I object to public funding being spent on giving dyslexic students their own computers, printers and internet access when all students need this equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is particularly unfair to dyslexic students that their learning is most commonly assessed by written assignments and timed written examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some dyslexic students appear to "play the system" by getting free laptops and extra time in exams when they don't really need them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that treating dyslexic students differently stigmatizes them as less able	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

Part E: Inclusive practices: non-dyslexic students

20 Have you heard of the term "inclusive practices" in reference to teaching, learning and assessment in higher education? *

Please choose **only one** of the following:

- Yes
 No

21 Do you think that you know what the term 'Inclusive Practices' means in this context? *

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '20 [E1]' (Have you heard of the term "inclusive practices" in reference to teaching, learning and assessment in higher education?)

Please choose **only one** of the following:

- Yes
 Not entirely
 No


22 To what extent do you agree or disagree with each of the following statements? *

Please choose the appropriate response for each item:

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Disabled Student Allowances (DSAs) given individually to dyslexic students should be replaced by carefully designed university-wide provision that takes account of the needs of all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reasonable adjustments currently available to dyslexic students, like the use of extra time and word-processors in exams, should be available to any student who needs them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disabled Student Allowances (DSAs) entitle dyslexic students to additional provision such as their own laptops, printers, digital recorders, assistive software and funding for individualized study skills support.					

23 If you would like to comment further on any of the above statements then please do so below:

Please write your answer here:

A large, empty rectangular box with a thin black border, intended for the respondent to write their answer to question 23.

Request for Personal Details

Thank you for giving up your valuable time to supply me with data for my research. The data will contribute towards a first phase survey of dyslexia assessors, lecturers, dyslexic students and non-dyslexic students.

A second phase data collection, consisting of semi-structured interviews with a smaller number of the initial survey participants, is planned. If you would be prepared to participate in this part of my research would you kindly let me have your preferred contact details, below.

The interviews, which will take place before Easter 2015, will be up to an hour in length and will be conducted at a time and place that suits you. Any information that you supply will be anonymised, treated as confidential, and used only after you have been given the opportunity to approve a transcript of the interview.

Many thanks,
Denise Ryder
dtr202@exeter.ac.uk

24 Name

Please write your answer here:

25 Contact Details

Please write your answer here:

Document 6: Scenarios for Assessors Interviews

Scenario one

Samantha is a second year History and Politics student from a Russell Group university. She has 3 As at A-Level (English, History and Politics) and has presented for assessment, on the advice of her tutor, because she is finding it increasingly difficult to keep up with reading and to complete written assignments on time. Her grades have been disappointing and she had to re-sit some of her first year modules. You are about to carry out a full assessment in line with the current DfES guidelines.

Scenario two

John is a first year Animal Behaviour and Welfare student with poor literacy skills, at a post-92 university. John gained admission to his course on the basis of a Level 3 BTEC National Diploma. He has failed the first year and is currently repeating it. He, too, has been referred by his tutor, who realized that if John were to be successful the second time around, he would need all the help that he could get. Your remit is to assess this student for DSA eligibility in the hope of providing access to funding for the additional help that he is perceived to need.

Document 7: Topic areas to be covered by interviews with assessors

1. ASSESSORS ASSUMPTION ABOUT THE NATURE OF DYSLEXIA

i. RELEVANCE OF DISCREPANCY DEFINITION

- In HE assessment
- Comparison with diagnostic assessment in schools
- BPS, ROSE, DSM-V and ICF definitions
- Focus on literacy difficulties and consequent social and emotional problems

ii. RELEVANCE OF CORE TESTS OF COGNITIVE PROCESSING

- Phonological awareness
- Working memory
- Processing speed
- Underlying verbal and non-verbal abilities

2. FACTORS INFLUENCING ASSESSORS' ASSUMPTIONS AND DIAGNOSTIC DECISIONS

i. RESEARCH FINDINGS

- Emphasis placed on the relationship between biological and environmental causes
- Continuum Vs categorical concept of dyslexia
- Needs Vs diagnostic assessment

ii. PERSONAL SOCIO-POLITICAL BELIEFS

- Commitment to Widening Participation and social mobility
- Belief in essential elitist nature of Higher Education

iii. OTHER PRESSURES

- Pragmatic labelling to gain resources

3. IMPLICATIONS OF DIAGNOSIS FOR DYSLEXIC STUDENTS' DISABILITY STATUS

i. DISTINCTION BETWEEN DISABILITY, DIFFERENCE AND DISADVANTAGE

ii. DYSLEXICS' LEGAL AND ETHICAL ENTITLEMENT TO DISABILITY PROVISION

Document 8: Assessor Interview Agenda: Scenario 1

Record Guide

i.	What would be some of your thoughts about this student as you set about preparing for, and starting, the assessment?	P	
ii.	Can a student with no obvious history of literacy or academic achievement difficulties, be dyslexic?	P	S
	YES		
	<ul style="list-style-type: none"> Personal strengths, favourable environment, motivation and hard work could have enabled the student to overcompensate for inherent weaknesses in some cognitive skills 	P	S
	<ul style="list-style-type: none"> HE has placed unprecedented demands on the weak cognitive skills 	P	S
	NO		
	<ul style="list-style-type: none"> Student appears to have had no difficulty in acquiring literacy skills 	P	S
	<ul style="list-style-type: none"> Would want to investigate other socio-emotional reasons for current poor progress e.g. lack of motivation, excessive social life, not enough work done 	P	S
iii.	How would you obtain the information needed to make a decision about the nature of this student's difficulties? Why?	P	S
	<ul style="list-style-type: none"> Diagnostic interview Diagnostic tests of literacy attainment Diagnostic tests of cognitive processing Measure of underlying ability Other e.g. professional experience, intuition 	P P P P P	S S S S S
iv.	What degree of evidence would you be looking for, and why?	P	S
	<ul style="list-style-type: none"> Statistical deficits for "cut-offs" Discrepancy Overall spiky profile of strengths and weaknesses No evidence of dyslexia 	P P P P P	S S S S S
v.	If you concluded that S. had a SpLD, would you regard her as disabled? In what sense?	P	S
	<ul style="list-style-type: none"> Legally In the context of HE Different, but not disabled 	P P P	S S S
vi.	What would you regard as the main purpose of this assessment?	P	S
	<ul style="list-style-type: none"> Identify student's learning needs and help her to understand them Establish eligibility for DSA/additional resources 	P P	S S
vii.	Would you recommend RAs for this student?	P	S
	<ul style="list-style-type: none"> Which Equity issues 	P P	S S

Document 9: Assessor Interview Agenda: Scenario 2

		Record Guide	
i.	What would be some of your as you set about preparing for, and starting, the assessment?	P	
	a) Student's difficulties might be due to previously unidentified dyslexia	P	S
	b) Unfavourable environmental factors likely to be responsible for student's poor literacy and lack of appropriate study skills	P	S
	c) Possibly a combination of the above, but questionable whether student should be attempting HE level study. Query intellectual ability	P	S
ii.	How would you obtain the information needed to make a decision about the nature of this student's difficulties? Why?	P	S
	• Diagnostic interview	P	S
	• Informal observation of student's language/social skills	P	S
	• Diagnostic tests of literacy attainment	P	S
	• Diagnostic tests of cognitive processing	P	S
	• Measures of underlying ability	P	S
	• Other e.g. professional experience, intuition	P	S
iii.	What degree of evidence would you be looking for, and why?	P	S
	• Cut-off points for cognitive processing skills	P	S
	• Statistical discrepancy (between what?)	P	S
	• Overall spiky profile of strengths and weaknesses	P	S
	• Exclusion of environmental non-biological causes	P	S
iv.	What evidence might persuade you that this student did not have a SpLD like dyslexia?	P	S
v.	Would you regard this student as disabled?	P	S
	• Legally	P	S
	• In the context of HE	P	S
	• Different, but not disabled	P	S
vi.	Your brief was to see if this student met the eligibility criteria for DSA. What would you, personally, regard as the main purpose of this assessment?	P	S
	• Identify student's learning needs, in the context of HE, and help him to understand them	P	S
	• Establish eligibility for DSA/additional resources	P	S
vii.	Would you, if you thought it appropriate, advise the student that he was wasting his time in HE?	P	S
viii.	If you came to the conclusion that the student could benefit from the course, would you be recommending RAs for him?	P	S
	• Which?	P	S
	• Equity issues	P	S

Document 10: Sample transcript of an interview

Q: You've read the first scenario, what would be some of your thoughts about this student as you set about preparing for and starting the assessment? What possibilities might start forming in your mind?

A: Well before I start an assessment, if it's a private one, they would have filled out a questionnaire for me so I would have already garnered some information. And if I'm doing it at university they would have filled out the questionnaire at university so we would have some background information.

Q: If you just had that information.

A: Well, when she first came in I would talk to her to start with, explain, you know, did she know why she was there and what were her current difficulties? I would then ask her if she'd had any difficulties at school or anything she was aware of that she found harder than her peers, taking her back to primary school. Because she's got problems here with reading, speed of reading, I would have asked did she have problems either learning to read or reading as fast as her peers in school. When she was given a reading assignment did she finish at the same time as the class? Try and find a background history of difficulties. If she's a bright student because she's at a Russell group, she might not have struggled at primary school or it might not have been picked up. You would then ask about time in exams, did she have any problems finishing? And if she didn't have any problems finishing, did she have any problems writing as much as she wanted to within the given time? Did she truncate her answers? So I would be looking for some kind of difficulty further down. It might not be there because with the very bright ones it often is at university where they start to fall apart, but normally there are warning signs. So just chatting really, family, was there any family background? Medical history, I always ask about their hearing, their sight, asthma and eczema, that sort of question. And the questionnaire, if I'm seeing them on the day and I haven't sent a questionnaire in advance, I have a check list and we sit down and we go just quickly through the check list, yes or no answers. So we're looking at 'Have you even had any problems?' so we definitely have to not go in cold and we have to find out what's going on before we start the actual assessments because a lot of that will trigger which tests you fish out.

Q: Yes, ok. Would you be looking for any other reasons, like not having done any work, or over socialising?

A: Yes! That's why you talk to them. You also, you can't say 'Do you take recreational drugs?' but you always have to bear in mind that there could be drug abuse, alcohol abuse, there could be some kind of medical condition, there could be – is it ME, that one that really drags you down and gives you no energy? Or glandular fever, which is why you ask about background health checks. And you ask about what they're doing. And also because I've got dyspraxic difficulties I also tend to ask them about whether they're aware of time and what their time management is like, is it just left to the last minute? Do they find difficulty starting? So you're really looking at what's going on. Normally by the time

they've come to you a lot of that has been done by the tutors or by the parents, and it's definitely picked up in a lot of the questionnaires, but yes you do ask if they're working, obviously.

Q: Ok, and so you would be trying to get a feel. And which tests might you use?

A: Well, I have the battery of tests, definitely, and I always use certain tests even if I know they're not going to show anything because it's good to rule it out. That sounds ridiculous, but like with dyspraxia, if you always give the BEERY you can say 'Well there are no signs of...' and you, even in questionnaires that can be masked. But by talking to them you listen to, is there a problem with language acquisition? Is it a speech and language problem that's becoming...? I mean I know dyslexia underneath is all language based, but is there a more semantic, pragmatic disorder coming through? So you start thinking 'Do I need receptive vocabulary as well as the expressive?' and you definitely, it's talking to them and relaxing them. And something I always tell everybody, just before we're about to start I show them the list of tests, the normal tests that I use, and I will say to them that they're going to make mistakes and they're not to worry about it. And they will make mistakes for three reasons, the tests want them to go wrong because if they can get 100%, the test wouldn't be any good, they've had difficulties in the past, if they have, and it would show up, but mostly they're going to make mistakes because of their age – they are nowhere near the test ceilings. Because having been assessed as an adult I nearly cried three times, I really cried during the assessment, I am very aware how they might look calm, but they'll be panicking. So I say to them that they are going to make mistakes, I know they are, don't worry about, everybody does, give them the reasons, and then say 'I'm not judging, it's not like a school where it's right or wrong, we're trying to establish what you can do, what you can't do, and there's no judgement involved.'

Q: So diagnostic rather than attainment.

A: Definitely, because it is so nerve-wracking to sit that side of the table, even if you know why you're there. So really it's putting them at ease and trying to create some kind of rapport. If I can I will try and make them laugh because I think if they laugh they will start to relax, and I do tell them that I've very dyslexic and very dyspraxic myself. And I also give them a couple of questions that are looking specifically for poor proprioception. I get them to stand up and then shut their eyes to see if there's a lot of movement. And I'll ask them if they ever sense the bed moving at night when they're sober, which always makes them laugh – unless they're Muslim in which case I miss out 'When you're sober,' because I don't want to offend!

Q: Getting to the next one, you showed me that list of tests, presumably you don't do all of them?

A: Yes.

Q: Do you?!

A: Yes.

Q: My goodness.

A: If I'm doing a private assessment, yes.

Q: So how long would that take you?

A: Two and a half to three hours. Sometimes if they're very, very slow it will be over three and a half, because they're private assessments. In the university they allow us up to three hours, they're very generous at specific post'92 university; at specific pre'92 university you're allowed up to three hours. It used to be three and a half, but with the latest versions of the tests it takes longer and I really don't think I'm getting a good picture without most, I mean I can miss some of them out, and I do, like if you've got somebody who is very dyslexic and they fall apart of CTOPP, I don't do the supplementary. But most of the brighter ones cope on the real words so you need the supplementary.

Q: Yes, right. So you obtain the information that you need in the way that you've just described, and by testing. With this particular student, you know that she reads accurately, probably, because of her progress to date...

A: Well yeah, she might not be reading accurately, but we know she's reading, we know it's not going to be a non-reader and it's not going to... But she might not be reading accurately. She might be taking the time, because she doesn't read accurately, to keep re-reading. And a lot of the brighter high-flying dyslexics that don't get picked up until university, a lot of their problems are they don't read accurately and therefore they start to mis-read and misinterpret questions.

Q: Ok, so you'd do the whole profile of reading tests, accuracy and fluency and so on?

A: Yes.

Q: What about tests of underlying ability? I know you have to do them, how much emphasis do you place on those?

A: It depends on the student. I say ability, I don't say IQ. If I feel the student's vulnerable and they've got good scores, I keep stressing that they've got the capability to cope. And it's like that, the three circles we use on our PATOSS slides, I sometimes get that up and show them, where you have the underlying ability, you have the information management, and you have the outcome – the reading and the writing. And I assure them that this bit is fine, the problems, when you've done the assessment, it's normally with the information management, the processing, and it affects the outcome. If you've got a student where they have done badly on the ability test, which is quite easy to do because

the one I use is WRIT, and it's got lots of flaws, but of all the tests available to specialist teachers, it's the best in my opinion. But it's flawed, and if I know they're getting low scores I will explain that the test is, well not flawed, I say... Obviously it's an American test so who the hell is John Coltrane anyway? And they, we don't cover this syllabus in the British school so I will tell them that, I will also tell them before we start the test 'Before we start this test I will just remind you, the test ceiling is 85 years of age, you are not 85.' And I don't think that's, that's before I start the test, so it's not affecting the... Everything else is done properly, with proper wording. But I do just remind them because having gone through it as an adult, when you start going wrong, especially at this level when you haven't got a background history of specific learning difficulties, therefore you think it's you, and you've got the 'I'm really stupid, I shouldn't be here,' and you start making mistakes, you can get very flustered and the more flustered and panicky you get... Once or twice I've stopped the WRIT and I've said 'Right we're stopping, we'll do another test and we'll come back to it.' because they've gone in to panic mode. And once I actually got, I made him, bless him, I said 'Go for a walk in the garden,' and I got him walking around to calm down before we continued because you could see the breathing had gone, the panic had gone, and he just wasn't coping. So I'm very aware of that as well. But what was your question about the ability test?

Q: Well when you've done it and you sense that it's low, how does that influence your thinking during the assessment process?

A: Well it depends whether you're verbal or visual. If the visual is low, I will get out the BEERY and the Symbol Digits Modalities Test and look for visual difficulties. I will also watch what the head is doing when they're doing the rapid naming, another test. Because if the head is the ducking penguin routine then you're pretty certain that there's visual tracking, and if you've got troubles with visual tracking, you really are going to struggle with Matrices and the spatial awareness, the dyspraxic side. If the verbal is low, I will get out a receptive vocabulary test, the Peebody because it goes up way beyond their age range, to see if there's a difference between expressive and receptive vocabulary, and often there is. And if they're both low, you then start asking 'You've said English is your first language, do you speak, are you bilingual?' well that should have come out in the first part, but I've had students that have told me English is their first language, and don't mention they're bilingual or they speak a second language at home. And Fins(?) is the give away, if they don't get Fins(?) you're almost certain that there was a second language when they were younger. So, but that should come out in the initial talk.

Q: So you use the WRIT diagnostically, you don't take any notice of the scores?

A: I do take notice of the scores as well, but it's used diagnostically. I really take notice – you always put the qualitative in, how they did it, that's always included. But if the scores, if there are big gaps between the scores or the scores are unexpectedly low from what else the student has done, you then use it diagnostically. I give the scores because I thought we had to, but I will explain

them. And for a student where English is a second language, and we get a lot of those at post-'92 university, I actually write 'This is not a fair test for this student because it is based on English as a first language, north American curriculum.' and if you've got students from Asia or Africa or totally different environments when they were younger, that test is not going to be a good test.

Q: Ok. When you're using cognitive tests, do you look for any sort of statistical cut off? Like 1.5 standard deviations from the norm, or 2 or...?

A: No, what I do with the testing, yes I look for the 1.5, but I also look for the prevalence. So you have, you know it's a significant difference because it tells you here, but then you look at what the gap is. So here it says that if the gap is 12, it's significant, but when you look for a 12, 31% of the population would have that gap, so I will write 'there is a significant difference, but as 31% of the standardisation (...)' it's when it's in the lower numbers, and if it's in the lower numbers, the composite score will not be quoted. And I will say 'I am not quoting this score because it's not accurate, and the same for the sub-tests. Between, I don't, the two verbal subtests or the two visual subtests, I use these, but I also look at this.

Q: You do look at how common it is?

A: Yes, if it's common I will say 'There is a significant gap, but because 72% of the same age population have this difficulty, the composite score has been quoted. Because only 7% of the standard (...) will have this gap, I haven't quoted it.' so it's...

Q: And you would do the same for the other cognitive tests like the CTOPP?

A: No, the CTOPP you always quote the cognitive scores, it says so in the manual. You must always quote the cognitive scores in CTOPP.

Q: Well if you quote the cognitive scores, how much emphasis would you place on them?

A: Well you would then... Right, you've got somebody with a CTOPP – which is a pattern this lot will do – they'll do very well in verbal memory, in phonological memory for numbers, but they usually plummet with the non-word repetition if they've got underlying phonological difficulties. So you can get a score of, a scale score of 13 and a scale score of 4, and it gives you a good composite. So I say 'Although the composite is in the average range, looking at the two sub tests, when she knew the sounds she was able to cope because she had strategies in place, but when she was given repeating non-words, which was using purely phonological skills, the score plummeted, indicating there is an underlying difficulty.' So it is teased out and written up and made clear that although the composite score says 'Oh yes you're fine,' no, there is a difficulty there.

Q: Yes, ok.

A: Because at this level they have so many compensatory strategies.

Q: I know. Do you work with any discrepancy concept at all?

A: It's gone out.

Q: I know it's gone out, but in higher education does it come in to your...?

A: Yes it does. I've done one at Pre'92 university that had no low, average, or below average scores whatsoever, but he had problems. And luckily I know (colleague) who was fronting at pre'92 university, and I actually went to her and said '(colleague), is it alright to do this? Because I want to say this, but I haven't got...' because when you work for schools and you're working for access arrangements, you must, apart from that very small (...) you are expected to have below and low average scores. But because we could say how high he was, he actually did have huge ability, he was 150 plus on the WRIT, which is almost unheard of, and that time I did use the discrepancy because there was no other way of doing it, and even his sub tests didn't fall, I think the lowest sub test was 8, I don't think he got any below 7, but it's the speed at which he did it. With the phonological awareness he got right, but he took forever. And so I was able to say it was not a fluent skill, it was, he was working it out each time, it was not automatic, and there was an underlying difficulty. And that one I did use discrepancy. And when I sum up, I do often say 'Although these two scores were in the area expected from this type of profile, these were lower than you would expect from a student with this ability.' So yes, it's creeping in, but you don't, it's not the only criteria. But yes it would be daft not to refer to 'You would expect them to do better...' especially when there's research to say that verbal ability, reading comprehension, vocabulary, are all quite correlated. So if you've got high and a couple of lows, something is going wrong. So if that's discrepancy, yes I use it, but I would not say 'Because there is a discrepancy...' it's subtler than that, it's not just...

Q: Thinking on a more informal level in higher education, do you not look for a sense of incongruity between what you expect and what you actually get?

A: Of course you do, yes of course you do, but you don't write it like that because...

Q: Because it's been discredited?

A: Of course you do, and I have to tell you there are, when we do training, there are two profiles that I use and they're both almost identical, and one was a low ability student, and she really was general learning difficulties across the board, and the other one was very, very dyslexic, had all the visual difficulties, the poor tracking, all the visual problems, and English was a second language. But the root scores were identical, so looking at them without knowing the students, you conclude they were both general learning difficulties. But in the case of the first one, I, it was a discrepancy, I pointed out that she'd got a degree

in her first language, that she was holding down a responsible job, that when you talked to her she was fast, she was fluent, she was sparky, she was an oh can't think of the word, you can tell the dyslexia is coming in.

Q: Innovative?

A: That's that one, that's what I'm trying to say. And the eyes were sparky and she was not general learning difficulties. The other one 'My friends think I'm dyslexic because I fit a pattern.' There was no spark, there was no creativity, there was no, the vocabulary was very limited. What she was doing was what I would expect from the scores on the page. So of course you do.

Q: The discrepancy concept (...).

A: Yes, you'd be daft not to, you can't just go on the scores. And if you don't just go on the scores, what else are you looking for? But...

Q: So do you think this is more important in higher education than it is in schools where you've got the Rose definition?

A: Yes definitely. And also higher education, you can almost say that most of the students that get there that haven't been discovered already have got so much innate ability, they have compensated and masked, and you must do it more so. Because of their compensatory strategies it's not showing up quite as obviously, if it showed up that obviously they wouldn't have got to that level in the first place.

Q: Well it depends on the university sometimes!

A: Well, and the schools.

Q: So what would you need to see for no evidence of dyslexia with this particular student?

A: I would expect, for no evidence of dyslexia, I would expect no problems with working memory or short term memory, I would expect no difficulties whatsoever with any of the phonological skills. I would expect her to go through that test like a hot knife through butter, instant, instantaneously, no stopping to think about it, no having to re-listen. I would expect the reading to be accurate and her to understand pretty much on a first read through, not hesitant, not stopping and starting, and I would expect good speed of work.

Q: And you'd expect a flat profile?

A: It could get a little bit of a zig-zag, everybody gets a bit of a zig-zag, but I wouldn't expect wide gaps, it would all be probably within a standard deviation of each other. And I've had them, it's nice when you get one and you say 'Oh there's nothing wrong with this one!' It's brilliant, it just proves it's not me!

Q: If you did find that this student was dyslexic, would you consider them to be disabled?

A: I would consider them to be disabled in terms of being a student, and I would say to them 'You qualify for the disabled student allowance, you are not a disabled adult in the terms, in the wider terms of the act. So you can't get your parking badge, but as a student, because you'll need extra time than your peers to complete tasks, yes, we could as disabled students,' it's not a nice term, but it's the government term, and it's the one we use, and I put it in context.

Q: Would this be a problem with the proposed modernisation of the DSE criteria for eligibility?

A: Not if you re-read the wording because... I've got it here somewhere. You see the trouble is a disabled student and a disabled adult, how do you judge... People think of disabled people in the wider workplace as having physical disabilities, so we're not disabled in the physical. But if we have persistent day-to-day effects in the higher education environment, we meet the criteria of the government disability, government definition of disability, and it's long term. So yes they do, they are disabled, but within the label of disabled you only need adjustments when it affects you. So you won't necessarily need adjustments with parking, shopping and all of that, but for the workplace you will, and for universities you will, yes. So I would say they are disabled, but I tell them that they're disabled in the context of the academic setting. And I do mention workplace, if I'm assessing at university level I mention workplace, and in my reports I always put a reference in. And the latest book I've got, it's here, it came today, it's the Amanda Kirby one, 'How to succeed in employment with...' and I recommend books like that, and it's 2014, it's just out. And I like her books so I thought I'd gamble on that one. So it's giving them, employers must make reasonable adjustment, and I tell them in the school I work, I have no problems working in the school, no problems holding down a job as a teacher, but I have to write letters home to parents and because of my dyslexia I do not spot my mistakes, so my reasonable adjustment is if I write a letter home, I can ask anybody in that school to proof read it for me. My letters have to be proof read because I want them to be proof read, otherwise I would send letters home talking about eternal exams, because "eternal" exams don't show up on a spell check, and it looks like "external", to be honest with you, if you're dyslexic. I did write that in a letter once.

