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# Beyond cognitive deficit: the everyday lived experience of dyslexic students at university

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## Beyond cognitive deficit: the everyday lived experience of dyslexic students at university

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### Points of interest

- This article is of interest to students with specific learning difficulties, educators and specialist practitioners in higher education, educational psychologists and speech and language therapists.
- This article explores the lived experience of students with a label of dyslexia.
- This article identifies some of the ways in which dyslexia interacts with specific educational contexts.
- This article helps to highlight some of the disabling aspects connected to dyslexia which may not be clear from cognitive assessment.
- This article supports the argument that dyslexia is indeed disabling, and that these disabling aspects arise from an interaction between cognitive difficulty, environmental expectation and pressure, and individuals' educational experiences.

### ABSTRACT

*This study explores the lived experiences of three dyslexic university students as they negotiate a number of different learning spaces within their higher education institution. The students completed reflective diaries for a period of three weeks and were subsequently interviewed about the experiences they recorded. The transcribed data from the diaries and interviews were analysed using interpretative phenomenological analysis. The following four themes were constructed following analysis: getting things out of my head; holding back – performance as risk; ever-present inner voices – effort of constant self-monitoring; and not belonging in academic spaces – metaphors of misfit. This study argues that attention to the everyday experiences of students with the dyslexia label is as important as knowledge of cognitive differences in the drive to create a more equitable learning environment in higher education.*

### Introduction and literature

In light of the many different understandings of dyslexia that students with the label have to negotiate (Cameron and Billington 2015a; Pollak 2005), and considering the emphasis

## KEYWORDS

Dyslexia; university;  
lived experience; higher  
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placed upon high standards of literacy as an indicator of 'intelligence' in the developed world (Collinson and Penketh 2010; Ong 2002), this study aims to explore, in depth, what it can be like being someone with the dyslexia label at university on an everyday basis. The study also aims to gather insight into some of the ways in which these students might make sense of their experiences. A small sample size was purposefully chosen in order to allow a 'detailed, nuanced analysis' (Smith 2004, 42).

What dyslexia is is highly contested, and has been since its emergence as a widely recognised label for specific learning difficulties (for example, Beaton 1997; Elliott and Grigorenko 2014; Stanovich 1996). This contestation is a challenge to institutional recognition of dyslexia, which is to some degree dependent upon receipt of a standard definition (such as the commonly used offering from the World Federation of neurology [1968]) upon which it can build policy and set guidance; and likewise, a stable knowledge of dyslexia is crucial for institutions, educators, policy-makers and students to understand the extent to which dyslexia can constitute a disability under the terms of the Equality act (2010). More recent arguments about dyslexia focus upon validity of diagnoses and point to the lack of agreement about which difficulties are part of dyslexia and which difficulties are not (Elliott and Grigorenko 2014); and there has been particular questioning of the relevance of the label in higher education (Elliott 2014). Although not the intention, squabbles in the field of dyslexia research feed arguments expressed in the popular press that dyslexia does not exist (for example, Sample 2005), which unfortunately are too often translated into an assumption that people's reports of specific difficulties with literacy and related domains are disingenuous (for example, Daley 2009).

Variations in ways in which the dyslexia label may be interpreted can also mean that students have to be increasingly flexible in how they use the label: sometimes hiding it, sometimes openly disclosing, sometimes taking pride in it, sometimes feeling ashamed to take help (Cameron and Billington 2015b; Pollak 2005). Yet there is strong evidence that people with the dyslexia label do face particular difficulties in relation to specific difficulties in particular cognitive domains (for example, Nicolson and Fawcett 2008; Shaywitz and Shaywitz 2005; Snowling 1995; Stein 2001) and that these have implications for study in higher education (Farmer, Riddick, and Sterling 2002; Hatcher, Snowling, and Griffiths 2002; Mortimore and Crozier 2006; Pino and Mortari 2014). There is also evidence that dyslexic adults have lower self-esteem in educational contexts (Carroll and Iles 2006; Madriaga 2007; Riddick et al. 1999), and often have to manage memories of very challenging experiences at school which continue to impact upon their adult educational experiences (for example, Madriaga 2007; McNulty 2003). Some of these students also seem to find a lack of understanding of the difficulties they face (for example, Riddick 2003); or they experience social discomfort in relation to dyslexia (for example, Hellendoorn and Ruijsenaars 2000).

There is an abundance of dyslexia literature in the field of cognitive psychology and individual differences (see examples given earlier), but this tends to focus upon measurement of deficit and prefers large sample sizes for greater generalisability. Such studies neglect attention to the details of experience of those studied and ignore the interpretive element

in their analyses (Burman 2003). They also neglect the ways in which personal histories and the social environment, in all its complexities, interact to help produce what dyslexia can mean for an individual student in a specific educational environment (Burden 2005; for examples of studies which do this well, see Herrington and Hunter-Carsch 2001; McNulty 2003). as Hacking (2002, 358) argues, the socially produced aspects of a phenomenon or object are no less 'real' than those apparently produced by their inner nature. While there are some thorough and insightful studies which have focused upon experiences of dyslexic people in post-16 education, these often explore breadth over depth of experience (for example, studies with larger sample sizes such as Blace et al. 2011; Carter and