Q: Even if you're not dyslexic sometimes!

A: And also because I'm dyspraxic, and I normally am organised, but sometimes it goes wrong, I expect the school to be a bit more sympathetic when I've misfiled, like Philip Edwards gets filed as Edward Phillips and we can't find him. Oh, that happens a lot! And they have to accept that that is a genuine difficulty and I don't do it deliberately.

Q: So you would regard these students, or this particular one if you thought she was dyslexic, as legally disabled?

A: I'd never thought about it until we got the new wording, but I suppose yes, you'd have to.

Q: Mental impairment that has a long term...

A: Well it is. Is dyslexia a mental impairment or a different wiring? It's, I wouldn't like to call it...

Q: The legislation says mental impairment.

A: I know it does cause I signed up to it and ... Yes I would say, thinking about how I am and thinking about how they are, we have to, yeah, you'd have to go with that definition. I don't like it, but you'd have to go with it because I know that I have more problems than somebody with my ability without the dyslexia. I have lots of strengths they haven't got, but the day-to-day organisation, the memory, the speed at which you can do certain things . . . yes it is an impairment - if you're measured against them.

Q: What would you regard as the main purpose of this sort of assessment, from your point of view, rather than the client's point of view?

A: To do it properly.

Q: When you assess, what do you think is the main point of doing an assessment?

A: The main point is normally to identify if there are any underlying needs so they can be re-addressed or compensated for. That's the main point to do it. But to me the main point is also building up their self esteem, because having grown up as an un-diagnosed dyslexic, and met quite a few adults in this category, the vast majority have problems with self esteem because they've blamed themselves. So it's building up their self-knowledge so they can also make adjustments themselves. And it's ok 'yes this can be done for you, but this you must do for yourself,' and the big thing I say especially to the school children, but also the university ones, 'this explains that it's not your fault, but it is your responsibility, and now you know it's there, it's even more your responsibility to find ways round.' so it's not a carte-blanche to 'Oh I don't have to do that, I'm dyslexic or dyspraxic.' it's 'right this is your self awareness, this is why you really do have these problems, this is what you can do about it. And one of the adjustments is the university giving you extra time, but the other adjustment is you doing this.' and I always put strategies at the end of the report so it's got something practical they can do as well as the book list.

Q: So in your view resourcing would just be a side effect of your assessment, you wouldn't assess in order to get resources?

A: Yes, you're doing it as well. You asked me what my main concerns are...

Q: Yes, your main purpose... And the additional resources are just another bonus.

A: I mean I'm doing it, the reason we do it is so they can access help at higher education. But my main one, yes, it's nice they get the help, but I firmly believe it's a self-awareness and raising their personal esteem and ability to cope. Because when the resources go and they're in the workplace, they're still going to have to cope. So I think my main reason... I'm doing it because the university want them to have extra time, but I want them, what I want them to get out of it is what they can get out of it, and what they can do in the future. So it's really, it's enabling them to cope, and if you know, it's half the battle. If you know this is a problem, you can do this to get round it.

Q: Yes, and sometimes you might need help to learn how to do that.

A: Yes, yes.

Q: If you thought it appropriate, would you be recommending reasonable adjustments for this particular student?

A: Yes, if I thought it appropriate, if the scores backed it. You see she might just be reading slowly cause she's got visual problems, so you would refer her on to a behavioural optometrist, sometimes they've never had their eyes checked. So you'd ask questions like 'does the print move? Does it bow in?' you'd be looking for visual stress, I mean I don't test for that, but I would refer on. Because you've mentioned the speed. But if the keeping up with the reading is because her social activities are so huge... A friend of ours went to Cambridge I think, and he got in the rowing team, and he got thrown out after his first year cause he spent too much time rowing. So he couldn't keep up with his reading, but it's because of the social side. So you'd rule all that out.

Q: And drinking too much.

A: Yes, or taking what you shouldn't be taking, yes. But if there were genuine underlying difficulties... I've forgotten the question.

Q: Equity issues, do you think there are any equity issues around reasonable adjustments? Is it fair that some students get extra time and others who are probably undiagnosed but don't get extra time, or maybe they're foreign language students who don't qualify, well, who don't know that they qualify for extra time.

A: Well of course it's not fair; life's not fair. I mean I'm female and fat; it's... If you've got two students and they're both diagnosed and one gets help and one doesn't, that is not fair. If you've got a student with no difficulties whatsoever and one that has to re-read twice or three times, misreads, they should have adjustment because it brings them up to the level playing field. So is it fair that a student with dyslexia, dyspraxia, Asperger's, cerebral palsy, physical difficulties, has an adjustment? Yes it is. Is it fair that that student has an adjustment when

one equally as bad doesn't, but you don't know they've got it? Well it's not fair, but you don't know they've got it, and they don't know. So it's as fair as it can be.

Q: Is it fair to give all so called 'dyslexics' a blanket 25% extra time, for instance?

A: That's a hard one. You're talking at university, I would say probably not. You're talking at GCSE and A-level I'd say yes, because of the criteria, because of the demands... Or... But there again in my experience, and I've worked in a lot of schools with a lot of students since 1990, when we give 25%, which we do in the schools I work in cause the exams officer will not play 10, 15, they wont do it, it's 25 or nothing, and that's the schools decision, not mine. We find that the ones that only need about 15% get up and go before the extra time is up. It's very interesting, they use it, but not all of it. So I think if you gave 25% to everybody, not everybody would use it. The ones that... But then if you've got an underlying difficulty, how can you judge how it affects you? Because I know that there are days where it hardly affects me at all, and other days where I can't cope. Stress levels, the demand of the task, one exam you don't need because of the way the exam is worded. Another exam, you need more. I would say I don't think it's unfair. If they don't need it, they tend not to stay the full time. So I think yeah, why not.

Q: So it doesn't give them an unfair advantage?

A: If they've got an underlying difficulty, no I don't think so. And there was talk at one stage not timing exams at all and let people have as much time as they want, which seems to me the fairest.

Q: Cause some students have a very minor unfair advantage.

A: I suppose you have to say, yes I suppose in a real world you should be saying '17.5%, 19%', but who's got time to do it? And how do we know? I think it's very unfair to say 'Right well you're not quite... you can only have 10% and you can have 25%' because in another university they, the 10% 'ers would be getting 25%. So across universities that's even more unfair. And how, where is the cut-off point? Where is the 10, 15...? and how much cut off point do you have? Cause 10% is probably not worth having, 6 minutes an hour isn't it?

Q: Why 25%?

A: Yes, because it's a quarter I suppose and you're in the bottom... It's probably done statistically. I think it's fair that some should have more if the processing speeds are really, really down, talking 69 and below. Then I will write in my reports that although 25% is a normal adjustment, the awarding body could consider giving more if it is needed. But the way the exam boards have gone is they're now putting more and more emphasis not on what the scores say, but what's happening in the work place. So I tend to put 'If it's needed, if...' So I tend to put the caveat in.

Q: Let's move on to the second scenario, quite a different student.

A: Now he's had poor literacy skills, has he got a diagnosis, has he been diagnosed?

Q: No.

A: No. We assume English is a first language?

Q: Yes.

A: This is a harder one. Because he's done the BTECs... Is my name going on this?

Q: No.

A: Right. A lot of students that do BTECs haven't done it themselves and the coursework has been done by the college because they need to get their grades up. And so you get students that appear to qualify, they get on to a course and they, they're not clever enough. And we had one at post'92 Uni who had a D in his physics and he got a place at Uni on that D, and I was assessing this boy and half way through I actually said 'How did you get a D in your physics?' and he said 'Oh they did my coursework for me. I shouldn't have told you that.' He, no way could that boy have got a D in physics, he just couldn't have done it, he was general learning difficulties. Now John could be two things, he could be the general learning difficulties, just looking at this, that's been so supported that it's all been done for him. If he's had a history of literacy skills he might have had a reader and a scribe, they might have interpreted what he was saying because the schools need the blinking, that thing we have to follow, oh league tables, yes because schools need league tables, teachers help students to get the grades up, and that's why a lot of coursework has now been taken out of GCSE's and A-levels. But he could be a brighter student with a lot of dyslexic, dyspraxic issues, and has never had the correct support. I suspect possibly poor organisation because he can't get the stuff in at the right time. So he might be an undiagnosed, poor organisational one that, he just can't cope without much more support, but you wouldn't know without the assessment. And it's not, again it's not the scores you get, it's how they do it, it's the qualitative that builds up the quantitative.

Q: Ok, so you'd be looking informally for a lot of information.

A: I'd be looking informally as well as, yes definitely, that's what a good assessor does. Because all the manuals tell you anyway, 'it's not the test scores, it's what you see them doing.' and when we do our training we often give identical test scores but they're two totally different... Like a deaf student looks like they're dyslexic because they'll get the bad scores on CTOPP, but it's cause they can't hear, not because they're dyslexic. And if you look at the sub tests you can spot the difference, but you can't from the composite scores, so that's what you're looking for. And I've had this scenario several times, especially at post'92 university, and you get the two, you get the really bright ones that have never

had the support, and you've got the ones who really shouldn't be there in the first place, but that's not your decision. And once or twice I've had to say that it's really general learning difficulties and they don't qualify for the DSA. But sometimes it is general learning difficulties, but you've got enough evidence that there's dyslexia as well, and that is a moral dilemma, what do you do then?

Q: Well yes, I was going to come to that.

A: That's a very tricky one, and once or twice I've gone in to the uni and I've said 'I don't know what to do.' and the other ladies there, we've gone through it and I just don't know what to do, I get 'I don't know, help!' I've got friends and I've emailed, taken the names out so it's all confidential, but I've emailed scores across to people before now and they've done the same to me and we've both... And then you talk to the person, because again it's not the scores on the page, it's 'what were they doing? How were they doing it? Do we write...?' cause we're playing with peoples' lives, this is not done lightly. And you don't want to give a diagnosis that's not right. So it's easy to say 'Oh yes he's dyslexic, we've got below average scores.' it's harder to say 'Actually although the below average scores are there, everything is below and it really is general learning difficulties.' or 'Yes he is, he has got general learning difficulties, but he's also got more difficulties here.' it's very difficult.

Q: So if he's got general learning difficulties and happens to be dyslexic you've got that dilemma.

A: It's a very difficult dilemma.

Q: So he's disabled within the context of higher education by the general learning difficulties, as well as by the dyslexia, and so really your gut feeling is he shouldn't be there anyway...

A: But it's not your decision and you cannot, it's very difficult what you write because this report is going to follow them. Once or twice I have said... I actually, I haven't written they shouldn't be there, but 'they might be better on a more practical course.' I've often suggested a course change if they're doing sociology or psychology, which a lot of them seem to do, there are better courses that they probably should be on at that university that are more practical based and they will get the, they will cope.

Q: So in theory, even if they've got general learning difficulties and are dyslexic they would qualify...

A: Well it's difficult isn't it? And these are the ones...

Q: And you do get a lot of these students.

A: Yes we do, especially at certain universities, and we agonise over this, we... I say 'we' because there are about seven of us that do assessments at post'92 university, and every so often you'll get an email from somebody 'What

do I do about this?' and once I wrote 'general learning difficulties' and the girl appealed and asked me to look at it again, and I looked at it again and we passed it on to all the other tutors, we actually passed it on to, I think four of us looked at it. And we decided in the end that we would, it was general, but she did have some very articulate friends. And it was such a difficult one that one, I do remember that one and I did worry whether I'd done it right. But I looked at it again and I couldn't see that it was just dyslexia, everything was so plateaued, everything, and there was no problem with the visual tracking or anything, so you can't say 'No that was plateaued because she got poor...'

Q: Do you think the Rose definition has got anything to do with this? I mean, does the Rose definition work well in higher education?

A: No, but I do use it in my report, because of all the definitions I've found... I use the Rose definition and I put a little bit of the – then I say that the British Dyslexia Association have added this bit, so I do quote the Rose and I do put the little bit from the British Dyslexia Association. It's not perfect, but it's the best I can come up with. I don't like some of the definitions about dyslexia that are out there, and some of the American ones are ridiculous~!

Q: Such as what?

A: Oh I had an American mother at a private school who wanted me to assess her daughter. 'I've got auditory dyslexia, I want you to look at auditory dyslexia,' and I thought 'What the hell is auditory dyslexia?' cause it doesn't exist in the UK, auditory dyspraxia does so I thought 'Did she get it wrong?' so I looked it up on the web, and it's an American term, and it just means dyslexic, it just means the same, you don't process sounds in your head. So I actually wrote 'Well this is the definition of auditory dyslexia, but this appears to be covered by the British definition of dyslexia,' and that's what I did, I wasn't going to say 'Auditory dyslexia.'

Q: So from what you've said, when you do your tests of underlying ability with this particular student, you would be influenced if they were very low.

A: If there was no reason for them to be very low, there's no English as a second language, no second language spoken at home – because bilingualism can knock, it really can have a knock-on effect, and they've been brought up in the UK, but some children have been brought up in the UK and still haven't had the early experiences you would expect. So I always look, I always try to rule out any mitigating circumstances, and if there are mitigating circumstances and they're logical, I will use them, I won't look for them if they're not there, does that make sense? So, 'well he's got low scores but he's probably not that stupid really,' you'd write it like that. But only if, if I do think it's general then I will use general, and if it's general I won't give a zig zag in their reports, I will just give a list of the scores. Because if you've got everything down there and you do it as a pictorial one, god it's so awful for them to see – if you just do a list of scores it's, they're all low but it doesn't show, it doesn't look as bad. So I'm very aware of how I write them up as well.

Q: Yes, it's awkward because you want the assessment to be a positive experience.

A: Yes, and you always start off with 'these are the strengths.' and something is going to be a strength, or a comparative strength! I've used 'comparative strength' before now.

Q: I think you've answered this next one, 'what evidence might persuade you that the student did not have a specific learning difficulty?'

A: It would be not having the peaks and the troughs in the areas you normally associate with specific learning difficulties. You do have peaks and troughs, but not where you would think they would be. And the areas dyslexics on the whole do badly, and he's mirrored everything, there hasn't been any major shifts. Because normally when they're low ability but they've also got dyslexia, the dyslexia scores, instead of being 60's and 70's, are sort of 58's and 40's, so you've still got your shift downwards. And if it's all there, it's all there, that's where he is.

Q: Not specific?

A: It's difficult isn't it?

Q: So it's still a disability, but it's not a specific disability.

A: Yes, but is it a disability? It's so hard to know, is it just a continuum?

Q: Well if dyslexia is a disability within higher education, even if you're fairly high functioning, surely low ability or a lack of knowledge is a disability in that context?

A: Yeah it's so hard isn't it?

Q: It is, there is a lot of semantics involved.

A: Isn't there!

Q: So in what context would you describe this individual as being disabled?

A: Well I don't use the word 'disabled,' I, it would depend on what the assessment showed up – if I had evidence that there was dyslexia underneath it all, or dyspraxia, for some reason I'm looking at this boy thinking 'You're dyspraxic' I don't know why I'm thinking that, but that's what's popped in to my head, and there's nothing, I don't know this boy, I don't know even if he's real, but there's just something about the failing, he's repeating it – they normally fail because things get handed in late or they're not, the planning and the organisation, that's what I would suspect there. If I can prove that then I will say there is a specific learning difficulty, dyslexia or difficulties associated with DCD,

although it has to be – unless there are underlying medical difficulties to account for it, I always put that caveat in just in case.

Q: You would need some evidence, wouldn't you?

A: Yes, and you need some background history, the childhood history of difficulties, definitely.

Q: Your remit has been to assess him to see whether he's eligible for DSA in the hope of providing resources and funding, would you be prepared to label pragmatically?

A: No.

Q: You wouldn't, ok.

A: If I think it's a pragmatic language disorder or Asperger's, or anything out of my remit, I cannot label it, but I will absolutely refer on. And I have suggested for some they have a social, communication assessment with a speech and language therapist. I've referred on when I do think it's a language based thing, their receptive and their expressive vocabulary have both been severely impaired. And then I will say 'In my tests it's shown that there is a difficulty and he or she would benefit from speech and language.' So if it's out of my remit, like ADHD, I would refer on, I would not diagnose.

Q: Given that the student wants to continue with this course, his tutor obviously wants him to continue, you've assessed and really think that he's got general learning difficulties and you haven't got much evidence of a specific learning difficulty, would you be prepared to somehow help him get the funding that they want for him so that he can get support?

A: I, oh it's so hard because I've had students in this situation and if I... I am asked to look 'Is there a specific learning difficulty?' that's what I'm asked to do, and there is not. And I have to say 'there is not.' but I do say 'he should have support from the university in these areas, but he can't access the disabled students allowance.' but the university can do a lot for him. So from that point of view I would want him to get the support he deserved, but I would not be saying it was a specific learning difficulty when I knew it wasn't to access the support that way, and I don't do that, and it's hard. And sometimes you so want to, but you don't because that's my, I mean that's why I've got that certificate – I have to have my code of ethics and practice and I have to stick to them. And I don't let parents bully me, which they try to in school, I say 'I'm not saying it, it's not there, go somewhere else!' but then I use 'Not adversely affected by...' Not saying they're not dyslexic, you always put the 'not adversely affected by...'

Q: Good. And getting down to the reasonable adjustments, if you thought he was dyslexic, even though he had general learning difficulties...

A: I would then say, if I thought he was dyslexic as well then that would affect the WRIT, because if you're that dyslexic, and he would have to be, you have huge problems with word retrieval, you heard me try and do that 'innovative' – I still can't do it.

Q: Yes, innovative.

A: I have students that know 'That Beaver thing, Beavers, oh that sticky thing, that thing, they go in, it's in the Narnia films, that sticky thing and all the river builds up,' and they can't come up with 'Dam.' they can't get the mark. And you get boys that, girls do that, boys just go quiet and don't give it to you, but they know the concept, but they just can't come up with the word. So a very severe dyslexic will get low scores on the WRIT anyway. So how much is low ability and how much is the test we've got? Because there are other tests... The, you see the trouble is with dyslexia, if you get a low score on the WRIT there is very little we can give them that shows their ability because all the other tests are based on reading and writing, and he's going to be impaired. So you do it on the talking, when they're talking to you 'do you have any hobbies?' Sometimes in this case, I don't do it for most students, but occasionally I get them to talk to me and I write what they say and I compare what they're saying with what they're writing. And sometimes I read them a passage and ask them questions on it as opposed to making them read it. They're rare ones cause they take so much longer. But this one would probably be slipped in for him. And even then you can't guarantee that reading one because if his memory is down, he's not going to remember it anyway. So what are we testing? What... And that's what I say to them, I say 'this is a test of verbal ability, but it relies on skills you don't have so of course you're not going to do well.' If I give this to a blind student they're not going to do well at all. And I'd put that, for a student in this position where I suspect it's not general learning difficulties, I put the test in context, 'we have to use this test, it's the only one we've got, you're not brought up in America so you're disadvantaged to start with, it's using skills you've got a weakness in, I know you have because these tests are showing me. You don't have these skills, without these skills, you can't do that test.'

Q: But if you decided that he was dyslexic, regardless of his overall ability, and you recommended reasonable adjustments like use of a scribe and a word processor in exams, do you think this would give him an unfair advantage?

A: No because if, if the assessment – and it is a lot on, not do you like them, that's not fair, it's a lot of what they're doing and how they're doing it. Because we have to use the qualitative as well – if you feel this student really can't cope because the dyslexia is such a level, those are reasonable adjustments. He can't do it cause he can't read and write, he can think it, so you enable him to think it. I mean if you've got a student with really, really poor ability and you give him a reader and a scribe and there's nothing there to work with, you're not going to improve the scores. But if you give it to a dyslexic and there is something there to work with, you will improve the scores. So yes I would be – and I have recommended. I normally recommend the computer first, I say the voice activated and the computer (...) because that makes them independent learners,

which they can take in to the work place. But I've learnt to write 'The awarding body could consider letting him use these electronic aids in exams or a reader and a scribe so that they....' but they should have it because so many dyslexics are so blocked by this [holds up a page of writing presumably] and it's not this. If, and you tend to – 'sense it' is the wrong word, during an assessment you can pick up a lot. Sometimes we'll get it wrong, of course we will cause we're not perfect, but yes, it's not an unfair advantage cause you're just, you're liberated – to give a reader and a scribe to a child that can read and write for themselves would be an unfair advantage because it would be unfair to them because it would hold them back! So you know.

Q: Thank you, that's great.

A: I hope that's all right.

Q: It's very good.

A: It's hard, it's not easy to do, but I enjoy doing it.

- [End of Interview] -

Document 11: Copy of ethical approval submission

*STUDENT HIGHER-LEVEL RESEARCH
DISSERTATION/THESIS*



Graduate School of Education

Certificate of ethical research approval

DISSERTATION/THESIS

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School's Ethics Committee.

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I hereby certify that I will abide by the details given overleaf and that I undertake in my dissertation / thesis (delete whichever is inappropriate) **to respect the dignity and privacy of those participating in this research.**

I confirm that if my research should change radically, I will complete a further form.

Signed:.....date:.....
.....

NB For Masters dissertations, which are marked blind, this first page must **not be included** in your work. It can be kept for your records

Certificate of ethical research approval DISSERTATION/THESIS

Your student no: 610042677

Title of your project: Dyslexia: an assessable and valid category of disability?

Brief description of your research project:

The research project will focus on issues around the assessment of dyslexia in Higher Education students. It will survey and explore the knowledge, assumptions, concepts and attitudes of practitioner assessors, as well as those of others affected by their practice: lecturers, dyslexic students and non-dyslexic students. The data collected will be critically evaluated in the context of current disability legislation, policy and practice for dyslexic students in Higher Education, and for the contribution that it makes towards future policy and practice in the field.

Give details of the participants in this research (giving ages of any children and/or young people involved):

Phase 1: questionnaire surveys of 40 specialist teacher assessors and 10 educational psychologists, 20 HE lecturers, 20 HE dyslexic students, 20 HE non-dyslexic students

Phase 2: semi-structured interviews with 20% of each of the above groups

Give details (with special reference to any children or those with special needs) regarding the ethical issues of:

- a) **informed consent:** Where children in schools are involved this includes both headteachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document.

Participants will be made aware of the purpose of the research and of how the data will be used.

Phase 1 adult participants will not be required to sign a formal consent form – their consent to participate will be assumed by their willingness to fill out the survey and return it. They will, though, be asked to tick a box to confirm that they understand the purpose of the research and how the data will be used. No bribes or means of physiological coercion will be used.

Phase 2 adult participants will be asked to sign a consent form that will detail the terms and conditions of their participation. A copy is attached.

b) anonymity and confidentiality

Participants in both phases of the research will be assured of anonymity and confidentiality.

Participants will not be required to put their name on the first phase survey. They will, though, be invited to supply their name and contact details on completion of the survey, if they are prepared to participate in the second phase of the research. Surveys returned electronically will be printed out, any contact details detached from them, and the email to which the surveys were attached will be deleted. The hard copies, and the data extracted from them, will be stored securely.

The second phase data collection will be audio recorded, subject to participants' consent, and then transcribed. Participants will have an opportunity to edit, or withdraw, the transcribed data, should they so wish. At no stage in the data transcription, analysis or evaluation, will individuals be identifiable. All data will be treated with the strictest confidentiality. Every reasonable effort will be made to ensure that no output (e.g. dissertation, article, report, conference or seminar presentation) will provide information which might allow any participant (e.g. pupil, teacher, student) or institution (e.g. school, college, university) to be identified from names, data, contextual information or a combination of these.

Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:

Phase 1: questionnaire survey data collected either electronically or by having the participant supply it on a hard copy. Adult participants can choose whether or not to complete the survey. They will be assured of anonymity and confidentiality.

Phase 2: Interview questions will be semi-structured. Participants will not be pressurised into commenting on any issue about which they feel uncomfortable, for whatever reason. Their views will be listened to with respect. Participation will be entirely voluntary, with the usual assurances of anonymity and confidentiality. They will have the right to edit the transcript of their interview, if they so wish.

Give details of any other ethical issues which may arise from this project (e.g. secure storage of videos/recorded interviews/photos/completed questionnaires or special arrangements made for participants with special needs etc.):

Participants will all be consenting adults and so it is not anticipated that they will need special arrangements. Interviewees will be interviewed at a venue, and time, of

their choice. All data will be coded to assure anonymity and stored securely with protected passwords or locked premises, as appropriate. All hard copy data (e.g. transcripts and signed consent forms) will be stored in a locked filing cabinet. Electronic data will be stored on the University U-drive. Audio data will be downloaded from recording devices at the earliest possible opportunity, and then deleted immediately from those devices.

Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

It is possible that some participants might offer opinions that question the legitimacy of their professional organisation's code of practice. Such individuals might find themselves caught in a dilemma between being critical of their profession's policies and practices and reluctantly going along with them for purely practical reasons. The views of such participants will be protected by the researcher.

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

***N.B.** You should not start the fieldwork part of the project until you have the signature of your supervisor*

This project has been approved for the period: _____ **until:** _____

By (above mentioned supervisor's signature):
..... **date:**.....

***N.B. To Supervisor:** Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.*

GSE unique approval reference:.....

Signed:.....**date:**.....

.....
Chair of the School's Ethics Committee

This form is available from <http://education.exeter.ac.uk/students/>

Document 12: Copy of interview consent form

PARTICIPANT CONSENT FORM

I am satisfied that I have been fully informed about the aims and purposes of the research in which I have agreed to participate.

I understand that:

- There is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation
- I will be offered the opportunity to read the transcript produced as a result of my participation, and will have the right to edit or delete sections of it, should I wish to do so
- Any information which I give will be used solely for the purposes of this research project, which may include publications
- All information I give will be treated as confidential
- The researcher will make every effort to preserve my anonymity and will not, under any circumstances, use my name

.....
(Signature of participant)
(Date)

.....

.....
(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher

Researcher contact details: Denise Ryder dtr202@exeter.ac.uk Ph. 01305 262839

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Document 13: Assessors' survey text data

Section B: Assumptions about the nature of dyslexia

I sometimes find it difficult to distinguish between poor educational (and social) experience/opportunities and difficulties resulting from SpLDs - eg in terms of language use, expressive language skills, general knowledge, study skills etc.

I know that the discrepancy model (on its own) is not accepted, but sometimes find it difficult not to have a discrepancy as a key indicator.

?aire not tapping the range of issues involved in that some different clusters may indicate SpLD (a preferred term) this has led me not to make definite statements (I Think)

I was unsure what you meant with the question related to language Expressive language when this relates to difficulty with saying multisyllabic words can be an indicator

However general receptive and expressive language skills difficulties should be excluded as the cause of the problem rather than a n indicator of dyslexia

Dyslexic students in HE may have high underlying abilities and may be 'well compensated' if they have received targeted training with, for example, phonics. Their cognitive processing skills may in these cases not be below average, but low average. In such cases I would be looking for statistically significant discrepancies.

Co morbidity is relevant to some of these questions and we need to remember that we also assess for dyspraxia, ADD/HD, dyscalculia and have an awareness of AS and other communication difficulties.

Depends who you are assessing; a student at Cambridge university will present

very differently to a student at an agricultural college on a practical, foundation degree course. That is why an interview with past history is SO important.

In my opinion, the issue with respect to a diagnosis is fundamentally related to how it affects someone's access to reading, writing, organising and planning. Further additional support and funding is related to having a diagnosis. therefore it is important to not be affected by the surrounding aspects, which may give a reason for the status of a given person, but will reduce the likelihood of the relevant support, which may be required whatever the reason

I think the statements about 'exclusion of...' are not worded particularly well and I'm therefore not sure whether they reflect my answers! I'm trying to say that I would take into consideration sensory impairments and of course I would take into account experience/opportunities. General intellectual impairment I would consider but not rest conclusions on this.

A spiky profile is a misleading term. What matters is that an underlying theory of cognitive processing is used to explore how information is processed by the student, if a psychometric test is used then the relative theory would be Carroll-Horn-Cattell. The psychometric needs to be supported by clinical observation and clinical interview

This is a difficult area. I am agreeing that discrepancy is important because I see so many students, who, given a more appropriate education system in this country would be better training rather than on an academic course. I generally use a combination of factors for assessment and see many who do not fall below average on diagnostics, but have significant differences on a WAIS.

Please note that the term 'spiky profile@ is discredited and although often used has no statistical basis.

I, like many psychologists, believe that dyslexia should be strictly defined according to difficulties with phonological skills and the characteristic pattern of difficulties with spelling and reading accuracy etc that follow on from this. I am happy to diagnose other types of specific learning difficulty and processing weaknesses when they are both clinically and educationally significant and exert a clear and measurable impact on aspects of academic attainment. However, I would not describe a very weak processing speed for visual symbols in isolation, for arguments sake, as dyslexia even if it impacts on reading speed and reading comprehension.

The reason I have not ticked many factors as necessary is that I think you have to take a combination of factors into account, and also many adults have developed coping strategies that mask their difficulties. I wouldn't regard any one cognitive difficulty as entirely essential (although I would expect to find difficulties in at least some aspect of phonological processing, combined with processing speed and/or working memory). I am also conscious that there are many reasons why someone will achieve low scores on some WRIT subtests, without this meaning that they have general learning difficulties. of course it is also possible for someone to have low ability and dyslexia, and also to have hearing/visual impairment and dyslexia. I have to consider the profile as a whole, their history, the strategies used and then make a judgement on the balance of probability.

Great variety of students assessed. This can include 'other language' background, high underlying ability that has enabled student to compensate so scores appear reasonable, dubious level of underlying ability, dyspraxia, ADHD and so on! The tests available do not always meet the needs of the session e.g. the WRIT (inappropriate language range & visual reasoning heavily dependent on early childhood environment t), TOWRE (standardisation only to mid twenties), SDMT (old). The comprehensive testing needed adds stress as one has to work against the clock. Great work to do, though.

We don't 'measure' ability, intellect or intelligence - students have met the academic requirements for an offer of a university place, and are attending HE.

I'm not sure what your definition of phonological processing is, as I think it includes phonological awareness & rapid naming, and phonological memory (which overlaps with aspects of working memory). Adult dyslexics who are not below average in single-word reading often do not have phonological awareness difficulties. Below average Rapid naming scores are therefore more important in adults than phonological awareness scores. I selected 1 because I assumed you were including rapid naming in phonological processing, If rapid naming is not included in Q3, then 2 would be my answer.

Q4 Not sure what you mean by processing speed, as rapid naming tests processing speed. SDMT also tests processing speed. If you are referring only to SDMT scores, then I would select 2. By selecting 1, I assume you are also referring to rapid naming measuring processing speed.

Although many of the above are required to meet the necessary criteria to achieve the 'label' each individual should be taken on their own merit, and I feel PATOSS are taking the professionalism of assessors away.

History of difficulties with the acquisition of literacy skills - occasionally I have been told by a student that s/he did not become aware of real difficulties until a relatively late age, e.g. beginning of Key Stage 3 or 4; or even, once, until beginning "A" level courses. This often seems to be because s/he was enterprising enough to develop strategies, and prepared to work very hard, and therefore more-or-less "kept up".

"Below average difficulties with processing speed" - I hesitated between 2 and 3 on this one.

Auditory perception / visual perception - I'm not sure that I assess for these, except via phonological processing tests and questions relevant to possible "visual stress".

Receptive / expressive language skills: if a student has experienced long-term and widespread difficulties in this area, I would expect this to affect his/her literacy skills, but would not expect the same "pattern" of difficulties (as in most of the students I see) to be apparent. (I did see one such student recently, and had to do a great deal of thinking about what to recommend!)

"Substantial underachievement relative to their peer group" - usually but not necessarily - see first comment above.

Discrepancy between "ability" and literacy attainment - the DfES is clearly looking for this, among other "signs". I am not so sure, - especially when both are "low" but attainment scores are lower than ability scores.

Underlying cognitive processing difficulties which are impacting on attainment and learning.

Although the Rose Report is primarily for school age learners, I consider this definition when making a diagnosis

Please note: I am a recently retired (September 2013) specialist teacher who has fulfilled the role of Assessor for dyslexia in an FE college for a number of years. Assessments were used by students who sought support on HE courses at college and at other HEIs they were moving into. All responses on this and later pages are influenced by this background which seemed important to state.

Am just thinking of dyslexia here, rather than other splds

Difficult! I've put (1) for the exclusion of sensory, intellectual and poor

educational experience but sometimes it just isn't that clear. You'd certainly want some positive indicators of dyslexia if you suspected any of the latter were additional.

I am shocked and very concerned about the disabilist, out-dated, medical model language used in this survey, such as 'diagnose', 'Intellectual impairment', 'strengths and weaknesses', 'discrepancy', 'spiky profile', 'weaknesses', 'below average'. The use of such language perpetuates the way we, the 'professions', maintain people we supposedly aim to help in disempowered, dependent positions relative to us so-called 'experts'.

There is an increasing emphasis on statistical rigour in diagnostic assessment. In my professional capacity I frequently see, and sometimes need to feed back or make recommendations on, reports which I do not consider to be consistent with dyslexia on any level. As a passionate believer in dyslexia I don't think enough emphasis is placed on recognising when it isn't.

The "spiky profile" and discrepancy model is not the currently most favoured. Aptitude-Achievement Consistency Analysis is contemporary alternative to the traditional ability-attainment discrepancy model used to help in the diagnosis of dyslexia/SpLD

You need to establish to what extent student has been taught/developed coping strategies ie 'well compensated'. Literacy difficulties may result from poor education - doesn't mean they are not dyslexic. My understanding is that you can be dyslexic despite general intellectual impairment (I have seen it at University, but only twice). I am assuming there is not meant to be any co-morbidity with dyspraxia, in which case my answers would have been different.

The 'below average' phrase used in items 3-7 was interpreted as being 'in

significant difference or discrepancy' In my view a student can have above average cognitive ability (and literacy) and if the difference is in excess of 1 standard deviation an SpLD can still be identified.

I look for a discrepancy between underlying ability and phonological processing, working memory and processing speed.

Unsure what you mean by the last question - it is ambiguous. Do you mean excluding these factors, or should we take them into account? So have gone for middle answer. Please adjust to what you think best but I would expect any student dyslexic or not to sometimes have these problems so I would not use it as a diagnostic aspect, but merely report it as an (important) effect

Underlying cognitive difficulties may be low in relation to underlying reasoning ability but not below average as the discrepancy may be relative.

I read 1. as 'A history of perceived difficulties with the acquisition of literacy skills'.

I take the definition of dyslexia as having two main "kinds" - those who cannot decode to learn new words and those who can but cannot easily build a visual lexicon man rely too much on decoding - there may be a mixture as well .

Below average attainments are not of any value in themselves in a diagnosis - it is the interplay of scores including how they relate to expectations based on ability (sorry still stand by the discrepancy model!)

Students frequently cannot recall difficulties with the acquisition of literacy as some are able to employ strategies from an early age that circumvent these difficulties - so self-reporting in this way is not always a reliable indicator of whether literacy difficulties were present - careful probing must be used by the assessor to tease these out.

Ideally the exclusion of sensory impairments as the cause of literacy difficulties should be done, but it is not always possible to be certain, but this should not exclude a diagnosis of dyslexia.

Many verbal able dyslexic students and many mature dyslexic students have managed to find strategies to cope so below average score sometimes are not recorded but the spiky profile is always present.

In my experience difficulties with working memory coupled with structural language difficulties can impact hugely on literacy skills and their impact is not always taken into account in HE students with a dyslexic profile.

My answered important indicator but not always necessary response on the basis that the question specifies a below average score and also because not all would be present necessarily - I guess what I am saying is I would consider them more than an important indicator but not all would be required to be present! I hope this note is useful!

Although auditory perception has been shown to underpin phonological processing difficulties I know of no adult assessment of this which is why I have highlighted 'not necessary' as the information is not readily available.

I have come across students who have dyslexic difficulties and low abilities.

Although educational experience obviously affects early literacy skill development if a student has continued to access education and support later at school or at college and their skills are still at a level that would be supported with specialist software then I don't think their early educational experiences should impede them from accessing the support. There is no evidence that their skills would be more advanced had their education been different.

Happy to diagnose dyslexia if reading and spelling attainments are now average if there is a history as the student may have had some good help. It is important also to compare student to Uni level expectations in eg writing and reading speed. Maybe more likely to be ability/achievement inconsistency issue in students rather than absolute poor standard scores. As can be seen above many criteria are indicative and combined with others, it is range and overall evaluation not one thing.

Rather than just considering below average scores in aspects of phonological processing, processing speed, etc., I would look at standard deviations of 15 points or above, if that makes sense.

I had to have SOME experience of working with all age groups in order to gain my RSA (now OCR) qualification, but all my work after this was with post-16 people, especially mature adults.

It's very sad to see such 'medical model' disabilist language being used such as 'diagnose', 'average', 'poor', 'weaknesses', 'discrepancy' etc..

I have also worked for over 40 years as 'therapist'. I still find it tragic that educational psychologists still do not recognise that the language which we use about people with whom we are working are hugely influenced by the language which is used and, thereby, the people we are working with come to use about themselves. The language we use becomes us. It is especially damaging when that language doesn't 'externalise' the individual from the 'problem'.

There is a huge training need for people working with people labelled 'dyslexic' around this issue

Section C: Research positions influencing assessors' practice

Dyslexia as combination of abilities/gifts - depends on the individual but the aim is to find & use strengths.

An individual will not cease to be dyslexic, but may develop strong

compensating skills/strategies.

It is possible to distinguish between SpLDs - only to some extent as there is considerable overlap and each condition has variations of indicators/symptoms and intensity of these along a spectrum.

Environmental factors are not a cause of dyslexia but can be a cause of difficulties with literacy/study skills/and all the other areas associated with SpLDs - how to distinguish is the difficulty.

An individual is dyslexic or non-dyslexic: we have to make that judgement in an assessment report (and about other SpLDs to some extent now), but it is a spectrum and the individual may have many compensatory strategies. I did hear that we were now not meant to make this statement but replace it - and not just qualify it - by stating what the specific areas of difficulty are. I usually say if the person is on the dyslexic spectrum and summarise the strengths & weaknesses.

Again dyslexia not SpLD. Even guidelines use SpLD!

I think an individual is dyslexic or not. However I believe it is a spectrum from mild to severe

Also learners with co-occurring difficulties can be difficult to diagnose

I think diagnosing dyslexia is fraught with difficulties in the HE arena. One main problem is that phonological processing deficit is supposed to be the core deficit - then CTOPP seems rather insufficient; and I now always complete the alternative phonological awareness composite in order to have more substantive data. Perhaps this comment has been somewhat superseded with CTOPP2. I developed the impression at a PATOSS workshop that some assessors would diagnose dyslexia without this core deficit. If practitioners are

confused on this issue, i.e. that rapid naming deficit was sufficient to diagnose dyslexia (because of Wolf & Bowers 1999 double-deficit theory). Wolf & Bowers do say that readers with a rapid naming deficit can be more impaired than those with phonological deficit.

From questioning the PATOSS professional at the end of the renewing your practicing certificate day I was told emphatically that testees must have the phonological deficit. But since dyslexia is a social construct with a particular historical development I am not sure that these theoretical issues which impact on definition have been totally resolved - or even if they can be

in my opinion, as one gets older, although dyslexia may be, as from the Greek, an inability with literacy, there are other factors which have very significant affect both in secondary school and later. often the remaining difficulties are related much more to organisational skills, aspects of executive functioning and planning skills, which hamper young people with respect to note taking revision, timing of things and seemingly concentration. these aspects are sometimes considered to be resultant from laziness, when in fact this may not be the case.

Environmental factors such as lack of quality-first teaching can lead to difficulties that could be described as dyslexia... I wouldn't agree they are a cause per se.

A diagnosis is nothing more than a descriptive label that is theorized to have a neurological cause. However, the observations made are of a series of behaviours. If the neurological cause is true for the individual being assessed then the difficulties will be life long and affect information processing, rather than literacy per se, which with effort can continue to improve over time. Differential diagnosis is essential so that the correct reasonable adjustments are made.

Academic potential is slightly harder to agree on for students in HEI, however, for school age children there is a wealth of research evidence that shows that verbal comprehension is correlated with academic performance

Environmental factors make the student look like they have dyslexia on the day of the assessment - it is not really possible to tease these out in a one off assessment. More generally, there is research evidence to show that children and adults are assessed for dyslexia for a whole range of socio-political reasons I don't use cut-off points from manuals - the normal distribution curve is more useful.

Agree that the term dyslexia is not used rigorously and this causes lots of problems at all levels. As it stands many students in higher education are given diagnoses they don't understand and many university staff also struggle to understand what they mean and how best to help. Differential diagnoses are entirely possible (although some students will display broad profiles of difficulties that cut across different diagnostic boundaries). The thing that students find most helpful is to understand what they find difficult and why and guidance to help place this in the broader context of their skills and abilities. Students then need specific support that is tailored to their individual profile of difficulties. Widening participation has led to broadening of these categories and this is a different issue to be addressed. Many of these students with more modest level of ability and varied educational backgrounds do require support but this support should not be confused with support that is justified on the basis of a clear specific learning difficulty.

I think environmental and socio cultural issues can be factors, but not causes. I am cautious about over reliance on ability tests as I think they are flawed, and WRIT in particular is now quite dated, and otherwise able people often struggle, for example, with verbal analogies. Although it is often possible to distinguish between splds, there is often overlap or comorbidity.

point 6 - There is no 'cure' for dyslexia. However, as it is developmental (and adults develop many compensatory strategies), dyslexia can present differently at different ages/stages.

Widening Participation has opened doors justifiably but in occasional cases results in students with general rather than specific difficulties starting courses, and often with no prior preparation as ACCESS courses are less popular. The socio-cultural background can mean that the child's specific difficulties are not identified at school

However it is extremely difficult to determine whether Mature students, and particularly those from socio-economically disadvantaged backgrounds, have an underlying difficulty or educational disadvantage, particularly where those students request a screening within the first year, and sometimes within the first weeks of HE.

There are some contentious ones here!

"No widely agreed criteria..." - For this reason I always quote (in my reports) the BPS definition of dyslexia (1998 or thereabouts) and the Rose report definition (2009), and relate my findings to these. No-one's come back and challenged me yet!

"WAIS" or "WRIT" scores - measure of academic potential - a high score on the WAIS "verbal comprehension" index should indicate good academic potential. High scores on the other index scores, including "perceptual organisation", don't necessarily. Even a high score on "verbal comprehension" doesn't necessarily, e.g in an "Aspergerish" individual who is not academically motivated.

I cannot use WAIS as I'm not an EP. WRIT has limitations as a tool to measure

ability. We are constrained by the tests available to us (including the fact that many are from the USA

I would qualify my agreement that an individual is either dyslexic or not dyslexic. In an ideal world the term dyslexia might hardly be needed. People function differently and we should welcome their differences. The term dyslexia is useful (and necessary) in order to provide individuals with an avenue for support into our educational system.

There is generally considered to be an overlap (or horrible term 'co-morbidity') of the different categories of SpLD's. I often imagine the categories themselves to be a spectrum rather like ASD where each individual can have carried characteristics. Poor educational experience can result in lowered literacy skills but the underlying cognitive measures should not be affected.

I think socio-cultural factors can't cause dyslexia but can exacerbate existing difficulties or present as dyslexia. I agreed with the last question, not because I feel it should be that way but because there is great pressure on us to label students with low ability as dyslexic.

the comments made on the previous page still apply and are strengthened by the use of such dangerous words as 'potential', 'abilities', 'gifts'.

This page again appears to be be presaged on a flawed assumption.

Re the last question - it certainly shouldn't have done but in some cases may have done.

If dyslexia is a difference in the neuro wiring in the brain, then it is not just part of a continuum of normal distribution - although literacy attainment is. There is the rub.

I think I support the old Frith framework - that environment, heredity, brain

architecture etc combine to make the genetic predisposition to dyslexia play out in different ways in different circumstances.

I have taken academic potential narrowly- as in what our schools demand in the curriculum

They are big questions, some of them leading, which don't make a continuum type answer really easy to fill in.

Again compensation needs to be noted in individuals. I have seen 'low ability' students achieve far better than 'expected' due to their determination, hard work and persistence (personality traits can greatly affect results). I assume distinguishing among categories of SpLD is meant only where there is no co-morbidity. Several answers do not qualify my actual feelings/beliefs

Although I think there are widely agreed criteria as to what dyslexia is, I think this is being challenged at the moment by a broadening of its meaning. I understand that WAIS and WRIT are meant to measure academic potential, but I am unsure they do this with any degree of accuracy. Although I say someone either is or isn't dyslexic, some people have traits only.

The ones I have ticked 'unsure' are because: WRIT and academic potential depends on how you use the score. It can indicate you have academic potential, but equally, having an average/lowish score does not preclude you doing well if you put your mind to it and try your best at things.

An individual is dyslexic or not - ultimately I agree yes, but it can be difficult to differentiate sometimes. -- It is difficult to distinguish between different SpLDs - broadly this is true, but there is always that small area of overlap where you cannot be sure which category it comes into

I often worry about my identification of dyslexia. You know there is something

that is making studying difficult for the student but it is a medley of difficulties but it gets labelled dyslexia because you don't want to give multiple labels.

'Clinically recognisable' and 'essence' didn't work for me so didn't know how to answer. If MRI scanner available in clinical setting then, yes.

Dyslexia as it presents itself in HE IS more than diff. with literacy skills, but can't stand without it.

Diagnosis 'ought' to be stable over time.

I have not assessed in HE for five years but I have supported students and provided NMH tutorial support.

This could account for some of my 'unsure' answers.

I have seen the last question with other assessors but I think a full history and underlying cognitive weaknesses tease out issues of lack of education and one must not call weak literacy dyslexia

Writ/wais generally good yard stick of academic achievement BUT there are many exceptions and conditions.

there is an area of grey - widening participation has not broadened the meaning of dyslexia, rather it is the lack of applied definition/ criteria that has enabled assessors to 'give' a diagnosis of dyslexia for HE students who are struggling for reasons other than dyslexia as the students are seen to need help. This is increased when access arrangements given in FE for low attainment in literacy (students are often told they are dyslexic based on AA reports and 'having tendencies' when there is little evidence of it as the tests used are generally limited to literacy attainment and do not include writ type tests), are used as evidence of a specific learning difficulty.

I feel that sometimes, assessors are trying to err on side of dyslexia where students have insufficient intellectual capacity

The unsure button is used when the answer is neutral rather than unsure - there are occasions when what looks like a dyslexic profile is due to other factors but then it is not a dyslexic profile of course - just looking similar. sometimes the difficulties are so overlapping it is hard to pinpoint exactly which is which hence the unsure. Usually you can tell which is which but here are always the exceptions to the rule so I didn't want to be too dogmatic. Same for dyslexic or not dyslexic - training, personality, life experiences and motivation can mean that two people with identical scores and underlying pattern of difficulties cope so different that one appears to have no problems at all - hence not seen as dyslexic while the other struggles throughout their education and life. Therefore in the strictest sense some dyslexics are adversely affected by dyslexia - that is what I have taken the question to mean. However, even if compensating and so not adversely affected the dyslexic difficulties will always be present.....

Unsure answers may mean don't disagree or agree answer may not be that cut and dried rather than I am unsure which implies perhaps no view/knowledge.

I agree that an individual will not cease to be dyslexic but the measurable scores and difficulties/strengths may change may change with good intervention.

Dyslexia does not go away and although literacy skills and coping skills can be developed, difficulties often appear at times if stress eg particular types of examination

In my experience as a level 5 SpLDD specialist Teacher supporting HE Students, although they will always have dyslexia they are able to apply strategies to certain problems which may help the student to overcome the problem, so the dyslexia remains masked by the applied strategy.

What does "essence" mean far to vague a concept hence unsure. The 'gift' of dyslexia is patronising but I agree a combination of abilities, hence unsure. I see dyslexia as an individual difference in cognitive processing dependent on brain function but is not necessarily always bad – e.g. might be good a spatial and of course brain pathways can be laid down, but a gift hm..Not keen on term mental impairment but cognitive difficulties eg mld etc can be identified by cognitive test. .

I feel that much needs to be clarified in terms of what is a clearly defined difficulty, if 'dyslexia' can be clearly defined (and I know the latest research is pointing that way)...current testing protocol is more clearly defined than it was, but I think there's much confusion between 'dyslexia' and 'splds' in the broader sense of the word and still too much variance in interpretation...and much to be debated about the tension between assumed 'underlying ability' and the actual impact of working memory and processing speed deficits on the 'learning style' needed to cope with 'academic' study.

While I agree that individuals are either dyslexic or not, I think that dyslexia is a continuum and many individual exhibit some difficulty in some area; the important consideration is the extent to which their dyslexia affects them in studying/work.

Re widening participation, I do not think that this has caused a broadening of the meaning of dyslexia. However what it does mean is that individuals are taken on to courses at times with qualifications such as BTECs where they have had numerous opportunities to draft and redraft coursework and far too much 'support' from lecturers who are under huge pressure to have 100% achievement on their courses (I was previously in a management role in FE). The jump to HE is too much for them and their lecturers or the students themselves want to be dyslexic to get support. There is an unwillingness in education to have difficult but important conversations with students who have

little interest, ability or motivation to study that university is not for them, but that gaining some life and work experience would be much better for them. They may also not have an aptitude for their subject (eg a journalism student who has huge difficulty writing but not dyslexic) There is also now an assumption that anyone who wants to can gain a degree, Masters or even PhD. I have been faced with students who have extremely low ability, very poor literacy and whose parents are keen for them to get a degree. They are often allowed to retake modules and to go on to second year when they have not passed everything and will end up with a large debt and either a spurious degree or no qualification at all. They will have had personal tutors and teachers throughout their education who do not feel able to say this to them and I am their last 'hope' and have to tell them they are not dyslexic. They reach me for an assessment not understanding anything in lectures and often cannot write more than a paragraph with very high stress levels and extremely unhappy. Many students in FE are given access arrangements in exams because they are no good at reading or spelling and then assume they are dyslexic when they come to Uni, but have low literacy and therefore get no support.

I don't believe that environmental and socio-cultural factors such as poor teaching and impoverished socio-cultural background can be a cause of dyslexia. However, in the case of a potential mild form of dyslexia, because of lack of practice of reading skills at a critical time of development, reading difficulties can be exacerbated (the brain neural pathway circuits do not have a chance to develop; Paulesu et al., 2000; Wolf, 2008)

(Final question) - A number of students coming to me for assessment in the first year of their university degree course appear to have followed certain courses at school - eg BTEC and some A-levels - that have required very little in the way of serious reading or sustained writing. (They may even have had someone do the course-work writing for them, and often with BTEC there are no examinations). They have

sometimes been 'told' by a teacher that they are dyslexic, been given mega amounts of learning support, perhaps been granted extra time in examinations, and been advised to get assessed when they get to university. As a result, they arrive with a presumption of dyslexia, and perhaps an inexperienced assessor feels obliged to give the 'benefit of the doubt' to cover themselves against formal challenges that could perhaps result in a legal case.

I am generally concerned about the over-diagnosis of dyslexia. When I applied to PATOSS to renew my practising certificate in 2010, I submitted a report where I had concluded that the student was showing severe symptoms of scotopic sensitivity/Irlen syndrome but not dyslexia. (The student agreed with my conclusion.) He had a verbal skills standard score of 103, a nonverbal score of 130, reading and spelling scores of 101, 101 and 102, and cognitive scores of 95+. The single exception was the TOWRE sight word efficiency score of 79, entirely due to slow speed, which I considered to be consistent with his visual issues. However, my conclusion was not accepted by PATOSS. I was asked to reconsider my diagnosis on the grounds that if I had compared the test confidence intervals I would have identified significant discrepancies between his nonverbal ability and achievement in literacy skills that could have constituted a robust argument for a conclusion of SpLD. I was required to send in another report (where I made certain I had a classic dyslexic!)

It is often difficult to make a clear cut diagnosis of dyslexia, as there is often a co-morbidity with another or other SpLDs. Some of the questions above expect a definite yes or no, when it is not always possible.

The language used in these questions continues to reflect a perspective which is disablist and disempowering. It is, in inference, similar to that used by men about women around a hundred years ago to justify why women were different, in negative ways to men, such that they could not vote or take positions of responsibility outside the home. (and I'm a man It is also similar to that which

was used about black people. If the language used in this survey (notwithstanding the obvious physiological differences between men and women) were used about either women or related to ethnicity, it would be justifiably regarded as illegal

Section D: Attitudes towards the assessment of dyslexia

He student with flat profile: I would include all the background information, observations, interview etc. but it would be more difficult to justify a diagnosis of a SpLD.

Obviously, the problem with diagnosing students is that each individual presents with a different cognitive profile and that whilst the assessor may be trained to diagnose for dyslexia the student may in fact have another SpLD or other difficulties. If the assessor is not trained to identify these other learning difficulties there are different possible outcomes: a misdiagnosis of dyslexia, an assessment with a general "SpLD" diagnosis with references to particular types of tendencies (ADHD etc), or a false negative.

The difficulty with the student with the flat profile is that s/he will actually need more help than most with degree level assessments and if not diagnosis is available will not qualify for financed assistance. I can imagine a scenario where the assessor "explains" the below average underlying ability score by reference to how deficits in information processing can impact on performance on these tests.

I do not believe that we should be distinguishing between poor literacy skills and the effects of environmental factors, although for intervention it is extremely important that appropriate teaching strategies are out into place, based in my view on the principles of instructional psychology as outlined by, for example Dr Jonathon Solity.

I don't see myself as 'diagnosing', more identifying!

SpLD means more than dyslexia, there are many types of specific difficulties. The term serves only to distinguish between general and specific difficulties. Qualitative data and data from dynamic assessment is as good as psychometric data which is prone to standard error of measurement - what matters is an underlying theory of cognitive processing. Environmental factors and experience of reading affect cognitive processing as well as reading ability.

Not sure what you mean by 'below average', do you mean 100- or 90-. the WAIS manual does not use the term.

The general definition your refer to is too broad and includes a number of different factors that are not all equally strongly indicative of dyslexia. The psychometric measures on the SASC list vary in the extent to which they measure the purported skills. Some offer validity which is unacceptable and I would not use them. Literacy measures are the biggest problem. For example, I see frequent problems with interpretation of CTOPP - only some of the subtests within this measure phonological skills and this is often not clear. Generally, it is possible to disentangle literacy difficulties arising predominantly from environmental factors with careful history taking and good use and interpretation of appropriate psychometrics. This is not to say that literacy difficulties arising from other causes should not be supported just as strongly but it is important to identify the cause and come up with the right support that addresses the underlying issue. It is not true to say that I prefer using the SpLd label over dyslexia (tried to amend answer and couldn't). One is broad label and one a very specific label and both are appropriate in different cases and different situations. Don't quite understand what you are getting at when you say the diagnostic criteria for dyslexia are 'too diverse'. If you mean, should they be narrower, then yes, I agree they can and should be. If you mean has the

term dyslexia become too woolly or wide to be useful, then maybe, but this is unfortunate. At some point, the term dyslexia has been confused by some as referring to any type of specific learning difficulty that impacts on literacy skills and this has led to the situation we are in now. This is like confusing the terms 'mental health' and 'depression'. Yes, depression is a common cause of mental health difficulties but it is not the only cause and describing all people with mental health difficulties as depressed would not help us to identify the causes of depression, identify appropriate support or help people to understand mental illness.

Q2 I hover between "agree" and "unsure"

Q6 Occasionally I err on the side of "caution" and will give a diagnosis when I around 70% sure but not totally 100% This is particularly the case when students have a former diagnosis and history of exam concessions and have stressed how essential they feel extra time is to them

Whilst usually a flat profile would not suggest dyslexia, caution has to be exercised in the case of students with English as a second language who may be disadvantaged on some of the WRIT tests. Although I prefer SpLD, I do give a more precise label where I think it is clearly dyslexia/dyspraxia etc but have used SpLD for unusual profiles.

Point one - although I don't agree with the discrepancy criteria in general, it does help those students who are well compensated in some areas but would struggle to complete qualifications at a higher level (e.g. postgraduate level) without some concessions/support.

Although I understand the need for standardisation, we must understand the individual and therefore be able to feel supported at using more dynamic assessment tools.

"General description in DfES guidelines..." In a sense it is useful, - in the sense that it tells me what the DfES wants to know, therefore that is the information I will feed back into my reports.

"Confidence in the validity of psychometric tests..." - Not on their own; I always supplement them with observational evidence and the student's self-report (though the latter may need to be taken with a pinch of salt on occasion, or at least looked at in a broader light)

Dyslexia / environmental factors - I think I may have made misjudgements in the past, with students from overseas who have been educated in a system very different from what pertains in the UK.

"confident about using the label..." - only given that I quote definitions and relate my findings to those definitions.

"standard diagnostic criteria ... too diverse" - the DfES guidelines seem to be looking either for a discrepancy definition or for low literacy attainments, - it seems that either will do.

Some tests on SASC list should be removed - WRAT3 has been superseded a long time ago. NAB has poor reliability for some subtests and there are more recent, more reliable alternatives.

My previous comments are relevant here also. Assessment is useful in providing a picture of barriers to learning. It can help the learner understand his/her strengths and difficulties and provide information that will help those who teach. The label that becomes attached serves only to fulfil its limited purpose.

I think it is increasingly difficult to rely on tests which are normed in the US.

I feel that I could add to these and the previous statements if I had much more time than I currently have to devote to this questionnaire.

It seems to me that 'dyslexia' is an umbrella term for a number of difficulties that all have the same outcome - an individual fails to learn to accurately decode and encode.

I think the DfES guidelines are very, very sad because

a) they reflect a medical model perspective which is inherently disabling and disempowering of people. The view that the label is liberating reflects the Victorian attitudes to disability which so many 'professions' have in terms that the 'disabled' need to be grateful for the professionals 'rescueing' label, even though that 'label' consigns the disabled to the belief that they have some kind of illness that they are dependent on others to provide the 'fix' or the 'treatment' or the 'support'.

b) they consign a huge group of people for whom the formal education system has been disabling to a continued state of failing to understand why their educational experiences are so difficult. This is the group who don't fit the criteria which the 'expert' group deem appropriate.

c) some of the questions I felt uncomfortable answering because of their wording e'g' I don't 'diagnose' anything. I leave 'diagnosis' to trained medical people who diagnose illnesses.

I have, for the last fifteen or so years, acted as advisor to the main law firm which acts for the main insurance companies which underwrite the schools, universities, education authorities, social services departments and hospitals regarding issues related to some aspects of neuro-diversity. Through this work I have therefore seen various people who have endeavoured to sue schools/colleges for 'failure in duty of care' regarding, for example, issues

related to 'dyslexia'. These people had all previously been seen by various 'experts' in the field of 'dyslexia', including national figures, (names can be supplied) strongly supported the individuals' claims for damages. When the 'experts' findings and my own were compared, all the cases collapsed on the grounds of the 'experts' having failed to identify the key aspects of the individuals' functioning which various situations were making difficult for the person. Sadly, none of these other aspects are reflected in the guidelines because the guidelines were established by similar 'experts'. Fortunately, very recent information is emerging which is beginning to, at long last, support the inherently flawed perspective of 'dyslexia' on which the DfES guidelines are based.

It is absolutely crucial that those guidelines are re-written.

Where I have said 'unsure' on this page: the tests on the SASC list vary in their validity, and I would hope that an HE student with a flat below average profile would not be called dyslexic - they would not by me - but I've seen too many reports in which they have, not least because of the DfES descriptor, which is far too broad. Personally I use the 2010 BDA definition. The third 'unsure' is because I'm wrestling with just such a report at the moment - scores all over the place but I think mainly weak academic skills (not ability, although that was all over the place too.)

One of the hardest parts of working in HE, is the lack of available background information for many students- so it is hard to know sometimes whether there is more environmental impact that could have resulted in the presenting skills,

Once again it's hard to encapsulate what I think with agree/disagree. For example "I prefer the generic label SpLD" - well no, I don't, but when writing up a Diagnostic report for someone who is not clearly dyslexic yet still has difficulties with processing/memory etc it is useful. So I find it expedient rather than liking it.

I have some reservations about tests such as WRIT, and to a lesser degree WRAT, where there is a strong cultural bias. I appreciate why it is required but...

For "unsure" please read "it depends"

Some of the psychometric tests do not always measure what they are supposed to, although some are very good.

Question 3 I use three diagnostic factors - reported evidence, observed behaviours and error type analysis and statistical scores. Therefore it is not all about the scores

Re Q 3 - I would replace "would not" with "should not". In our University, we look for a 'spiky profile'. However, some EPs would diagnose those described above as dyslexic. We try not to use these EPs!

I assessed a student once who had clear evidence of dyspraxia. She experienced severe pain when writing and her handwriting was unreadable. She had severe organisational problems (used to get up at 5am to be ready for college. All her scores were at the lower end of the spectrum. Her profile was almost flat. I used her underlying verbal reasoning score to argue the case for dyspraxia because it was discrepant with her literacy scores and underlying cognitive deficits because her history, present difficulties and assessment observation all indicated dyspraxia. I still think about this student though because most of her scores were so low. ALSO Underlying cognitive difficulties may low in relation to underlying reasoning ability but not below average as the discrepancy may be relative.

Some students like to be labelled "dyslexic", others do not and prefer Spld. I

use both terms in reports, the aim being to help them to understand their learning needs

A flat profile may be due to cultural and educational deprivation and cause the culturally biased WRIT for example to undervalue the ability of the student. I think every student must be regarded as a unique case and the range of difficulties described - labels can be too inflexible so there may be some attentional issues or slight dyspraxia etc. as well as dyslexia. The underlying cognitive profile is important

I am aware of research on overlapping conditions/symptoms. I favour the working memory theories of learning, especially simultaneous processing- limited capacity- development of automatization: plus the inclusion of writing. I don't subscribe to single cause explanations of dyslexia. I believe individuals and their experience affect patterns of cognitive processing learning inefficiencies.

Flat profiles can be found in English as second language with visual difficulties - hence performance on ability tests are very impaired BUT there are usually signals that the scores are unreliable - way student talks in assessment - speed of response - academic background etc. Do value the tests on the SASC list BUT all scores need to be interpreted and not relied on alone - not what they did but also how they did it etc.

I use the Rose report definition 2009 in mind as the more up to date definition. The flat profile would make me look closely at other qualitative evidence before discounting an SpLD.

I generally feel confident about distinguishing between dyslexia and poor literacy skills but I do find it occasionally difficult / confusing.

As for the question arriving at diagnosis when the quantitative evidence contradicts qualitative... sometimes.

I prefer the generic label “SpLD” rather than “dyslexia” ... sometimes I prefer it. Depends on the profile.

I am interested in the questions which talks about dyslexia being different due to poor literacy skills due to environmental factors- why should it and which environmental factors does this include. The BPS definition of Dyslexia includes "response to adequate teaching" surely inadequate teaching is an environmental factor.

I would also like to comment about the lack of research in the DfES guidelines about the fact that there is no qualitative difference on the strategies to support literacy difficulties, whether the pupil has dyslexia or not.

You can never be totally sure of the impact of environmental factors.

It is important that the correct choices of standardised tests is made to obtain a true profile of any individual and conclude that dyslexia is present.

SpLD too wide - would include eg dyspraxia, dyscalculia ADD etc although it is true these can co-occur and overlap.

'Flat' profile - don't like flat spiky, too vague, but one can get someone esp child outside HE who is mild and dyslexic

I generally have confidence in the validity of the psychometric tests on the SASC list – i.e. that they measure what they purport to measure - I am not sure about this statement with regard to students who have English as an additional language.

I find that medical students in particular HATE any label containing the 'learning difficulties' term and even avoid assessment to avoid it!

The DfES guidelines are appalling! I act as advisor to the law firm acting on behalf of the major insurance companies which underwrite most of the Universities, Education Authorities, Social Services Department, and hospitals of the UK regarding various issues when individuals sue those institutions for 'failure in duty of care' over, for example, failure to 'diagnose and/or provide for the individual's dyslexia'. In support of their case, people are seen by various 'experts' in 'dyslexia' who write reports to support their case. I also meet with the claimants. Since I became involved about 16 years ago, all of the cases in which I have been involved have collapsed. This has been sad because the people actually had just causes but failed because the 'experts'(names can be supplied) failed to actually identify the complexity of the person's difficulties. The reason being that the 'experts' 'diagnosis' was based on the very same perspectives as those used in the DfES guidelines.

Fortunately, very recent writings are reflecting the profoundly limited perspective of 'dyslexia' which the 'experts' who set up those guidelines adopt. References can be supplied.

Section E: Dyslexia and disability

Neuro-diversity point: can be demeaning for some, but need some recognition of the difficulty it can cause when operating in an academic culture - and it can create an expectation that all dyslexics will have exceptional strengths in other areas, which is not the case.

Impairment vs literacy expectations at HE - there should be other ways of assessing but I'm not sure how far academic writing should/should not be part of the marking criteria - there should be ways of capturing the content eg assistive software, scribe etc.

The issue is not just about literacy surely. Issues such as organisation are important as are appropriate study skills.....

Most institutions are working hard to make environments more inclusive and to remove barriers to learning - I am on a working group at the University of Manchester which is trying to introduce University wide teaching practices that will support more students without the need for assessments.

On the question of whether the inclusion of dyslexia as a disability has freed individuals from discrimination, although I think things have improved, particularly in the higher education sector, sadly, discrimination has not yet been eliminated.

Re last point - dyslexic students are 'impaired' regardless of academic expectations although I believe that the teaching style, environment and the ability for teachers/lecturers to 'notice and adjust' are key elements for successful outcomes.

Dyslexia is not a disability, it is an input/output difference in the domains of reading and writing - which are not innate skills - based on a constructed alphabet and phonetic code. Humans are diverse in a myriad of ways, but difference does not necessarily equate to disability.

Institutions should seek alternative assessment criteria in this day and age.

Some of the students I have seen will clearly benefit from higher education, but need some support to meet the literacy demands of their courses.

Others - possibly the majority - are likely to struggle with the course, even with literacy support, and end up with a not-especially-good degree in a not-especially-sought-after subject. And (these days) heavily in debt into the

bargain. The last question above seems almost to imply that academic institutions should lower their literacy expectations. I think on the contrary that many students should be following a different sort of course.

I have agreed that it is right that the Equality Act recognizes dyslexia as a disability only because this is a means of addressing a potential barrier to learning.

Dislike the term 'disability' when applied to dyslexia. Prefer 'difference'.

In the last question, I think it is down to both. Some students I have seen would struggle to succeed academically even if the institution changed radically.

Many students are fairly happy to be labelled dyslexic, but less so to be labelled disabled. However most accept that it is necessary to access funding for the DSA.

Legal recognition of dyslexia as a disability has not freed affected individuals from humiliating discrimination, they continue to face discrimination, particularly in our schools.

Ahhhhh! Progress re the language. However, I think the word 'Equality' in this context is a misnomer. It appears to me that the current language used about 'disabled' people is similar to that which was used about women over a hundred years ago and about black people up to. I ask you to consider what the response to your survey wording would have been if the subject matter was women or racial issues rather than 'dyslexic' people. I suggest you would have been rightly accused of breaking the law!

Unsure here means - it depends on the individual student, their course choice, attitude and level of awareness. I am not a strong supporter of the strong social

model of disability.

Equality Act much better name than DDA- and it is a shame that Uni cannot move away from the Disability word

I feel the last statement is a leading statement that can't really be answered without a fuller response.

I think dyslexia or SpLD should be a separate category eg Anyone with a disability or a SpLD should not be discriminated against. I am dyslexic, I am not disabled, it is just that I may not do somethings at the same speed as many others of my ability, however I do things a lot quicker than others of a lower ability - does that make them disabled ?

The final statement is awkward, because, though institutions are using alternative assessments, it is ultimately a literacy enterprise and we enter it knowing this. But then this exclusionary experience

I think of disabled as someone being 'disabled by' the views, rules etc of other people, institutions etc. With appropriate tuition, support, aids etc. they need not be disabled.

Academic institutions take in too many students with below average literacy, maths and English language competence.

Legal recognition has helped but we still have the discrimination from those bigots who think it is all an excuse and we could do it if we really wanted to. Not as bad as it was but still very present.

And technology can demonstrate the last statement

I would prefer that the word impairment was used

Dyslexic students are disabled not by their “impairment”, but by the literacy expectations of academic institutions - re this statement if 'reasonable adjustments are in place and an individual engages with support then standards should not be thought of as being compromised.

It is right that the Equality Act 2010 recognizes dyslexia as a disability... Only because it establishes rights in law. I am not sure I consider it as a disability.

I'm not 100% on the Equality Act year in which Dyslexia is stated as a disability,

I know I have been inconsistent above! I think DSA act has really helped dyslexics but don't like the term "disabled" Don't like the term neuro-diverse either – again smacks of incongruity in counselling terms. Dyslexia is of course defined by universal literacy as it were.

I think that ideally we should be accepting of neurodiversity and teachers should meet the needs of all their students through inclusive practice. I am aware that many dyslexic students do not consider themselves as disabled and this can be upsetting term for them, but it has been an important step in ensuring that people with dyslexia have reasonable adjustments made for the until things move on further

Rather than a disability I would rather refer to dyslexia as a difficulty, or possibly a difference.

I often find myself explaining to students that dyslexia crept into the 'disability' category in order to gain funding for it.

Difficult questions!

The last one is too general. It would depend on the institution, as they vary widely in their expectations and understanding of dyslexic students. Some might fail students, while others could be very encouraging. Lack of continuity - as ever with dyslexia.

The legal perspective is debilitated by the 'medical model' perspective of 'dyslexia' which is adopted by those 'experts' who hold the power to define it. I think it legitimate to ask who gains most from the label of 'dyslexia'. The labellers or the labelled? It is my view that it is the former (Illych - 'Disabling Professions' and Foucault's perspective).

Section F: Assessors' knowledge of disability legislation re dyslexia

Eligibility for support: this varies between institutions but LS tutors strive to offer support to any student who needs it whether they have DSA or not. The reality of funding means that only DSA recipients get the support in many cases. This is difficult as many students may not qualify for DSA (if they can afford the assessment) but do show some difficulties, whatever the cause.

Would like to see HEI offering more help to students generally (inclusive argument!)

I don't like how learners with dyslexia/spld are labelled as 'disabled'

I don't like the word 'mental impairment' but it is in the legislation.

I work in the ROI, so not necessarily sure about some of the legal issues.

Further work is required by the government to ensure we meet the medical and social models of 'disability'. The word creates a positive platform to access

funding, but equally can negate the self esteem of the students and attitude of the HEI's.

I am fairly vague about the Equality Act 2010. I write my reports based on the DfES guidelines, and they then seem to drop into a "black hole", - there has almost never been any come-back. Presumably they are used by the students to apply for the DSA.

I think no. 3 depends on the institution.

The first statement is surely a matter of legal definition. Ah! I see! I think all of the statements are.

As far as I understand it to be eligible for reasonable adjustments a dyslexic student must be in receipt of a DSA is applicable only to post 18 education

As I understand it, the legal framework related to neuro-diversity is very damaging because it is built on the premise that the 'problem' lies within the individual, rather than the context in which the individual is working/studying. This is similar to the premise which underpinned male justification of restricting women's rights over a hundred years ago.

I think there is a problem with the 'mildest' level of dyslexia, or perhaps with the 'severity paradox' where the ablest individuals have the widest discrepancies within profile but may have a much greater chance of developing compensatory strategies, immediately qualifying for DSA. I also think there will eventually need to be dialogue between the diagnosis-driven model in HE (which certainly does support many students way beyond the demands of the Equality Act) and the score-driven JCQ model. There is also the issue of competence standards.

Is the word "Mental Impairment" used in the Equality Act. I didn't know!

Not sure what you mean by the first question.

Are you questioning my knowledge of the Act or what I think about it ?

Qualifier to Q 5 - HEIs would make reasonable adjustments for students with a temporary disability, so not covered by the Act. They may not have a legal duty to do so but would find it difficult to justify in court if they didn't.

I think that sometimes we give students the identification of 'dyslexia' so that they are recognised as being disabled and are able to get reasonable adjustments when all the need is extra time in exams. We know they wouldn't perform to their full potential without it. There is all the evidence for there for extra time but my understanding is that it can't be granted without identification with a SpLD.

There are many overseas students who are not entitled to DSA.

There needs to be some research asking students how they feel about the assessment experience.

Really not sure about last question as I can not work out what HEI stands for I am afraid!

I don't work in the UK so I'm not fully informed of the implications of this Act.

The Act has been helpful but I don't think you have to be have a definition under the act to get help - should be available to all really, tho' I see it has been valuable for many disabilities/difficulties

I am not 100% sure why you use the term 'diagnosed mental impairment' on this page, also the specifics of maximising academic success I feel is arguable.

Section F: Equity issues and reasonable adjustments

If one uses a pragmatic definition of dyslexia then the discriminatory issue is reduced

HE seems to be a diagnosis led model of support as opposed to a needs led model as we strive to in schools

Study support should be more widely available for undergraduates. Post graduates can often access a range of courses to improve their academic work. Examinations should test knowledge and skills and accommodations should be available to anyone who wants them. This is really a cost issue.

There's a researcher bias in that last statement.

I do agree that any student who is struggling, for whatever reason, should be given some support either through their subject tutors or a study skills centre at the university.

See my reply to the immediately previous batch of questions.

The EAL situation is a minefield as more speakers of several languages are getting a place at university without their English skills being up to academic study.

It bothers me that only students whose parents can afford an assessment or are clued up can have an assessment. Some schools are hopeless and kids in those schools miss out.

I think the whole concept of 'reasonable' in this context is fraught because of the flawed assumptions on which 'dyslexia' itself is based. If those flawed assumptions are dealt with, then a whole series of functional difficulties about the DSA are resolved.

The problem is that the concept of 'dyslexia', as it is generally conceived, suits 'professions', whose status and livelihoods depends on it, more than people who are labelled 'dyslexic'. (Illych, 'Disabling Professions') and Foucault.

The reality is that it is reasonable for employers to expect a certain level of literacy from the holder of a degree, and extending RAs to anyone who simply doesn't have the literacy skills to succeed in an academic environment is not levelling any playing fields but raising unrealistic expectations.

I have noticed that some assessors/needs assessors will recommend absolutely every type of assistive technology to students who are quite competent. An example was a student who had illegible handwriting but typed at 70 wpm- he was recommended voice recognition software in exams and extra time. Had this been implemented it would have been unfair to others- when I discussed it with the student he was quite happy to have the use of a computer and no extra time as his typing speed made up for the slightly slower processing speed. Every adjustment has to be justified by the students profile of results.

Question one - they shouldn't be, but I don't know what goes on elsewhere, we try to make sure only those that 'deserve' exam arrangements get them; generic study skills are available to all students. I think some resources under DSA are unfair, particularly a laptop (every student has one, why should you get one free just because you are dyslexic) but much of the software is now available free for anyone or part of the package automatically acquired by all students anyway (laptops with build in recording).

Third question is a hotly debated subject here, but I probably lean towards disagree.

Reasonable adjustments are negotiated after the assessment, by the student and their learning advisor. Sometimes Occ. Psychs. are asked to do a workplace assessment and specify the adjustments according to need and conditions on the job, but this is an additional service not normally included in DSA assessments

confusing deprivation with disability is not helpful. Universities should ensure that deprived students have the right preparation for universities - Access courses having been excellent are now a bit suspect - I have seen very inadequate students passed.

Dyslexia is genuine difficulty due to brain wiring which can adversely affect students especially in timed conditions and will always be present. The other two disadvantages will disappear with appropriate training and experience.

Reasonable adjustments commonly made for dyslexic students, such as additional resources, study support and examination accommodations, can be unfair to other students... In some cases yes.

It seems discriminatory to allow reasonable adjustments for dyslexic students and to deny them to others whose literacy skills are similarly affected due to their socio-cultural or ethnic background... Yes, but this is the same for lots of people. I think a line has to be drawn somewhere or the applying of reasonable adjustments becomes too convoluted and confusing.

If literacy is affected by socio-cultural etc. should get appropriate support to, but not unfair if dyslexics get help too.

I find that students who are struggling with their course particularly want 1:1 support and this motivates them to request a dyslexia assessment.

The concept of 'reasonable' causes huge difficulties for the current perspective of 'dyslexia' as an 'all or nothing' 'condition'

Section E: Inclusive practices

I have marked two of the above questions 'unsure' simply because in my opinion, I cannot generalise about the nature of support needed for dyslexics because their needs are personal and diverse. Some dyslexics do need specific, targeted specialist support; others might have their needs met by high-level generic support.

Ghetto comment - depends how it's done; the support needs to be discussed and 'owned' by the student so don't feel it a negative experience at HE.

Interesting questions - I want both - the specific dyslexia provision and enough wider provision to support all those who need, without compromising either!

This is about what the views of HEI are, some would not bend at all so keep it specialist, better to have a system for all students though

It seems that my replies are contradictory and indeed I am in two minds over these questions. I think that institution wide provision that is flexible enough to cater for the needs would be ideal. My problems is that for the severely dyslexic students I do believe that they benefit and require more individual and specific specialised support. I think that removing this would place them at a disadvantage within the system. However, those with mild dyslexia are probably at not more disadvantage than many others without a diagnosed SpLD.

The issue here is confused I think. the issue is that diagnoses remain pertinent

because of the paucity of careful analysis of individual needs and because of the generic homogenous nature of examinations, especially as now further recommended by Mr Gove. if there was individualised assessment methods and good identification and allowance of / for different ways of learning and getting to par then diagnosis would be able to take a back seat - and that is the direction we should be travelling in.

A dyslexia friendly institution would cater for all dyslexia needs in a generic way - it would also help academics become better communicators and reach a wider audience in their own publications and public engagement

Moving towards generic adjustments would discriminate against students with marked and severe difficulties. We would be back to system where those students were denied the opportunity to engage with higher education and become disadvantaged. Students with milder difficulties and for whom literacy difficulties arise as a result of other factors (educational background, ESL, stress) may benefit from generic support though this will always be second-best.

We do need institutions to be have inclusive practices, but there would still be the need for individualised support. I don't see another way to help with exams than the access arrangements, unless examinations were abolished altogether, and a more inclusive way of assessment was possible!

Have worked in FE where support to less targetted and the students were not as well served. However the DSA needs assessment process has grown. In some cases a standard issue of helpful software and equipment could be considered with more detailed assessment of need for those with complex situations. I have just read on a PATOSS Forum that neds assessors pay little attention to comments from the diagnostic assessors.....

In an ideal world all the above could work together to ensure every student reaches their potential through good teaching skills, targeted support and a more [positive attitude to learning differences by society in general.

Nearly all the students I see are studying at one specific HE institution. That institution's "learner support" staff have given me to understand that students will always have a "needs assessment" following a positive identification of dyslexia / other Sp. LDs, and that any recommendations I have made will be taken into consideration, but not necessarily followed. Hence I have no knowledge about the actual provision made.

Also, to answer the above questions with a more definite "agree" or "disagree" I would need to know what sort of standards obtain among students not identified for assessment by myself or another assessor. Which of course I don't, except very informally or anecdotally by reference to my own children (now adult) and their friends.

Removal of bespoke disability provision is extremely risky. Enormous care would be needed to ensure flexible institution wide provision for all students.

I would agree with this sentiment but this needs enshrining as a right for all. If there is no obligation or legal duty then in these penny pinching times I would not be confident of this support happening.

No. 1 sounds great in theory but may well be a way of institutions dodging their obligations.

No. 2 - often, but not always the case

No. 3 - as a specialist tutor as well as freelance assessor, I have a vested interest in arguing that we should continue to support dyslexic students!

Students vary greatly in their attitude to access arrangements; some feel

'ghettoized' while others do not.

But the first statement, if put into effect, would bankrupt most universities!
My responses to 2 and 3 seem to be contradictory, but that is because of the lack of resources. Similarly 6 and 7.

If bespoke disability provision for dyslexics were to be removed and replaced by institution-wide inclusive practices the provision would become VERY uneven and at the mercy of the competence/motivation of the school staff.

Very interesting issues raised here. Having been involved in planning provision for FE students across Wales when FE Colleges came out of Local Authority control in the 1990's, these issues were central to our discussions. There is, in my view, no doubt that the institutions, in various ways, create the 'disability' for the wonderful variety of learning rates among students. However, this is not a single strand issue with, by extension, a single strand 'solution'. If we look at what has happened to FE provision for 'dyslexic' and other non 'typical' learners in Wales, the original way of providing for diversity of learners has been largely lost. I would be happy to supply you with the various documents and training materials which were developed for FE to become more inclusive as well, as discuss this matter with you. It has been my experience that one particular group which has been very uncomfortable with this and, at the very least, done nothing to support such inclusive moves has been the 'dyslexia experts' because such inclusive provision removes the need for their 'specialism'/'expertness'.....we're back to Illych again. It mirrors the way special schools worked hard to sabotage inclusive education in the pre-16 sector.

However, such experiences should not imply that HE should not become genuinely inclusive. I do a lot of work in occupational health and the world of work is, from my experience, much more 'inclusive' than Education.

I would love to see inclusive practice expanded and DSA support reserved for particularly severe/complex cases. The first 'unsure' relates to visual stress - much better remediated at individual level. We made all exam papers be printed on cream paper years ago. Now students complain this makes their blue overlays look green and request white paper. The exams office is not happy. If Peter Irons is right about optimum font sizes, I for one absolutely DO NOT want to read size 27 font all the time. Keep in control - keep it on the screen.

Second 'unsure' - I have been a specialist tutor for HE students and what they often want is very generic indeed. However, it is better if they can be guided towards more metacognitive tailored approaches, so I wouldn't want to see unqualified tutors used.

In an era of very limited resources, I feel that it is hard to achieve both the institution support for all- who after all have been admitted to the HEI, but also retaining the specialist support for students with spld

Some leading questions I don't feel comfortable with.

Q 1 and 4 look as if they contradict each other - 'flexible enough' is the key

A lot depends on whether we assume good practice or bad practice.

I think in the cases where dyslexia or dyspraxia are severe then individualised provision is needed but most of the people I assess are only mildly dyslexic. I would answer differently to many of these questions if we were particularly talking about severe dyslexia but the majority of the time we are talking about a mild form of dyslexia.

All dyslexic learners are different, it is very hard to generalise. Solutions need to be matched to their quantified and defined needs.

The above depends on the severity of the dyslexia - mild dyslexia may fit well in to provision for all but severe dyslexics need one to one help.

Your questions here were - at least some of them - difficult to answer given the status quo....

In an ideal world all students should be treated as individuals with their own individual learning needs, but unfortunately that is not the situation we live in. At least the DSA provides individual support for some students.

Agree to the last point until universities become more inclusive

My answers may appear slightly contradictory. In general i do believe that dyslexia friendly teaching helps all students and that institutions should apply the methods to practice. However there will remain a number of students with dyslexia that still require specific 121 intervention in order for them to achieve their potential.

Having run a school for dyslexic children they do not feel excluded by being called dyslexic or exam provisions - it really helps them understand their own problems

I find this difficult to answer because of the specifics linked to all SpLD needs, including academic ability / level of performance / spiky profile -versus- the needs of others who do not have these but still have individual needs. I would not include those who 'flatline' with lower scores here - although I expect they still get help but maybe less and not formalised? I would not expect to see many of the latter in HE.

I am aware that my responses to this section are somewhat contradictory. I

think this is because I see a big difference between severe disabling dyslexia and people with some milder dyslexia characteristics who are now being diagnosed as dyslexic and are qualifying for the same provision.

As one of the people who advised the, then, welsh Office about the shape of FE provision for people 'with special needs' in the 1990's when FE Colleges became independent of Local Authority control, all these issues were part of those considerations. The issue of adjustments and 'provision' becomes much clearer if a non medical model is taken. As a person involved in the change in processes at the end of the 1970's which led to the concept of 'special needs', it needs to be appreciated that children/people don't have 'special needs', it is teachers/tutors who have special needs.

In the 1990's many documents were developed for training FE staff to be inclusive in their teaching/training. Much of it has fallen by the wayside because of the resistance of 'specialist' staff (Illych again!)

Document 14: Lecturers' Survey text data

B2: Awareness of, and attitudes towards, dyslexia

Dyslexia comes in many forms and requires different responses in how work is presented to students. The Disability service just says 15 minutes per hour for exams which I think is unfair (and I am dyslexic). I think 10-15 minutes reading time per test would be better so a 2 hour exam would get the reading time (no writing in that time). In fact, I would like ALL of our students to have 10-15 minutes reading time in their exam papers. I think it would be most beneficial to all students.

While students with dyslexia should be accommodated when reasonable, this has limits. It should also reflect expectations in the further working place. Students need also be aware that reading and writing are essential skills in a modern workplace.

My best student is dyslexic. It is a very subjective topic (consumer psychology). She writes unbelievably well. If she was dyslexic, should she be able to write so well? I come from a country where dyslexia is not so prominent as in the UK. I believe that we have gone too far in the UK. The fact that a student is only diagnosed in their final uni. year (it has happened with my students many times), is perhaps the best proof that the whole system is not right. If this person was really dyslexic, she would have been diagnosed much, much earlier. My cynicism is founded on the self-serving system that we created. The more staff diagnose dyslexic student, the safer their job is!

I welcome developments in helping students with dyslexia, but wonder whether we a) sometimes go to far (I had a project student at another University who was simply not capable of functioning in a molecular biology lab/ as a field biologist because of their severe issues, causing amongst other problems real H&S issues for themselves and others; they have since left science - did the University make a mistake in letting it go so far) b) huge discrepancies between students classed as dyslexic

I am a new lecturer at the Department, and I have only come into contact with dyslexia students through my pastoral tutees, who have been generous enough to explain certain aspects of what the University system can do for them. I feel many times (not just around dyslexia but around other issues to do with students) I am expected to know and to support students although I am given no training or time to do this. The demands on my time are extremely high, and no value is put in how well I am trained to deal with students or how I deal with them (there is no account for any of the pastoral care in the work load model). I feel there is an inconsistency between how I would like to deal with students and the resources (especially time wise). I am sent information in the form of Individual Learning Plans, but then given no way of having the time to aid students in learning.

I think it is harder for students who enter HE without a formal diagnosis. I am aware schools focus on needs and as such often do not diagnose dyslexia. Yet this has implications for students self confidence, efficacy and self esteem.

I think because I am dyslexic, I am able to see traits in others and openly share my diagnosis to demonstrate to students that it does not mean they are not clever nor that they won't achieve. It is about being self aware of difficulties and developing strategies to address these. Dyslexic students do have to work harder than their peers though.

My last choice sounds harsh but the point is that students who have problems with basic reading and writing skills need sufficient support to get them to a point where they are ready to undertake a HE course before they start rather than admit anyone no matter what difficulties they have and then tell those running the course to make allowances for people who can't meet the requirements -this is unfair to staff, students as a whole and also to students with difficulties.

Statement 7 - if dyslexic students were treated as a homogenous, unified group that would be problematic.

To clarify the last answer, I don't think HE is the right place for people who have reading/writing difficulties when this is not a symptom of a dyslexia-type difficulty but rather a reflection on ability.

A student with Dyslexia can overcome this, particularly with university support, but needs to put in the effort to achieve this and take advantage of help available. A dyslexia diagnosis should NOT be used as an excuse for preferential treatment. Such an approach does not help the student in the long run and is prejudicial to other students.

Not sure what you mean by: I rely on the student, and/or the Disability Service acting on the student's behalf, to inform me of their dyslexia

With regard to the final question: it seems rather blunt but I have been faced with students who cannot even spell their own name and others who have received a diagnosis of dyslexia but who freely admit just to being poor writers.

I am a relatively new lecturer, therefore have not yet had extensive experience of dyslexia-type difficulties in my students.

I have never had a dyslexic student in my tutorial group, so although I am aware of them through needing extra time in exams, I have no direct experience of this.

The last question depends entirely on whether the person concerned has a diagnosable condition or is simply poor at reading and writing!

The last question is the one that matters. I have had highly intelligent students who simply couldn't spell, but they were rare. I regularly have students who can neither read nor write properly, either because they simply can't be bothered, or because they have never been taught, or because it all goes over their heads. While the first group gets good marks, the other three won't, and I would suggest that they are unable or unwilling to benefit from higher education.

In response to the final question, there needs to be far more rigorous pre-university support to bring any student who wishes to attend university up the standard of literacy where they can succeed. Otherwise you are just stealing their money and frustrating them for three years.

I am or was dyslexic. So most of my knowledge is from my own experience. I have had no training from the university in this area.

More training would be useful beyond the basics. I feel that I can detect something is wrong but don't have the skills to be certain. So I normally approach the students and ask them a few questions before suggesting they get tested. I've even caught a student at Masters level who was so bright she'd developed excellent coping strategies.

I'm dissatisfied with my university's policy of not testing final year students after January. Their reason is that they won't benefit, but they would, particularly because it will affect their final classification and decrease their stress levels if they think they may be getting some help-advice.

I would distinguish "problems with reading and writing" (your final statement above) from dyslexia.

I know of staff who have not been very sympathetic to diagnosis of dyslexia and who have not understood how they can assess for content rather than presentation and spelling accuracy.

The support at Bournemouth University is very good. My concern is failure to recognize during secondary education. I have personally recognized dyslexia in students in the final year for LLB degree.

What do you mean by the heterogeneous nature of assessed dyslexic students? And if you mean they are different why is that a problem? And if you mean they exhibit different traits associated with dyslexia why should I be concerned?

What does "whatever it takes mean"

I am both dyslexic and dyspraxic

In general I have found dyslexic students to be strong academically, in some cases the strongest in the whole cohort. However, I also recognise this is not always the case. I have never felt the need to mark something 'more leniently'. Also, I find the universal description of Additional Learning Needs overly generic.

My confidence comes from having a close family member who is dyslexic - I watched her struggle through school with little support and saw the consequences of that, which has stayed with me.

It's more lack of diagnosis than disagreeing with the validity of a diagnosis--and no way to get a student to take action, when I see problems I think are related to dyslexia/dyspraxia.

I have received little training in dyslexia awareness, however as a dyslexic myself I am well aware of factors that affect the student.

Most of my understanding of dyslexia was gained through my previous experience in another University.

I think there could have been more qualitative questions and less classified answers. I do quite often recognise dyslexic students, but I also refer to the disability service. I am aware that I did work out that one student's needs in particular had been under assessed and advised her to go back to the disability unit. There are a relatively high number of dyslexic students who study architecture in HE so I am on the look out but am aware that there are sometimes other factors that result in poor reading and writing. I do get concerned by the number of students whose dyslexia is identified very late on including late on in their HE progression sometimes even in the 3rd year and in the case of the under-assessed student not until she had entered Part 2 of her studies i.e. year 4.

In Physics we have a high proportion of non-neurotypical students and therefore supporting people with eg. dyslexia is important. However, we are not trained educationalists and are not in a position to judge whether someone has undiagnosed dyslexia - this would involve seeing a high proportion of their work. Even as their academic tutors it is difficult to judge sloppiness versus genuinely untidy handwriting or spelling etc.

Like many I am sometimes troubled by the special status in education of dyslexia compared to other learning difficulties. At the same time, I'm not sure that it shouldn't have a special status. I would like to know more but not via an official university training session which will inevitably follow a particular viewpoint on the issue. I'd like to be made aware of (i) the extent to which there is consensus or otherwise amongst educational theorists; (ii) any hard evidence; (iii) how secure the diagnosis is.

Apart from a very general awareness, I have very little understanding of the impact of dyslexia or how I could support students. I am very open to improving this.

I am dyslexic myself, which may help.

I am confident in working with dyslexic HE students, but this is primarily because I was a secondary school teacher before moving to work at the University and so have QTS, training and previous experience at secondary level. I also prepare PGCE students to work with dyslexia in school so we have frank conversations about it within our sessions, including drawing on the expertise of dyslexic PGCE students themselves. In terms of the University policies and practices, I haven't engaged greatly with these as I am already relatively confident.

It is a little bit hit and miss sometimes. Some students are suspected of being dyslexic however, unless they are assessed a lecturer is unlikely to know and not sure how you as their tutor can help them.

HE absolutely should be accessible to students who, due to dyslexia, have difficulties with reading and writing; however, there needs to be sufficient support to supplement the teaching from the lecturers for navigating these issues to minimise impact on other students.

This survey does not take into account that staff also has dyslexia and this is why they know about students who have this disability

I think the last point is quite thought provoking and that the HE environment could do more for inclusive practice but I have not witnessed this but it is just from reading in the media and opportunities available to young students of all backgrounds.

I think dyslexia is way over-diagnosed. Some people are poor readers, doesn't mean they can't be the best. It just means that we should teach and assess using variety methods not just books and written exams

The answer I have had to make to statement 9 is misleading because I have never knowingly had a dyslexic student in my class.

I strongly disagree with the last statement above if the problems with reading and writing are due to problems such as dyslexia but not due to low literacy skills

I am a DSA Assessor who is dyslexic and a specialist teacher holding a Practising Certificate so I diagnostically assess individuals for dyslexia

I am only on a fixed-term, nine-month contract, so it's quite possible that permanent staff members are given more support and guidance on this topic.

Given the proper support and time and dedication a student who has any learning difficulty can be encouraged to learn strategies to circumvent any problems. It is also necessary that staff is afforded adequate and proper training to recognise students' difficulties and also that staff must be willing to expend extra time and energy to support such students. Their learning disability is NOT their fault!

The basis on which a diagnosis of dyslexia is made is extremely nebulous and the term seems to be used as a 'catch all'. A colleague who deals with dyslexia assessment in my institution informed me that not a single student who was assessed for dyslexia in a particular year received a 'negative' result in the assessment. In other words, every single student assessed was found to have dyslexia or some form of SpLD.

Information provided to lecturers about students with specific learning requirements is so general it is practically useless.

Re. my answer to the last question above, I believe good reading and writing skills are essential for particular, but not necessarily all, subjects in HE.

There is still a large amount of stigma against people with learning difficulties such as dyslexia and dyspraxia and a huge amount of work is needed to increase awareness and educate those working with dyslexic and dyspraxic students.

I have been a PhD student and received DSA for dyslexia from the second year onwards. I struggled with the reading load in the first year, but with the help of Text to Speech software, the load became not only manageable, but also, enjoyable. For the first time I could follow text without it being a struggle just to decode the words. I had a real battle all my educational life trying to achieve what I am capable of intellectually due to undiagnosed, and therefore unhelped, dyslexia. It took study skills support to enable me to understand how best to study efficiently. It wasn't stupidity that prevented me from studying efficiently, it was the need to focus on getting through the reading that left very little opportunity, and even less confidence, in the notion that other options might be of help. In short, it boiled down to the fact that, these practices worked eventually, last time, so let's not mess with them now - the next thing might not work at all.

C2: Dyslexia and Disability

The last question is intriguing - I do not see why a dyslexic diagnosis equals free computer and free photocopying and free books. No wonder more people are trying to get that diagnosis (it is not just about the extra time in exams). Dyslexia is actually about sequencing and poor working memory.

There seems to be a good amount of students that didn't learn to read and write properly who are then labelled dyslexic years after. Dyslexia is also often used as an excuse not to put (even more) effort into reading and writing.

I don't think students are playing the system, but I do worry that the system is over-diagnosing.

I have no problems with the Equality Act 2010 establishing Dyslexia as a disability. Some students do seem to have a problem. My issue is that too many are diagnosed. At one point 15% of my class had been diagnosed with dyslexia!!

We have recently had experience of a number of students being assessed for dyslexia/dyspraxia who appear to be 'playing the system' to gain IT equipment, who do not display any signs of dyslexia, who are academically high achievers and who have seen friends gain new laptops as a consequence.

It has been our experience over the years that all students seeking an ALN assessment are provided with a diagnosis of dyslexia/dyspraxia. No wonder some students 'play the game'!

My strongest ever student was dyslexic but took great effort to be organised, to check and double check, and to have ownership of the work. Some weaker students are those who fly and hide behind a dyslexic flag which I believe is grossly unfair to other dyslexic students and the wider student body

It is difficult in professional courses, for whilst we make reasonable adjustments - there are practice competences that have to be met, set by our professional body to ensure a nurse is safe to practice. Yet the incidents in which this occurs is rare as many dyslexic students excel in practice.

I am perfectly happy to make allowances for dyslexic students in terms of spelling and grammar but when we are told to accept written work that is essentially not correct in terms of what it says but are told to give a mark based on the overall sense

of what we think the student is trying to say this becomes a nonsense and is unfair to other students.

Statement 3 - it is right that dyslexia is recognised, in order for funds to be allocated to ensure equality of access to education. However, I am not sure I would use the word disability for any group. In some countries the term differently abled is used.

"An increasing number of students are "playing the system" and claiming to be dyslexic in order to receive special treatment" - if this is indeed the case, then there is a systemic problem with the way dyslexia is being assessed in the first instance.

I do not understand: Some dyslexic students appear to be no more functionally disabled within the context of HE than some other non-dyslexic students

I strongly agree that truly dyslexic people should be covered by the Equality Act 2010 but far too many are diagnosed as dyslexic when they are not. I feel very strongly about the final question as I encounter it frequently.

I suppose my answers depend on what we mean by disability (the term is loaded and not necessarily helpful, though I recognise there are real political ramifications for using the term). I would also say my answer to 2) depends on a number of things - I think there is an 'impairment' (if that is the correct term??) but that academic institutions could probably do a great deal more to support these students.

To answer the last question, one would need to know if the number/% of students claiming to have dyslexia has increased.

The overall standard of writing and reading ability is so low that moderately intelligent and diligent dyslexic students will perform better than their non-dyslexic peers.

In response to the first, I think misdiagnosis and variability in severity (by homogeneity of response) makes it difficult to justify lightening assessment criteria over students with literacy issues owing to poor secondary education provision.

In response to second, we are not doing anyone any favours by saying, oh, you are dyslexic, I won't mark your mistakes. I'm sure you'll do fine in job applications / life. I wouldn't want to be embarrassed about hurting your feelings that you can't spell when support exists to improve your writing

I don't know about students playing the system. In my experience it's usually the other way round, students who would benefit don't come forward because they don't realise or don't want people to think they're "stupid". A student I've suggested testing to was unsure because he was worried the test would come out negative and then he'd "discover he was actually thick".

Both my children have severe dyslexia and I know how both of them have struggled with the education system to be accurately assessed in exams. It has been a long hard battle. And they have suffered from staff thinking them stupid. they were both advised to take non academic courses and I had to counter this advice. one of them is at university now.

Question 3 implies that non-dyslexic students are functionally disabled? If you are talking about academic ability then sure, however, what about the academic potential of the individual and the way that it is measured? As educators that is what we are trying to develop not to play to the mean.

My personal experience is that problems genuinely arise because of disability but if I am really honest I have seen students who use their dyslexia as an excuse not to even attempt certain kinds of work...anyone who tries gets 100 per cent of my support regardless of result. I am not sure how much not trying is a learned behaviour but in my entire career I have never seen a uni unsupportable of such students.

Have heard news reports with regard 'middle class parents' who are 'playing the system' but not seen any evidence to back this up.

I'm thinking here of those that come from poor educational backgrounds

I see students with dyslexia as having individual learning styles that require different support systems to enable them to achieve their potential. I'm not sure if students with dyslexia see themselves as being disabled - I would imagine it would be dependent upon the severity of the dyslexia?

In my experience the students with Dyslexia put in extra effort to over come their problems. This tends to lead to higher quality work.

I prefer to use a social model of disability. In many cases in higher education, people with dyslexia are disabled by the type of education that we provide. They are therefore disabled BY the university, rather than due to any learning difference / preference. I think there is a lot more that we could do to encourage diversity and "level the playing field" so that students with a range of learning styles are less disabled in our education systems.

I don't think it is just the literacy expectations that disables - I think it is more about how we present information more generally and how we enable students to express their knowledge and engage with the curriculum. Literacy is just one aspect and while important, it isn't everything. I think we should move to a Universal Design for Learning (UDL) approach to education where dyslexic students can really contribute in a way that meets their needs but more importantly engages their real strengths.

People are functionally disabled by the teaching and learning method. If a dyslexic student is no more disabled than a non-dyslexic student, that could mean a good educational experience, rather than me denying the existence of dyslexia or having negative attitudes towards people with dyslexia.

40% of students in my final year class are given extra time in assessments and most of these are as a result of dyslexia or related impairment. Does this really reflect the prevalence of the disorder in the general population? If so, a fairly radical re-think of educational strategy is in order as too many people outside HE might fall through the gaps.

Within my discipline a lot of dyslexic students display very good visual and design skills which can counter-balance the difficulties they encounter re. literacy.

Some of our most able students are dyslexic and are unwilling to seek help and support, and therefore I feel they disadvantage themselves by 'putting up and shutting up'. In addition, dyslexic students who are entitled to and receive support do not always do so effectively - e.g. we end up having enablers who are not being deployed properly because students do not want to seem different in front of their peers.

I teach web accessibility so I understand some of the matters.

I don't feel like I know very much about dyslexia, which makes some of these questions hard to answer.

The question as to whether students with dyslexia are 'disabled' is tricky - they are clearly frequently and often seriously disadvantaged, but with the right support can do as well as non-dyslexic students. It is contextual.

Special treatment for dyslexics in the context I work in is usually 2 week extensions on their already generous coursework deadline- there is no point in 'playing the system', we have no exams and there is no adjustment in grades that I have seen.

Qs 1 and 2 both seem likely.

I feel that there appears to be an increase in students that are dyslexic :however at this university we have an assessment process that can be initiated as a self referral or by an academic tutor.

I feel that there is still such a stigma surrounding dyslexia and the assumption that it directly reflects intelligence levels that often students will not avail themselves of the assessment process until quite late on in their degree programmes.

You should not interpret 'not tending to think of dyslexic students as being disabled', rather as 'differently abled', as failure to recognise legal status and protection of dyslexic persons as disabled persons.

I'm not aware of any issues of playing the system. I think there is a bit of a lottery regarding diagnosis of dyslexia at school level and suspect that continues to be the case in HE. Also, dyslexia is an umbrella term that covers a wide range of 'disability' so it is difficult to answer generally.

The trouble is that as lecturers/tutors we are specialists in our subjects and sometimes dyslexic students need a different approach that we are not always equipped with

The penultimate question is interesting. I was not sure what you mean by 'functionally disabled'. Certainly, some students find the HE intellectual challenges very hard and may fail to grasp key concepts etc.

In the last question, the system will be open to abuse: I don't know whether that has increased though.

I try to look past any tag of 'disability' to see what capacities and potential s/he has and what can be done to maximise those. I also think that more assessment could incorporate an oral aspect as well as to a written one to provide alternative means through which those with dyslexia can communicate and be assessed.

It would be great to have an education system which offered openly enabling learning strategies without having to categorise some learning as disabled.

Archaeology loves dyslexic students because it encompasses such a broad range of data and learning. Students who struggle in other subjects may do well in archaeology for this reason.

It is difficult to assess this part but as only an extension is awarded for work submissions as opposed to any further consideration then I don't think it's enough for students to try to con the system!

Again, I didn't have an appropriate answer option for statements 4 and 5.

RE: Question 2 - While the literary requirements of HE create the conditions that make dyslexia a challenge for students who have this disability, some of these students also face difficulties managing the everyday broader textually-mediated environment (filling in forms etc) in which HE is located.

RE: question 5 I've sometimes wondered if students from advantaged backgrounds are more quickly identified as having a disability (sometimes because their parents are quick to pick up on this) whereas students from disadvantaged backgrounds are diagnosed later, if at all.

I can understand why some people may think that some students are playing the system. This is because of their ignorance about all of the characteristics of dyslexia - there is an assumption that if you can read you can't be dyslexic! However, one might be able to read, as in my case, but processing what I read is more challenging.

Anything that interferes with a student's learning ability could be termed a "disability" but not in the common parlance of "disablement" i.e. physical disability and thus some dyslexic students try to cover up the fact they have a learning difficulty for fear of being labelled "disabled" as if there is some social stigma attached to that label.

Questions four is ambiguous. The students do not appear to be more functionally disabled than other students but I have no idea what they are having to do to appear that way - they may well be putting in enormous amounts of extra effort to be able to achieve the same as others who do not have this difficulty.

I have occasionally been concerned by the quality of some EP reports, etc.

D2: Equity issues and reasonable adjustments

Some interesting ideas here. I have had dyslexic students do exceptionally well academically. It can not be used as an excuse for poor academic performance in my view but I expect them to do the same tasks as the other students.

The appropriateness of alternative assessments depends strongly on the intended outcomes. When testing understanding it is fine. When an essay in addition tests written communication it is not.

AS said previously it is the abuse of the system that is the problem. Genuine dyslexia students could benefit from some adjustments, albeit these should be minimal to maintain equity across students. For example, many dyslexia students type their exams on a computer. This gives them a MASSIVE advantage, because they can shift ideas around, write and re-write as they please. Today's student generation are not used to hand writing hence having access to a computer is a massive advantage. Because of the pervasive access to computers, current students write and then think, developing arguments along the way. Handwriting requires the opposite process: you have to think before you start writing. Hence the advantage in these situations.

It is difficult to consider whether adjustments should be made for other minority groups in HE (ie non traditional students), yet the fair access agenda should ensure that each HE has systems in place to support these students to enable them to succeed. Failure to do so is immoral and against the purpose of Widening participation.

With regards to exams, I am comfortable with sympathetic marking without penalising spelling, grammar, etc. etc. However, I do not accept this as much for essays. Students have time, support, computer technology, etc., that should iron out difficulties with spelling and punctuation. Sentence structure and vocabulary usage remain problematic in essays, but I advise students to get others to read drafts of their essays. However, I find that students highlighted as dyslexic often have better spelling, grammar, etc. standards than their peers who are not dyslexic.

All this hinges on what are regarded as reasonable adjustments -the problem I find repeatedly is that dyslexia is conflated with any kind of additional learning need to the extent that students will present themselves saying 'I'm ALN so I'm entitled to extra time' and are reluctant to even tell you what their ALN need is. For example in a test consisting of one and two word answers where I have already told them spelling

errors will be discounted for dyslexics I have frequent debates with students wanting their extra time -usually they desist from this when I point out that extra time is to allow them to structure arguments and make sense of the question in written exams but in a test where there is no argument just a brief answer with ample time to write it already -if they don't know it giving them extra time will not help. When they realise that extra time confers no advantage in such a test they lose interest in this 'entitlement'.

This is really about the tension between standardisation and diversity. I believe it is possible to create a system that honours both of these ways of being with students, but presently the standardisation discourse rules.

I disagreed with statement 1 in part because the term 'favourable' is loaded.

"I would seriously consider, or persuade my department to consider, the request from a dyslexic student for an alternative to written exams or coursework"; sometimes the method of examination is part of achieving the ILO. While I recognise the need for fairness, this could compromise assessment methods and the value/integrity of the module.

Is it 'more favourable' treatment??

I would say I am happy with the marking policy, but it wasn't clearly explained to me when I started, I had to do a lot of work to find this out for myself. I think things have changed in recent years, but we hear less as graduate studies tutors.

What do we mean by meritocracy?? - this concept is often used to unfairly discriminate anyway

Re question 1: you probably ought to explain the provisions of the EA section 13.

Re question 3: I answered yes because many of the adjustments I am asked to make in my teaching are not reasonable, in my view, although I have no say in the decision to implement them. The medical condition(s) that lie behind are never explained.

Re question 4: I am not familiar with such policies.

I prepare student teachers for work in schools as English teachers - hence, the quality of their written accuracy is of great importance. I have worked successfully with several dyslexic student teachers in finding strategies to help them ensure their spelling, grammar etc. is accurate and that they are equipped to mark students' work

"Favourable treatment" is NOT part of the Disability Act - "Reasonable Adjustments" are, which allow the disabled student an IDENTICAL experience to that of a non-disabled student i.e. they are not treated unfavourably but certainly never treated "favourably".

I would only agree to a request for something other than a written examination if and only if (a) the Disability Assist unit had 100% agreed that this was the only way the student could be assessed to an equal footing as other students [i.e. giving 1h/h extra time, a scribe, computer, coloured paper, individual room and so on would not have any benefits] and (b) the request came through said unit and with verified third-party evidence that it was the only way forward - in which case I would make such a provision without question - but I refuse to believe that non-written-examinations are the only option in the majority of cases and alternatives must be exhausted before jumping to this option.

As I noted previously, whatever the legislation, reasonable adjustment just don't really exist in the world and we are not preparing students for the reality of life in ANY field by not supporting and demanding improvements. This is true for literacy of students from disadvantaged backgrounds. Support. Not excuses.

I'm intrigued by the last but one statement. My subject, English, assesses the quality of writing so it's difficult to make adjustments... but we do. In the past I've done the same for Erasmus students, for example, so I see that perhaps we should consider other backgrounds.

(Eq.A. S.13(13)) ?

My subject is such that ability to deal with written exams reflects the real world demands students will meet when employed.

Need to be careful how much assistance is given as this does not apply in the workplace - may set unreasonable expectations.

IN teacher training it is not possible to be lenient towards poor spelling etc. The onus is on the trainee to develop strategies to overcome such problems - as teachers they have to meet the expectations of the profession. Most who have come through a first degree successfully and train on the PGCE have already had to deal with the demands of study.

In my experience it's difficulties with planning and organisation that are the bigger obstacle to achieving QTS.

I am comfortable with the marking practice but at my university, we are not told which essays this applies to.

Point 4 - agree but would sign post the student for further support from their dyslexic tutors to see what structures can be put into place to improve this e.g. use of IT packages, reader etc.

Point 5 - I believe we provide a range of assessments to meet the needs of all our students and there will be strengths and weakness within the whole cohort on the type of assessment they are being assessed on. Providing a range of assessments should therefore eventually ensure a balance of strengths and weaknesses for all individual students.

I do not agree with the use of the word "favourable" in the first question - it is not favourable treatment, these interventions are required to offer those students with ALN the same opportunities to do their best and offer their best piece of work possible as with other students. It is about justice/equity/parity.

No one should need more favourable treatment, in a world where our education systems would be designed using UDL principles. However, we need to respect that

our education systems are not equitable. I don't see it as more favourable treatment, but people with dyslexia should be able to access services, more time, tutor support to "level the playing field" where things are not equitable.

The issue of dyslexia marking guidelines is more complex. While this should be absolutely fine in examination situations, I feel that there should be enough support, such as specific dyslexia-focused proof-reading services and support to enable students to learn the "tricks" of language prior to submission of assignments. I am therefore not in favour of special marking guidelines if the appropriate support is available ahead of time and think that these special criteria have the potential to disadvantage dyslexic students in the long run. However, I recognise that these systems are not always in place and therefore there may be a need for them. There is a real need to campaign for services to make the need for these criteria redundant. People with poor literacy due to socio cultural issues also need support, but it is fundamentally different from dyslexia support and the two shouldn't be mixed up.

I think my key message is that the last point should be rephrased as an inaccessible curriculum is inconsistent with an academic meritocracy, not reasonable adjustments. They enable a meritocracy.

Dyslexic students have a functional disability, they find it very difficult processing the written word, in a similar way to a visually disabled student, and not similar to students with poor spelling or grammar abilities.

I consider it possible to offer dyslexic students and others whose skills have been adversely affected additional support to raise their literacy standards significantly and this has been evidenced with a significant number of students I have taught

Not sure how we could offer a non written alternative, except perhaps a viva based approach, which would be equivalent but hard to administer.

If the meaning is lost due to poor grammar or vocabulary, it can be very difficult to tease apart how well a student has understood. In this case a viva may be the best way forward.

We don't deny adjustments to others - if someone cites their background as impacting on the quality of their coursework, they too can gain a 2 week extension. NB our students are all postgraduates - mostly mature, often teachers themselves

Reasonable Adjustments under the Equality Act are NOT "more favourable treatments" - your wording is misleading!

Unsure about some of these in training for professions that require considerable written work eg letters to service users and health care professionals.

I am all for reasonable adjustments- I do feel the label of dyslexia can provide opportunities that are not available to students with other disabilities

For the penultimate question: I picked "Strongly disagree" because I found the question in itself discriminatory - I have never experienced poorer literacy skills in students from poor or ethnic backgrounds. Should a student from whatever background struggle due to poor literacy skills I would be happy to allow reasonable adjustments (at least for the time it takes to adjust to University requirements).

Dyslexia and social inequalities is difficult area of debate. Although dyslexic students need extra help and support, social inequalities can be very disabling but in a different way and such students also need extra support

I think these are really interesting questions. I am very strongly in favour of additional support and time. However, I don't think that the 'reasonable adjustments' system works well at the moment. Staff feel obliged to pass almost incomprehensible work. Perhaps speech recognition software would help severely dyslexic students to produce exam essays. They could then apply those skills in future professional life.

I think there should be more provision for proofreading facilities to be available to dyslexic students. Clear communication skills ARE important and some measure of responsibility lies with the student to negotiate the limitations of his/her condition by utilising proofreading facilities and/or (depending on the type of dyslexia) working to

develop their own capacity for written communication. I would seriously consider and encourage my department to consider offering some alternative means of assessment or an oral element to assessment; I do not think written communication should be avoided entirely. (It might also do other non-dyslexic students some good to be encouraged to communicate more verbally or in non-written form!). My hesitation over the issue of reasonable adjustments is less about the requirements of dyslexic students and more over what should be done for others who are affected. HE is NOT the place to resolve all issues that have not been dealt with previously in the education system. It may be that more 'access'-type courses would be appropriate for this.

The last question is difficult to understand

Yes it would be great to offer a range of assessments to all students so they can find their own path. Why should we value the exam/written form above all others.

I think perhaps it is not discriminatory but perhaps measures should be put in place for those where literacy skills are affected. Perhaps those measures though would be different and other considerations would be made

Again, the answer to the final statement is questionable because I am not sure that I understand what is meant

one sensible adjustment for disabled/disadvantaged (eg, single parents) students is to let them go part-time, taking fewer modules and finish their degrees over an extended period. *anyone* should be able to do this. adjusting individual student's support/assessment is *extremely* unfair and makes a mockery of the assessment.

Where a student has genuine dyslexia and has been given support and tutoring to overcome such difficulties, and still suffers from problems then it would be fair to afford extra support in exams. However, dyslexic students should not be permitted to gain a benefit from being so termed

The question re socio-cultural or ethnic backgrounds tends to suggest that dyslexic students are not from such backgrounds. This surely feeds into the old notion that dyslexia is a middle-class invention to hide low intelligence and /or poor teaching in their schools. And yes, poor teaching does exist in independent schools, grammar schools and those schools in 'nice' areas.

The question makes no more sense than to argue that it is discriminatory to give a wheelchair to someone who cannot walk, and not to give one to someone who is fat and unfit. Fat and unfit are curable. Socio-cultural or ethnic backgrounds can be addressed. Dyslexia cannot be cured

E2: Inclusion

Where a student has genuine dyslexia and has been given support and tutoring to overcome such difficulties, and still suffers from problems then it would be fair to afford extra support in exams. However, dyslexic students should not be permitted to gain a benefit from being so termed.

The high literacy question is very interesting to me personally as my youngest daughter is dyslexic and has auditory processing disorder and she encounters problems every day at school and feedback of her work varies with the teacher. What I have learned from teaching at Uni. level and from her is that there is a huge difference between inability to spell and inability to understand and respond to an academic problem. A spell checker can sort out the spelling problems but will not sort out the academic ones. Notes can be provided before lectures to help and recordings of the lecture are good too.

In a professional programme such as nursing it is imperative that students can write in a logical, coherent way. Our focus on supporting students with dyslexia is to enable them to develop strategies to manage their difficulties and it works well. I also believe professional programmes such as nursing needs a diversity of student body to reflect the community we serve, as such I am passionate about WP

I don't see any contradiction in strongly agreeing with all of these statements. Regarding stigma, none of my students seem overly stigmatised because of dyslexia. Most wear it like a badge. I'm not sure Widening Participation applies in my case - more than 50% of my students come from private schools, and there is a strong culture of social and economic privilege.

I'm not sure there is a stigma associated with dyslexia in HE as it is so common (or at least the diagnosis is).

I have put unsure for statement 6 because I do not think something that is idealistic is necessarily unrealistic so I would want to separate these two out before I could agree or disagree.

Again, answers are tricky as there are truly dyslexic individuals in HE and those who have been diagnosed as dyslexic but who are not dyslexic.

I would be able to replace written exams with alternatives only partially

I have to be honest that I am only just becoming aware of the wide variety of needs of dyslexic students as my daughter (age 8) is about to be assessed for dyslexia. Prior to this, I was very ignorant about how dyslexia can affect different people differently, and the wide challenge that they face.

Re question 7 - I do not see why specialist provision should carry any stigma.

Re question 9 - again, this depends on whether widening participation involves people with a diagnosable condition or poor academic standards.

I don't think it's irreconcilable, but it's certainly not be reconciled now.

It all depends on the severity of the dyslexia as to what kind of teaching and examining methods would work best. Some students just need a bit more time in exams and can still produce good written answers. However, for some students extra time will still not enable them to produce readable answers. Due to A levels also being written exams, I think we see very few students with severe dyslexia in HE, so I

think trying to change attitudes to teaching, learning and assessment at university is coming too late for those students who have more than mild dyslexia.

I have written unsure for the statement on stigma because in my view there isn't (at least in my area). Also, I think that high literacy standards are more important in some subject areas (you can be a brilliant mathematician and not be good at writing, but it's another matter in English).

What is meant by differentiated provision? I take it to be what we have now as outlined in Q5

Is specialist differentiated provision something different again?

On a personal note I have been teaching in HE for over 25 years and was diagnosed as being dyslexic 7 years ago

There is no one "all inclusive system" to meet all student needs. Inclusivity requires a flexible adaptive approach so that learners can have a range of ways of accessing information, communicating their knowledge and engaging with the curriculum. I think this point is misleading in your scale!

An inclusive curriculum, I feel, will make dyslexia less relevant - people will have strengths and weaknesses and in some aspect of programmes, the non-dyslexic students could struggle, because of the type of activity. I think the main problem is our focus on one type of teaching and learning and not recognising the real potential of dyslexic students and staff to enrich the learning experience for all.

It think there should have been an 'it depends' box.

It is important to identify specific needs in order to provide appropriate support.

Treating people fairly within an equalities ethos does not mean treating everybody the same

A key point is that, what are these dyslexic students going to do after graduation? If they have to compete with other non-dyslexic students in the job market, they do not have many choices. A company won't give you the job just because you are dyslexic. In other words, they must be competent to what the job requires them to do (e.g.,

reading, writing etc.). This means they should not be treated very differently when they are receiving HE; otherwise, they will have disadvantages after graduation.

First question on this page - you need both. 'Fully inclusive' is never going to cover every eventuality. The second question is not a reasonable one - it is an emotive one. Inclusivity does require resources. They are in short supply. Whether or not it is 'all very well' is not a question I would wish to comment on. Bad question - sorry! And literacy standards are central to academic learning, but literacy and dyslexia are not mutually incompatible. It depends on your definition of literacy standards. Literacy is about writing; dyslexia means a writing difficulty. Again, not a good question.

I am not aware of a stigma associated with specialist differentiated provision for dyslexic students

I'm unsure of many of these probably because I haven't had to think these ideas through before. I would be very interested in the opinion of other who have given thought to the academic and political implications of equality and diversity issues in higher education.

My answers to the first 2 questions seem to contradict each other. To clarify: I believe an inclusive approach to cater for all students would be ideal (although it may be unrealistic to find such a solution for all students), but it would require more staff. Lecturers are working ridiculous hours even now, and for most of us there is simply no way to take on extra work, e.g. for designing alternative methods of assessment.

As I am a lecturer within a professional field (Health and Social Care) it is difficult to rationalise and link some of the coping strategies employed by students with dyslexia as there could be direct conflict with ability to act as an independent practitioner in a safe manner.

With regard to question one - I strongly agree that catering for the needs of diverse students is important, but this is not incompatible with differentiating provision for dyslexic students - should be part and parcel of the same thing.

It might be idealistic to aim for inclusive teaching but there's nothing wrong with a bit of idealism.

Students can be disadvantaged either via a disability or some other factors and everyone has a right to education. The powers that be are trying to make us believe that HE is only for the elite or those with resources - usually family wealth

Inclusive agendas based on E&D DO demand more time and financial resources than currently exist; this doesn't mean they shouldn't be implemented, it means more time and financial resources need to be found. High literacy standards are and should be important to academic learning and there are expectations that these will be upheld in an English degree; however, there ought to be ways of striking a balance between upholding a good standard of literacy and not penalising those with dyslexia. With regards to the other 'unsure' statements, I'd want to be involved in a diverse discussion on these topics before committing to a perspective!

The problem is not that we value literacy; this is appropriate. The problem is that we do not value other learning as equally challenging, valuable, creative, disciplined etc.

Clearly challenging questions that I am not sure of some answers but I do think that support and resource should not be seen as a barrier but a necessity to support good practice in student diversity. If this is not in place then it is idealistic to support as the time is just not available. This does not by any means mean that it should not happen as the phrasing of point number 2

Again, my answer to statement 1 is not appropriate because I don't think that it has to be an either or.

Tutors are often expected to cope with students with various learning difficulties and to devise specific strategies to enable students with any learning difficulty to succeed. This requires extra time, effort and training and most of the time the University management is totally unaware of the extra degree of effort required to attain this when designing and writing course contents. Also, whilst dyslexic students often prefer not to be singled out, it can lead to discrepancies where there are students who,

not registered as dyslexic, still have problems with spelling, grammar, punctuation etc. and so giving dyslexic student extra help, extra time in exams etc. can appear to be discriminatory to those students not so registered.

Question seven - I am not aware of any stigma associated with differentiated provision for dyslexia students.

Question two makes no sense - of course it takes time and financial resources but that is not a reason not to do it.

Dyslexic students on nursing programmes present particular challenges as the skills gained in university need to be applied in an often time pressured environment in practice

High literacy standards and dyslexia are not incompatible. It is the struggle to achieve those standards and to maintain them that is the difficulty for dyslexics. Dyslexia is not illiteracy. It is a disability. People with a limp can still walk, but it is often more of a struggle for them.

Document 15: Dyslexic students survey text data

Initial feelings after being diagnosed as dyslexic

I was not diagnosed until I was 18-19 due to "a very high IQ that allowed [me] to work around [my] difficulties". To find out that I was not stupid and lazy was a huge boost to my self confidence. i can not remember as it was in primary school Mixed feelings. Glad to have support, but feel like a fraud.

I was 6, have no relocation

I was 7 years old; I didn't understand what it meant.

Found it hard that I could never remember as much as others.

i was to young to understand the implications

Failed last year at university during undergrads because tutors labelled me as lazy and not getting grades up to standards expected of me

I was six and had no idea what it was.

I was six, it just happened.

Confused and frustrated that it had taken until I was studying at a masters level to be diagnosed. Even at this point I was only assessed as I did not understand why I was not achieving the grades I felt I should be for the work I was putting in. I was first diagnosed at a young age so do not recall but formally assessed again post-16 As I was Diagnosed in primary school, i was to young to really care or understand the implications of it. Only later in my education did it start to dawn on me how irritating dyslexia can be.

and angry that it hadn't been noticed before

Mostly relieved, but also had to rethink and go over all the difficult times which were mostly

For years I had struggled with literacy and my parents had asked my schools repeatedly to assess me but they always refused saying I was too smart to have a learning disability...I was just lazy

My parents were known dyslexics so I knew from a young age I was likely to be dyslexic. At primary school my year 6 teacher mentioned to my parents that I seemed dyslexic. This was passed onto my secondary school by they were not interested until I started doing GCSE's. This was when I was finally offered support, however being a straight A student they didn't have any support to offer to me apart from being diagnosed as dyslexic and give me extra time in exams. I got formally assessed before going to University in order to get additional time in exams.

Since I knew from a young age I was dyslexic, being formally assessed had no impact on me.

Had been called Lazy thorough my education because I was obviously bright but could not demonstrate this in handwritten/spelling tasks.

A mixture of on the one side glad to know why I always tended to finish exams and reading last, and upset thinking than there is something abnormal about the way I think.

I come from a family where both my father and older brother had already been diagnosed with dyslexia before I was born. My parents are also GPs, qualifying around the time SpLDs were becoming recognised as genuine conditions. Dyspraxia was apparent pretty early on (e.g. quite slow to learn to walk despite talking fine) and only became more apparent (e.g. not being able to maintain a proper pencil grip). There was no point of diagnosis. My SpLDs have just always been there.

It was originally thought that I had dyspraxia, but having elements of dyspraxia and dyslexia made more sense and helped me learn.

I was aged around 10 (maybe younger), so didn't really understand at the time. I don't remember any strong feelings. I was 6, I cant remember, sorry.

Inquisitive to find out more about what it means for me personally. Neither of the

other two suggestions reflect how I felt. I was very young when I found out and it has always just been part of how I manage my own work and processing. I'd only just been diagnosed ADHD and was annoyed everything had been diagnosed so late, I was 18.

Thought I was only mildly and I was more

I was very young so can't really remember

Relief at *others* accepting there was an explanation (not just a "stupidness")

and a little upset but happy

felt upset it had never been picked up on before

Unsure as I was so young when I was initially diagnosed.

felt less stupid as there was an explanation.

Confused due to late diagnosis

Not surprised

Was a combination of upset and relieved

Don't remember being diagnosed and always lived with it

Relieved that I finally had a diagnosis that I had assumed I had for years.

I was very young (12) so confused what dyslexia was

I was seven when diagnosed so it wasn't really something that bothered me.

I can't really remember but I know I think differently anyway, being diagnosed isn't a big

shock to me.

I was diagnosed as young as I was able to so I wasn't really phased.

I was quite young (10 years old), so didn't understand what it meant.

I was recognised as dyslexic at 5 when I started school, and finally tested at 7. My immediate feelings are therefore not pronounced as its something that has always been there.

Was previously diagnosed as having working memory deficit and some aspects of dyslexia at school then formally as dyslexic at university assessment. Neither was surprising and I didn't particularly feel a formal diagnosis meant much

I was too young to understand fully what dyslexia was so I just accepted what my parents told me.

I believe I've always known - m a sister and a brother are also dyslexic, and one sister is not.

I just accepted it as part of who I was but I didn't let it dictate me. I never called myself dyslexic and through that I excelled and did not need further support

Because they said I was not dyslexic even though I am, it's because I got outside help and can read well now, but I still struggle with writing down whats going on in my head.

I was 9-10 years old and I thought it meant I was dumb and useless. That's when I saw an English tutor and she told me 'Dyslexia is not an excuse it is an explanation.'Which helped me build confidence.

Wasn't aware I had a problem until I stepped up into the accelerated graduate entry medicine course

I was relieved but also upset for how differently my life could have been had I known earlier

Different. I found out when I was 7. And at primary school I was singled out for extra support and help.

Current feelings about being diagnosed as dyslexic

Comfortable with the label ascribed to my individual processing style

Pleased that my learning differences have been formally recognized and provided for

Don't like being classed as disabled. I am not disabled but accept that I learn differently from others

Concerned that I will struggle if the government get there way wishing i didn't have it

Disappointed that I now have the extra burden of a label but no extra help

Neutral - it is not something I think about

Somewhat frustrated that I still have difficulties relative to my peers

I don't like it being thought of as a label though

I'm still confused on what happens next. I have been diagnosed with dyslexia and have received extensions on deadlines for essays, but have not been informed on where to go for information on any special requirements I may need or how to be tested for these.

I am very pleased that my learning differences have been formally recognised and I was able to have some help, especially in the form of a tutor. I feel better equipped to deal with my dyslexia. However I am apprehensive about how to now progress into a career with this label. I am worried about telling employers or whether I should. I am less likely to tell employers as although I know there are laws to defend such issues. I still feel it will hinder my application process. Overall, I am very happy that it has been recognised and explains some of my difficulties throughout education. However I am worried about my future dealings with it in the work place.

Doesn't bother me as I don't broadcast it and people are surprised to find out

Just OK about it.

Happy with the 'label', disappointed that my adjustments are taking so long to get in place.

I think the positive aspects of dyslexia are underplayed.

I still feel embarrassed when I can't spell something or don't notice that I've spelled it wrong i.e. by mixing up the correct letters but getting them out of order! annoyed that it may hold me back especially studying science. Sometimes its still hard to except

that I am dyslexic and not always comfortable talking

Though I am pleased that new opportunities have been afforded to me, I am ambivalent about my dyslexia on a day-to-day basis. I only consider it when necessary (i.e. during examination periods).

Frustrated as I am treated as if I am not dyslexic by most, as my reasoning and general abilities are above average and I over study to compensate, giving the impression that nothing needs addressing.

You should specify your questions better. Do you want, as the preset answers suggest, want my opinion on the label? It's a useful category. It allows me to rapidly explain to educators and others my differences. There is no stigma attached to the label, that I have ever really encountered, except maybe some lingering trivialisation. People can sometimes have a problem with the actual features that lead to me being categorised as dyslexic and dyspraxic. Obviously there are times when being a mostly unsupported dyslexic on a humanities course at an excellent and demanding department is really quite hard, stressful, disheartening and so on.

Like I've been dumped with a label that very few people understand and many assume means I am slow, incapable and less intelligent than others. The term dyslexia is associated with all manner of 'deficits' or 'difficulties'; I don't feel being ladled in such a way has any really benefits.

I have only been recently diagnosed so I am pleased to have a label for my problems but still have not got terms with the full consequences and benefits of this label.

The Tutor's don't always make allowances for the struggle of dyslexia students

Indifferent

I am Happy with the label, it is who I am and I like talking about it to people who don't

understand it. I like teaching other Dyslexic Actors ways to cope with and use there Gift in there craft.

It has its perks

Does not apply to me as I was not diagnosed correctly.

Why do so many people just think free equipment? It's unfair; I paid an extra £600 to get what I needed. How did someone get Photoshop free?? I didn't and how is that going to help with spelling speed and understanding. My programmes are designed to help me. Not give me a free art program.

Annoyed as my friends find everything so much easier than I do. I am confident and I don't feel embarrassed to say I have dyslexia although it can be frustrating at times.

Offended that the university sees me as disabled - this isn't a disability in my mind that label has too many negative connotations & should be reserved for those who would clearly benefit from the label beyond the negative side effects.

To me it is just a label that I don't fully understand; I can't really draw comparisons with not having dyslexia, for me it just seems like normality.

Wish I knew what to do with it.

Irritated that I have these problems

Glad to at least know there is a learning curve and it requires more effort for results to show.

I don't tell many that I am dyslexic as it labels me

I haven't been labeled, the University don't know I'm dyslexic, I just get on with it. I don't to be recognized or perceived differently

Hate having to come out of the dyslexia closet

Proud that despite challenges I face academically have not stood in the way of my intelligence. My dyslexia has never been my deterrent it has always been my motivator

I don't think I fit into the classic dyslexia label. I think it's an umbrella term.

I hate how the university uses dyslexia. Everybody's dyslexic tendencies are different... Not just that you're bad at spelling or reading etc.

I like that I do things the other way round even if it takes a little longer, although it does take me longer to understand certain things which isn't good but not the end of the world. Dyslexia is not a serious problem for me, there are FAR worse things in life

Still a stigma, sometime I get embarrassed when I am called to write on flip charts etc. always feel I am slower at reading and comprehension than others.

Slightly awkward as my dyslexia isn't exactly typical and I feel people often don't believe me.

Frustration! It's more of a hindrance than anything. Your survey seems to be aimed at undergraduate studies. For a PhD student it's not particularly helpful to be dyslexic. I get no extra time or support like an undergraduate student would as I don't take exams or produce coursework. Largely the university support services are sympathetic but they catered to a majority market. I produce excellent work but it can sometimes take a long time, especially written reports etc.

Difficulties with learning

Normally I get things done and get good grades but it often takes me longer than other people and I have to keep re - reading things, and catching up on lectures where my concentration was variable.

While I have problems with reading and writing text which is spelt correctly and grammatical, I have fewer problems with comprehension and expressing myself in writing. (I also have ADD, which is more relevant to some of the answers than dyslexia)

71 I don't forget dates and appointments but it may be due to keeping a diary for it all, and have a routine that keeps me getting stressed over appointments and exams

I also have dyspraxia which has negative impacts on my time management and planning skills. Dyslexia is more minor however still persists. There has been great

improvement over the years of my reading errors and speed.

I don't have a problem finishing exams in time as I have extra time - otherwise it would be impossible!

Accurate reading and understanding: difficult for me to pick accurately, given I read 3rd Philosophy. I do sometimes skip key words, which can be a big problem. The weird grammar of philosophers can also throw me but that tends to throw everyone. Generally I have few problems understanding the grammatical construction of a sentence, unless I'm tired.

Remembering things I just read or heard. Again tricky to classify because you stated immediately, which is generally not a problem. The problem is more retention over time. E.g. You just gave me an instruction that I am to act on in ten minutes time. I would be able to repeat the instruction back to you almost word for word (assuming I was attentive) but may well have forgotten it altogether or key parts of it by the time I am to execute the instruction.

Exams. I almost never fail to complete or feel unduly time pressured in an exam where I am both allocated extra time and use a word processor. Either of those factors being absent can cause big problems (assuming it's not a maths exam or logic where a laptop is useless). Remember in first year of GCSE History we had a mid-term test (no laptop or extra time) in the class. I got exactly to the staples, completing section 1, but didn't even start section 2. Got 48%.

Understanding what other people say is not a problem in small groups with low ambient noise (e.g. seminar). It can be a big problem in a cafeteria or pub, say.

Confidence or lack thereof. I picked occasionally because I don't walk around every day feeling unsure of myself or as if I lack worth. It has a habit of simmering away then erupting to the surface whenever something goes wrong.

When I was much younger (circa 8 years old, now 22) I was incredibly frustrated with myself for not being able to spell or do things as fast as my peers. I have come to accept this and it will no longer bother me, nor do I mentally bully myself over this shortcoming. I have learnt new techniques that work around these shortfalls and I am

able to perform equally or above my colleagues. I struggle with reading out loud and it takes me much longer to read. I can read quick however If i am trying to take in the text to an in-depth way it takes me much longer. I am quite bad at spelling, especially with certain words, which I never seem to get right even when I write the word a lot. I tend to take a long time doing certain tasks such as writing.

Because I have grown up by it I am not embarrassed by it but it is a problem every day in one way or another

I struggle with using the right and sophisticated words to say what I am trying to say. I have a high attention to detail and I appreciate this makes me take longer in certain things. The main thing that used to annoy me before I was diagnosed was the fact I used to 'appear' to take much longer than others on a essay for example but end up with the same or less marks. I am not sure if this was other people who just had a better gift of the gab as I have often had a lack of confidence academically.

If I have a lot of reading to do I get really tired and that's terribly frustrating 105 It is a constant, exhausting struggle.

I think the final section of the questionnaire may produce a miss representation due to the fact there are no options in between 'occasionally' and 'never'. There are options I have selected 'occasionally' for due to the face I am human, not dyslexic specifically.

As my dyslexia was recognised early I have adjusted the way I work to help organisation significantly, and institute recognition means that I rarely have problems with achieving grades.

Hard to socialise (don't know if this is relevant.)

I find that choosing coursework based courses allows me to excel. I struggle with exams and I don't get the grade I deserve with them however, with coursework I can express myself better and as long as i put in the effort and get someone to proof read my work I get the grades.

Stress is unrelenting, when doing an assignment it is hard to construct sentences like other people seem to do with ease, not be able to do it makes it hard and therefore you do not want to do it, but when you don't do it and the deadline gets closer it overtake

your thinking and lack of sleep near deadline dates is hard to deal with.

A lot of the questions such as exams don't apply to me as a PhD student. I personally would be careful to attribute organisational abilities to being dyslexic. These skills vary from person to person and also depend on the cultural environment you're in.

For instance, my work life before university was much more organised with shared calendars and organised meetings with pre-set agendas. My experience of academics is that what they make up for in brilliance doesn't always translate into good management skills and training of their students. It's quite easy to get into a hazardous approach to your research if that's the culture in your lab.

By expressing myself, I mean verbally.

The education system doesn't cater to my abilities - I need a lengthy period of consolidation before exams (i.e. holidays) to perform near my best. I have consistently underperformed in timed essay examinations, and achieved well below my potential. Usually my exam grades are 20% lower than what I would achieve in coursework (A Level and University).

Remembering the words and expressing your thoughts coherently to others - if it's a subject I am confident in then I find the words but when it's something I'm not so confident in then finding the words, even the basic ones to string the sentence together is much more difficult or impossible.

As a PhD student I no longer do exams or get grades but my answers represent my whole experience as a student, BA, MSc and now PhD.

I have words in my head that I know are more appropriate but cannot spell them in my work. Or the tutor puts a film that's in French and I don't have a hope in hell of reading the subtitles to the film.

My dyslexia has gotten dramatically better since secondary school, because I don't like asking questions this helped me concentrate and develop. A lot of people with dyslexia are very intelligent.

Dyslexia sucks but what is worse is the preconceived notion that if you have dyslexia,

you are stupid

The remembering what's just been said or read question is best answered frequently for read & never for said.

I have been working very hard for 6 years with a specialist tutor who has helped minimize the problem. Spotting it early is the best way to overcome it

I would say that certain aspects such as organisation have improved greatly due to having a tutor who taught me ways of organising my life!

My processing holds me back... Although I have accepted that I'll get there it just takes longer than other people. But when I don't get there - that's when I get down. And then when people tell me to move on and try harder next time I get more down about my abilities

Dyslexia and disability

Even though I don't believe it is a disability its the only way to acknowledge on forms in order for people to understand and in order to get help. Without help i would not be where I am today.

I wouldn't want employers knowing because it may put me at a disadvantage in job applications as they may not understand properly what dyslexia is or know how I am affected. I'd rather they read my CV and judge me on that...

I feel like I would be at a massive disadvantage for a job opportunity if the firm knew I am dyslexic

My friends said it was easy to pretend to be dyslexic. I could have just "faked" the test.

I don't mind my lecturers who know me as a person and know how hard I try knowing but sometimes other lecturers can just think its an excuse to get away with things.

I do not regard myself as disabled. I'm not sure if that is due to a personal unconscious stigma (I'm bad but not that bad essentially) or due to social expectations when it comes to the term disability. It feels and one is regarded as disingenuous to

call oneself disabled without rapid further clarification. I tend to describe myself as having two SpLDs and then move onto the specific terms of dyspraxia and dyslexia. Of course the D in SpLD is generally taken to mean disability, which in turns means I am disabled and I understand myself as fitting into that category but I do not identify with it or regard myself as it. Too broad and lacking in specificity.

2Yes technically (by which I mean there is a physiological difference, with a probable genetic component (though that is not required for dyslexia or a disability in general), that leads to difficulties engaging with and participating in society, particularly in education and employment) and pragmatically (it is useful for gathering popular support, raising awareness, ensuring people with SpLDs are covered by legislation and so on). As stated previously I do feel there is some sort of qualitative difference though between a conventional physical disability and a SpLD. Not sure if that is due to personal bias or if there is actually something to that thought.

Obviously it is both. Why is this a question? I process information in a different way to the normal person, which gives me strengths such as a very strong long-term memory,

I do not see how dyslexia should define me. It is a different manner of thought rather than a disability.

I know it looks like my top 3 answers contradict themselves. I don't think it's a disability, but it's not just a difference. Disability is too strong, difference is too weak. In my case it's a difficulty because things are harder but not impossible. People with different levels of dyslexia will obviously have different views.

I have no shame whatsoever, but I do know employers worry that you may not be up to the job. I will not tell an employer I am dyslexic before appointment, but then will disclose once I have the job and when necessary I will request reasonable adjustments

When it becomes most clear to me that dyslexia is a disability is not when completing academic work but when trying to perform tasks such as reading instruction manuals, filling in forms, organising travel. Here I struggle to complete task which most people consider relatively easy, yet as almost all assistance which is available is for the difficulties faced in work or study there is no one to turn to for assistance except

family members and friends who often have to help me.

I find that dyslexia is a processing difference, not a disability, but it does require additional measure such as time extensions and else. Thus in an academic environment it does can be consider as a difficulty.

I'd only want my immediate family to know others would gloat to my parents over their children being better than me. Wouldn't want me being dyslexic to affect future career opportunities so rather employers didn't know.

Intuitive aptitude for conceptual analysis, for the grasping of complex concepts and for making connections between them. Writing and structuring essays for me has also been mostly intuitive, while always incorporating advice and feedback. Essays were often held up as examples in class. At GCSE I was told in English that at least some (perhaps most) of my work, when left alone to prepare it on a computer with unlimited time, was at least AS standard despite being in the bottom set. Likewise studying philosophy at A-Level and in University my work is often used as an example of good structure. That being said, I still read at half the speed (roughly I don't actually have my report with me) and hand write neatly at less than half their speed, struggle with phonological awareness hence the mispronouncing of words and so on.

Labels are useful. How else exactly would I explain my difficulties to someone and how would I convince them that there is a legitimate difference between us, other than the fact I am stupid or clumsy etc.? Categories can be dangerous and they create room for active discrimination but without a category society will automatically and without noticing or even necessarily wanting to discriminate against people with dyslexia, precisely because we would be inexplicably different without any understanding as to exactly how or why or the positives or what can be done to mitigate the difficulties.

Hmm... I always regarded SpLD as a general term for disorders such as dyslexia, dyspraxia and dyscalculia. Given that I do not have all of those disorders simultaneously I rather use the specific terms. However, the concept of a SpLD can be quite useful to help people understand the difference between dyslexia and dyspraxia and how they can be co-morbid without being the same disorder despite

having overlap in their symptoms.

Hmm... complex and I've already written far too much. Long and short of it yes I suppose I am. It makes me different but a lot of those differences have formed me and some of them are actually really positive. That obviously doesn't mean I don't sometimes feel ashamed or worthless and it certainly doesn't mean that other people can't either deliberately or accidentally make me feel that way.

Can't identify with an identity I do not truly regard myself as belonging to.

Yes ultimately I think so. Take eyesight as an example. There is a distinction between someone who is legally blind and someone who merely has quite blurry vision when they don't have their glasses (though we make joke that the latter is blind as a bat and they may, without correction, meet the criteria). We recognise that there is a spectrum ranging from really very disabled in day-to-day life to sometimes has to wear slightly annoying glasses when doing lots of reading. The same is true, possibly to an even greater extent, with dyslexia and people should receive support appropriate to their level of impairment and their own wishes. The problem is finding and refining methods for fairly judging the former and providing access to formal assessment.

We are students or people with dyslexia, not dyslexic students or dyslexic people- it may be part of who I am but it does not define me.

I'm not sure if it is just the wording used, but I again feel I am not a disabled person, in the same way I would not call someone who uses a wheelchair disabled. I may find it harder, it may not be my strongest skill, but the only way I am 'disabled' is if the institution or person is not able to assist or accommodate my needs, in my view this makes them disabling- if that makes sense. I think I feel it is more down to different learning or expressive styles and unfortunately the systems/methods used in schools or higher educational institutions favour the written form. I have no problem understanding information or expressing that understanding when it is presented in a way that suits my learning/thinking style. Also In my experience the term dyslexia is often negatively received, mainly as a result of ignorance but occasionally arrogance, so I avoid telling people unless I really have to, like a tutor or exam board. to a degree I appreciate that often a label or name is needed to categorise problems, link research or allocate support etc. but the more I read about it the more I feel dyslexia is not

really anything more than the beginning of the understanding that people are wired differently, have different strengths and learning styles and that not having the strongest literacy skills is not a deficit but a difference- those who cannot sing in tune are not deemed disabled, its just not their skill

I believe that the label of disability depends on the severity of the effects on the persons life as a whole, not just academically. It makes many aspects of life difficult and there should be support for all additional needs, not just academic ones.

I am a research assistant part time and my current employer knows that I am dyslexic. My dyslexia was a small issue when I first started writing up reports and I thus received a small pay cut, as it was grant work and people thus needed to be paid to read through my work. I understand this and I am happy that I was employed even due to my disability in an area that was an important aspect of my role. I am worried about telling my future employers about my dyslexia as I feel this would hinder my ability to receive offers. I think dyslexics are still perceived as slow even though there is a bit more 'good press' for them. I am

Coming from Poland, the very first time I have encountered discrimination or unpleasant treatment based on my dyslexia in the official educational institution was when I left to live abroad and attended both American and English education systems. (High School education in American system and Higher Education in English system). Previously except for one mathematics class in primary school, I was usually treated according to my needs.

I am not too keen on employers or lectures knowing that i am dyslexic because in my experience i was seen as a extra burden

I feel that sometimes future employers knowing may hurt my chances in application

I feel the reason I've managed to do so well despite my difference in learning style is because I have concocted coping strategies that have enabled me to succeed throughout my schooling. I think the culture around teaching and learning should be more focused on encouraging all students to explore how they CAN learn rather than enforce a blanket approach.

The more non-dyslexic people have to do with and understand about dyslexia, the more normal I will feel. Assistance is about leveling the playing field. The difficulty is that all the learning methods are set-up in a way that is not compatible with a dyslexic brain. But, given that dyslexia is a multi-faceted difficulty, it needs a multi-faceted solution.

I would not actively disclose that I am dyslexic to potential future employers for fear of negative misconceptions affecting their perspective of me. However I would be generally happy to let current employers know, if I thought this could lead to better understanding or a more effective/productive working arrangement.

I would classify CP, blindness and dyslexia as totally different disabilities as dyslexia doesn't restrict my movement/function only my cognition, also it depends on the degree to which some one people are dyslexic to which they are disabled like with CP, in the Paralympics a T37 is less disabled than a T32 athlete but both are disabled.

I feel people equate poor spelling with lack of education.

There is no reason to be proud of it that's just silly you can certainly be comfortable with it.

I have learning difficulties and deal with them the best I can, I am not proud of having these difficulties. But I am not embarrassed or ashamed of them, they are what they are.

Blindness and cerebral palsy are discreet disabilities; dyslexia is a spectrum and effect different people in different ways.

I have always seen my dyslexia as a Gift, what it has taken away from my academic skills it has add Tenfold to my Creative skills

I can't help that I don't always understand things first time. Or that I can't think of the right word or get it completely wrong. But I don't use dyslexia as an excuse too many people use it as so what I struggle, I don't have to try hard. I've always been told to do my very best, try as hard as I can, if something doesn't make sense or I need help then ask. I do struggle more than my friends but I also sometimes end up with better grades, I do put the work it.

I am proud to have achieved what I have and to be dyslexic. As I managed to get through much of my academic life without help I hope that during my career I can get by without mentioning it, rather learn coping mechanisms pull over time to get the work done etc. unless it becomes a real issue to which I feel it necessary to mention or during the interview if such an issue arises. Whilst I would not lie to deceive an employer, I will not actively go out to tell them about my dyslexia in fear of the stigma overshadowing my capability during an application process.

Dyslexia as a label can at times be difficult to deal with. Sometimes can feel like being judged differently because of it. But only being recently diagnosed I am still coming to terms with being dyslexic and what this means.

I am concerned that with an 'official' diagnosis, employers may be looking for problems, and seeing them where they don't exist.

I don't understand this statement "Dyslexia is a category of disability alongside more obvious disabilities like blindness and cerebral palsy"

I feel the more you educate others regarding your difficulties the more they understand. However, it is not to use dyslexia as an excuse its to promote understanding.

Where and when I was diagnosed as dyslexic it wasn't well understood and the teachers made me believe it was shameful even though I had a lot of support and encouragement from my parents I never felt comfortable admitting my difficulties to others.

"Whether or not a dyslexic student is disabled depends on the severity of the effects of their cognitive differences on their *academic skills*" - I think it depends on any bias in the way that these academic skills are developed/taught/assessed which actively disadvantages a particular way of working, or presenting work.

People don't have to know I'm dyslexic I won't say I am I'd rather just get along with it and if someone asks why I do something that's simple so strangely then I just say that's my way of doing things, it makes sense in my mind.

I need more guidance sometimes. But it's so unfair that people think its just spelling.

Its not, it should be explained better.

I would prefer an employer not to know as i feel this can lead to you being given different jobs to other employees. Although it may take me a bit longer to do something I can still do it to the same standard as any one else.

I don't tell future employer till after I am confirmed in position

The reality in my situation is that nobody really cares if I'm dyslexic or not. People want the work done yesterday in a research environment. I can explain to someone I'm dyslexia a few times but it falls on to deaf ears after a while. Academics always claim that they are or know somebody that is dyslexic and that they have no issues so why are you? Often they just think its a problem with spelling and use spellcheck or they will edit my work. They can't understand that I might have an issue around getting the words on the page.

Dyslexia for me is safely managed outside of academic study. I have adopted strategies in the other areas of life to cope sufficiently.

I wouldn't say that I'm proud to be dyslexic/disabled but I'm certainly not embarrassed by it, Its part of me and not something I can do anything about, think some of this comes from the experience of being older and generally just more comfortable in your own skin. Future employers though are another thing altogether, I wouldn't want to jepodise any part of my career or future career. For example when applying for a recent training position I need to complete my studies I didn't mention it at all and will deal with the consequences later

As I mentioned before people tend to judge my ability based on the label dyslexia, which is why I don't mention it to people who can't help me with it, or it's not their business. It makes sense for teachers to know because they can help but friends will mock, students will be sceptical and future employers might discriminate.

I have found discrimination in applying for jobs. The system of timed psychometric tests massively disadvantages dyslexics, and is a source of acute stress and anxiety. Worried that declaring it to employers will disadvantage me in my later career.

There is certainly a variation in terms of how understanding lecturers are with regards

to dyslexia. This was especially so when I was doing my PhD (before this masters). However once you have told a lecturer and realised they are not understanding, there is no way of taking back what you have just told them.

Equity issues and reasonable adjustments

Dyslexic students are as able as any other student. We just process information and answer in a different manner.

During school there was a lot of resentment for dyslexics or learning difficulty students despite the school being very good to give assistance. Often labelled as 'bad spellers who were just whining'. Less troublesome in university.

Comment on: I sometimes feel bad about having, or being eligible for, DSA funding and reasonable adjustments, like extra time in exams, when some of my friends and fellow students do not get them

I assume you mean fellow students who are not dyslexic? I have a dyslexic friend who is a non-EU student and so has less help available for her, I feel bad for her because she is having the same difficulties but not the same assistance.

People in general in the university seem unaware of the adjustments that might be needed for any students with disabilities not just dyslexics and after having gone through the universities training for seminar leaders it is clear that no training on the needs of disabled students is offered.

I have noticed that some of the problems I experience due to my dyslexia appear to be shared by non-dyslexic friends and fellow students: Yes, some non-dyslexic friends seem to have similar issues from time to time - but not to the same extent, nor consistently.

Most of my lecturers don't know so wouldn't understand.

Postgraduate DSA is completely different and frankly a farce.

I know some people who think they are a bit slow at reading and writing and would benefit from some help but I don't feel bad as I'm positive I struggle way more than most people, especially at reading and listening in lectures

Some lecturers do not know I am dyslexic, those that do, don't treat me any differently to other students.

I would not "feel discriminated by the university system" if the support were well provided and fair for all, but it seems to be a lottery according to which assessor you go

I do not feel bad about having the extra time in exams, but I do feel bad about the DSA even though it hugely helps me.

On the last point, I feel it marks them as different but then the label already does that. It may lead to some stigmatisation, though I have not really encountered that since secondary school (from peers not teachers), but it is necessary. Much like ensuring buildings are accessible to wheelchair users through use of ramps and lifts is necessary. Any stigma that results should be addressed through education and activism.

I think the broader the term dyslexia becomes the more I feel many people experience difficulties with areas attributed to dyslexia. many people struggle with spellings, read at a slower pace or find it hard to maintain concentration, hence why some people feel annoyed that those who receive a label of dyslexia get funding or extra time. I'm sure I have read that dyslexia is now viewed as a syndrome and that people sit somewhere along a continuum of need, which must make it hard to decide who does or does not qualify for additional help or support. my university claims to be supportive and inclusive towards students with dyslexia, but when explicitly asked very few (apart from those working in or alongside the disability services, have any understanding of what dyslexia, for example, when discussing areas for my dissertation I mention to a tutor my interest in dyslexia and their response 'oh yes, that's when your eyes flicker and don't focus on what you read'. and yes I feel it frustrating that I can only express my knowledge via written assignments or exams, but due to practicalities such as time and finance I don't feel oral exams would be feasible and if they were an option exclusive to those under certain disability labels I'm sure this would then be unfair on others who struggle but not have a label.

I don't think any of my lecturers know that I am dyslexic or that any students on my course are

I think dyslexic students have to work with the assistance available to create strategies that work for them. If you want to achieve in academia you have to produce a certain standard of work whatever your disability or problems. Yes it can be more time consuming but it can be done

I don't actually qualify for funding as my island has a different system but I do get specialist equipment if I can afford to buy it - which I can't.

It would be nice if I could propose to conduct a presentation of an essay. I find it easier to get things across by talking about them rather than trying to write them down.

I have never claimed DSA funding - I didn't think it was appropriate. 1

I do not feel discriminated against, I just don't think it's very fair but I can't change that.

It's not about getting a free laptop, other students just see that and think that's unfair. For me it's about getting the help and the support from the academic support and the software so I can get the best grade possible. Also you could argue that it is unfair how I need to study 5 hours a day for months and manage to scrape a C and some of my non dyslexic friends study on the night of the exam and get an A. There are pros and cons to everything, but getting some of the equipment can make dyslexic students a target of resentment, but I doesn't bother me too much because it makes me confident that the quality of my work will be up to the lecturers standards.

While I agree with the first comment regarding reasonable adjustments I feel the label of disability is completely wrong. Just because there is a difference doesn't make it a disability. For example if you have a food allergy it doesn't make you disabled, just because your body cannot process something in the same way.

To much reading!

The general attitude from my school is not very helpful and understanding and I often have to push to obtain the things I need for term time assessments etc. but the examinations department for final exams are fantastic and have always accommodated me very well. I use a PC for my exams and this has helped no end

(spell checker, cut and paste) etc. are invaluable.

Also I'm not sure I would do much better at talking my way through an answer because I often have the same difficulties retrieving words or organizing my thoughts into words whether it on paper or spoken, so what ever the assessing method it is going to advantage and disadvantage different people in different ways.

Re: "I feel discriminated against by the university system that requires me to be assessed via written assignments and examinations". I realise that written work utilizes skills which are widely applicable to graduate life and work, and that it is important to develop these skills in all students (dyslexic or not). However, it is important to assess students using a variety of assessment methods. I would feel disadvantaged if all of my assessments were essay format. Different students have different innate strengths and weaknesses (dyslexic or not) and diversity in assessment methods is essential for fair assessment of learning.

As non-UK/EU/EEA citizen, I experience difficulty to obtain reasonable adjustments and supports owing to the financial shortage by the university.

To the last question depends how the treat them differentially in an obvious way in front of many or changing there learning techniques with one to one

If people didn't receive Photoshop and stupid programmes then there wouldn't be so much stigma. Not everyone does. If other students understood that it's about processing speed, understanding only part of what's said. Being unable to write everything down. That if we want a mac is out of our pocket.

Because people at . don't know I am dyslexic, I do not take advantage of the benefits open to me

Equality act intentions & outcomes good but shouldn't label as disabled - another phrase would be better.

Throughout my education I have had much stigma and jeering about my dyslexia. Could be considered as bullying, even.

In regards to examinations - at Arts we have no exams but written assessment is

expected on all courses.

At UAL 17% of our students are disabled, a lot with reasonable adjustments being made but there are still gaps within attainment.

Inclusive Practices

16 Everybody suffers with exams to some degree. I personally think exams are a flawed and outdated system, which encourage students to learn how to pass exams rather than pursue knowledge.

30 I don't mind if everyone is tested to see if they need different forms of extra help but I still think dyslexic people should be prioritised. Some people complain that they would benefit from help but then in the next convocation they've read a book in 3 days. Non dyslexic people might benefit from help but I think they will rarely have needs as big as dyslexic people. I really doubt non dyslexic people need extra time in exams, they just want it. That said, if there were proper tests for everyone to see in they need it I don't mind

What means need? If the person is has a learning difficulty that requires extra time or other support mechanism (s)he should get them but I do not think everyone just because they ask for it should have it.

None of my non-dyslexic friends seemed to be at a disadvantage for not having similar provisions as myself. Many of the things that I found useful they said that they would not use at all (such as the programme that reads documents out aloud to you).

A moderately proficient student without dyslexia may gain significant advantage by use of IT in exams etc. and would in effect "un-level" the playing field again.

Regarding the first option I am uncertain exactly what you are proposing. If you are suggesting that all the money be pooled and made available as a general fund to which any student may apply, well I would disagree with that. Without any strict criteria for inclusion or exclusion it is too vulnerable to abuse and too subjective (e.g. I might not be eligible for support with such a system, though I do not currently draw upon a DSA, given that I function quite well. The mere fact that the disabled student, who has spent decades developing coping mechanisms, can perform better than a

student, who was merely unprepared for university and unwilling to put the work in, is both unsurprising and should not exclude the former form support or include the latter for support.

Hmm... I would be open to the idea that every student can choose to word process an exam. Not that the art of handwriting should die out. But really almost all non-artistic documents of any length now are typed. Why should an exam be any different? The extra time though is meant to compensate for slower processing times and longer time spent

Each dyslexic person is individually assessed for their needs. If they need extra time, it's not that they don't have the knowledge it's because they take longer to get in written down.

Far too little information on the above to make an informed decision on such proposed changes to DSA provision.

I am not sure what 'Disabled Student Allowances (DSAs) given individually to dyslexic students should be replaced by carefully designed university-wide provision that takes account of the needs of all students.' means, but I do agree that the DSA is individualised so that my needs are satisfied as much as the needs of another dyslexic student even though how we suffered may be different.

These statements are far too ambiguous to assess. What is meant by the needs of all students? Does this mean that dyslexic students will not receive individual assistance?

As to the second statement if by any student who needs them is meant any disabled student who's disability interferes with their ability to complete written exams under time constraint then yes. If it means any student who's grade would be increased by such a provision then no.

I think everyone learns in different ways, and has different learning needs.

Maybe a slightly lower bar on eligibility but ultimately time-management is, regrettably, an integral part of the examination and how it functions as a method of testing.

There are too many maybes and buts regarding the last two questions to give a definite answer. I don't think it's as simple as sharing the funds out and it would benefit all, some may benefit from this, but I guess it's down to the individual, I'm not sure it would be possible to cater to every individual's needs in such a universal way. I do think some of the assistive technology on computers should be available to all students. And I think tutors could make their lessons more accessible to all students with simple strategies that are not particularly costly or time consuming. But take for example the use of coloured overlays, if students did not receive some individual funding many could not afford to purchase them themselves, they cost around £15 per overlay, and although notes or slides could be printed on different coloured papers, if the teacher or student has them prepared beforehand, notes made on a white board during lecture time are still going to be inaccessible to some, unless the teacher were to have various coloured boards and pens and write the notes out over and over.

University wide provision seems unlikely to take account of the differences between conditions like dyslexia. My concern would be that I would be told that my condition was already accounted for. Few staff have sufficient expertise to fully understand what different people might need. I do, however, think that the university should have policies for inclusion of dyslexic students, AS WELL as DSA, for example, requiring lecture slides to be available in advance, setting out course booklets clearly and consistently in user friendly fonts etc.

There is a very broad spectrum of difficulties in dyslexia.

As a dyslexic student I have found the additional provision fundamental in enabling me to work at my intellectual potential and I would not like to see this provision reduced. However, there are simple dyslexic strategies that could be applied to lectures and assessments that could benefit all students. I personally did not use a word-processor in exams but I see no reason why any student shouldn't be allowed to use one if they feel more comfortable typing than writing.

Without the DSA funding I don't think that I would be in the position I am now nearing completing and gaining a degree.

I think if it was given to any student then they wouldn't try as hard or push themselves

The point of extra time for dyslexic students is to balance it out and make it fair in comparison to non dyslexic students. As a dyslexic person When I read a passage I don't always remember what I have read, it lead me to panic and I would have to re-read a passage 3-4 times in the exam. This is why they let dyslexic people have extra time, I don't think it would be beneficial for everyone to have this unless the had a learning difficulty.

Similar DSA should be given to other dyslexic students regardless one's immigration status. E.g. non-UK, EU and EEA citizens.

I feel if DSA was made available to all students, many would take advantage of the system and this would be a large cost to the government.

Document 16: Non-dyslexic students survey text data

Difficulties with learning

My daughter has dyslexia, and therefore I know quite a bit about it, having been responsible for obtaining help for her in the past.

During Secondary school all my handwriting was entirely illegible since I was taught through primary to join up every letter in a word, and could not shake the habit. With the help of my Father I completely changed handwriting styles towards the end of Secondary School and vastly improved my legibility. During College I was tested and Identified with an abnormally slow speed for handwriting and typing, and would often place nonsensical words into sentences without realising.

I appreciate the restraints of dyslexia, although I believe no one can fully understand the intensity without experiencing it themselves.

I feel that dyslexia and dyspraxia (unsure of spelling) is when the brain struggles to deconstruct and understand something fully, such as long items of text which some people struggle to read without a coloured page.

Only know of the common traits that dyslexia sufferers have to deal with, such as, reading issues, writing letters upside down/back to front.

I have been told I have some learning difficulties in higher education but not in my traditional schooling years.

Dyslexia is a pretty wide term, but is mostly involves people having problems with reading and/or writing.

One or both of these subjects doesn't come natural for the person with dyslexia, but it is different from person to person what it is.

Some people have problems understanding the context of a text, and need extra long time to analyse it etc.

Most dyslectic problems are looked up on as "fixable", with help and training, for the individual that needs it.

It was difficult to rate my level of education - I was more driven than most and therefore pushed by teachers. Most of the teachers I have experienced only care about helping the "clever" children.

By "not entirely" i feel i do understand the basis of what dyslexia is but not how people are diagnosed etc.

I know dyslexic people, but did not meet them at school / university, so I am not sure they qualify as students. They have both been students at university, though.

I understand dyslexia as not being able to read and form sentences with ease. But I am not sure how severe this is and how it is seen through the person with dyslexia.

In a lot of ways I do believe I have slight literacy or dyslexic-type difficulties, my sister was heavily diagnosed but I have never had testing or support in the area.

I think Dyslexia is a largely misunderstood area and hard to truly identify, such as in my case where I am not sure if I do have learning difficulties or not, because testing was not readily accessible or too expensive.

The final one should have been broken down into asking us what we actually think about dyslexia, or giving some scenarios and whether we think that means the person has dyslexia or not.

It will be better for your research collection than just asking yes or no, etc.

Only 2 genders are selectable. This obscures those who do not define as either.

I don't think anyone believes the extent to which I personally feel hampered by my possible dyslexia. Either that or I am thick. The cost is too much to get it checked out now though.

I am a mature student of 64 years of age, so some memory loss is natural at that age
94 n/a 156 I suffer from depression, which can impact these.

163 I just have to mention that i am not English, I am Czech so English is my second language. A lot of my answers are influenced by the fact that English is not my first language.

I have dyspraxia. I have more problem with math related subjects. Maybe look at different forms of dyslexia ? All of the above statements tend to happen more often when I am tired or fatigued. On top of this, I am not an English native speaker, so I systematically misspell or mispronounce certain words (at least until someone kindly corrects me) and have to allow some time to attune myself to other people's pronunciation, especially when I first meet them. This takes considerably longer and is more difficult in noisy or crowded environments.

Are you taking into account people whom English is not the native language? This makes a difference for some of those questions.

I've always been concerned about how poorly I spell, but because I've been top set English since primary school, feel that I never had any support or attention for the problem, which would have been helpful.

I draft write an essay, and then when I come to type it up I am so confused with what has been written, even though its my own stuff.

Dyslexia and Disability

My response to the statement: "I tend to think of dyslexic students as disabled" was to answer with "Unsure" as I would like to revise the actual definition of 'disability'. In some cases people have used dyslexia in my past to get off reading or writing assignments so to say it's an excuse depends on the individual, I agree with some studies that not everyone who struggles with learning should be labeled dyslexic because then somewhere down the line everyone will be dyslexic. It is something not understood enough evident by the fact I know little about the disability myself other than reading writing and spelling are a factor. And then you ask yourself could this not be a learning issue or it's it full blown dyslexia.

There are many ways to help people who are dyslexic so I don't feel it would change my life too much but I am lucky I don't struggle to understand work as much as some people.

I'm dyslexic, I just never went anywhere to be diagnosed.

With regards to question one I do see dyslexics as having a disability in that certain

area therefore needing more help but they are often much more capable in other areas. Being disabled so often has bad connotations for 'able' people and I don't believe this should be so.

It is difficult for me to imagine what it actually feels like.

I think the difference with dyslexia is that it is not obvious - so while I'm sure it can be extremely disabling, I think there is a very wide range of disabilities experienced by the particular student. For example, some students I know who are dyslexic feel it only limits them in certain areas of study, whereas others seem to struggle more broadly.

I don't understand the third statement. Dyslexia is considered a disability in the Disability Discrimination Act. Even if it is not visible, it is a disability. Also, the degree of dyslexia can vary, and people can have ways to cope with it, and only occasionally require additional help i.e. having to disclose their condition.

I said here, I disagree with 'I'm glad I'm not dyslexic'. This is because whenever I have done tests I come up as slightly dyslexic, but when tested further, nothing comes of it. I have always had trouble with Literacy and am not offered the help that dyslexic students are. Also they get given free MacBooks and Editing software on my course.. and I want free editing software!!

I struggle with written tasks although not dyslexic- it could have been potentially more help if I were.

People use the excuse for dyslexia as a way to receive items in higher education, and for a free pass with certain things, then expect people to take the dyslexia seriously, which is unacceptable.

Dyslexia is just a different, less common way of thinking that is incompatible with the way society currently measures intelligence.

In my opinion dyslexia is often an excuse for laziness or lack of ability

I chose disagree rather than strongly disagree because I feel some people do use dyslexia as this; however I'm not sure these people actually have dyslexia so its hard

to agree with that statement

I was raised to see disability as a physical thing. but as I have grown up I realise that there are many mental things for disability.

I'm not sure I would describe dyslexia as a disability, though I'm not exactly sure why! By this I don't mean to say that I think dyslexia is not real, I do think it's real and think dyslexic people should receive the extra help they need. I think I just shy away from calling it disabled as I have negative connotations of the word disabled that I wouldn't want to stick the label on those with dyslexia. - having negative connotations against the word disabled is probably a bad thing in itself!! I just don't like labeling people.

Equity issues and reasonable adjustments

I know more than one person who has played the system, getting free stuff and bursaries, when they really don't feel they need that much help.

Unsure with one comment as have not heard or seen any dyslexic students 'play the system' but cannot rule out it happening across the nation. Would assume this would be a minority if it happens.

The funding for computers and equipment to aid dyslexic students is something that is often abused by non-dyslexic students and should be removed or toned down to seem less desirable to those that would cheat the system.

Essays, exams and so on, are a test of an individual's skills when compared to others. Allowing select students more time based on personal difficulties may affect the outcome of such tests in a way that does not accurately represent that student.

I feel that the amount and value of material objects that the dyslexic students are given, does not reflect the nature of the issue. Personally, having worked hard to save for my own equipment, i feel a little irritated that a student not working but with this problem, is given much more than i have been able to, when it isn't specialised at all. Also, the laptops and other items, seem, from what I have seen first hand, unnecessarily expensive. For example, a housemate of mine with the grant received a 15 inch Mac Book Pro retina display laptop, when she is on a course which doesn't

even require a sketch book at the moment, plus a new model of a cannon printer, with ink, which to my knowledge has been used only for Freshers tickets so far. I really do think people who need support should receive it, but I don't think that this is the way to go about it.

I know of a couple of people that faked being dyslexic in order to obtain free equipment.

I have no problems reading, but have always had trouble writing legibly - growing up in the 60s/70s I was just 'untidy', now I would no doubt be 'dyspraxic'!

I absolutely agree that some dyslexic students play the system by getting free laptops and extra time in exams when they don't really need them. I know students like this, and their ability is no different from mine, yet I get no help.

I think when you realise that there is support out there and you are not thick it can be life changing.

"I think that treating dyslexic students differently stigmatizes them as less able"... depends how they are treated

By giving dyslexic students extra help and time ensures that they can finish a task to their best standard without being restricted by time due to their struggle

The last three again are a small minority of people. But there are people out there that need the help.

The fact that there might be students taking advantage of the system does not justify taking away the help to all the honest ones (like for benefits, but that's another story). Granularity in assessing the degree of help needed might be too difficult and expensive to achieve.

As for the stigma of "less able", we should move away from that for all disabilities...

I do agree somewhat with dyslexic students getting computers and other things free, especially a computer which doesn't really help

Treatment of dyslexic students is done privately, there is no need to make it public

knowledge, and making it patronising.

Inclusion

I understand the people with dyslexia need extra time and help etc, but free laptops etc is completely excessive, considering so many students struggle with other problems such as mental health, illness and money issues and don't get this

Special considerations are given to other students who need them for other disabilities.

Universities may not have the money to do this for every student

"Reasonable adjustments currently available to dyslexic students, like the use of extra time and word-processors in exams, should be available to any student who needs them" - aren't they already? I receive extra time for having another disability category.

I struggle with writing because of my handwriting so feel that this hinders me in written tests etc. In this case, if my writing was that bad I feel that I should also be considered for a laptop or some assistance as it means that people struggle to comprehend my work, meaning I may lose out on marks because of this

I think reasonable adjustments are already available to students who need them (e.g. those who break their writing hand the day before an exam).

As for the first statement, I don't know enough to have an opinion. I can see pros and cons for both positions, but not enough to tip the balance in any one direction.

There seems to be some people who really don't need the extra help and they brag about it. I do recognize that dyslexia is a serious problem for some but it is difficult to sympathize when some people seem like they would be fine without the help

If students need help there are people to whom they can turn to for advice. we all complete the dyslexia test at the beginning of the year... We are very lucky that if we need help there is always someone to talk to

I do feel that if the university is able to procure funds to give dyslexic students

laptops, it would be more fair if they could also procure funds to give laptops to students who are unable to afford them.

I think anyone should be allowed to use word processors - but extra time should only be for those who really need it. You don't get extra time in working life!

I have friends who have been waiting for months for dyslexia test, not sure if changing provision provider would help or not.

Document 17: Dyslexic students self-perceived strengths

Practical and creative

Mathematics

Photography and baking

Creative thinking and problem solving

Fact collecting

Verbal communication

Practical tasks, such as crafts, photography.

Spatial data analysis

An ability to recall rather accurately theoretical models that are in a diagram

Maths

Good at playing instruments

Verbal reasoning skills, creativity

Verbal communication

Physics, Memory

Art

General intellectual ability and complex reasoning

Languages, particularly grammar

Thinking outside the box

Obscure fact recall, verbal communicationcritical analysis, conceptual thinking, both understanding complex concepts and teaching them to others.

Simplifying without losing too much rigor. Generally regarded as a talented student and writer (well typer) whose lack of organisation holds him back (NB: I have dyslexia more as a co-morbidity to my dyspraxia. Formally diagnosed with both but the latter is more of a problem and is objectively worse according to the testing.)

Thinking outside of the box

Maths, Science

Organisation, Logic, Intuitive, Fast processing

Mathematics

Long-term memory

Creative and practical activities. puzzles. Visually observant. Understanding and explaining how theories, ideas or information link and relate to each other. Numbers and logic. Public Speaking and Debating. Spatial skills

Empathy with others

I have been praised for my presentation skills. For being hard working, driven, having a strong work ethic. I have ben praised at my ability to grasp sociological issues. I have been told that I am personal and have good communication skills. I have a creative talent and was very good at Art during school. I have a good short-term memory. Endodontics, singing. Being a good friend. Analytical thinking

Problem solving. Seeing things from a different perspective

Creative Writing Teaching

Long-term memory

History

Programming, Piano playing

Funnily enough, writing!

Singing

Intelligence in many subjects

Big picture and systems thinking. Working with groups. Verbal skills.

Forming practical solutions to problems

Computer programming, problem solving

Sport (gymnastics and trampolining)

Music (Clarinet and Saxophone)

If anything organisation

Engineering, conceptual design, spatial reasoning, leadership

Yes, things I have persisted in and practice and enjoy.

Music. drama

Artistic and creative thinking - think of other ways to do things

Mostly creative activities

Drawing from my imagination.

Art

Logical thinking, hands on tasks

Acting/Performing (entertaining)

Drawing

Problem solving and puzzles

Art

I am talented at drawing.

Problem solver

Art

Grade 8 cellist

Good at creative writing

Grade 8 singer

Sculpture

Friends and tutors have said that I am creative and hard working, with filming.

Sports

Art and music

Maths

I feel like cooking/baking probably isn't what you are looking for here.

Seen to be reasonably intelligent, accusations of not being dyslexic are common. Mechanics Academia and general athleticism

Mathematics, visual problems

Writing poetry/rhymes

Math and logical thought

TEACHING, PUBLIC SPEAKING

Common sense, sales

Drawing

Creative writing and art

Spatial reasoning, Maths

Acting, dancing, classical guitar

Leadership, careers, rugby, travelling, socialising, speech-making

Organisation, high mental processing speeds

Attention to detail and public speaking

Personal communication, analysis of situations

General knowledge and event organisation

Mathematics Physics Chess

Presentation

Patient interaction and oral communication skills

Drawing, Observation, Problem solving

My memory, normally for unless information, the sort of information that plays in my favor in quiz situations!

Not sure if this is relevant, but running

Music, dance,

Lateral thinking, determination

Verbal communication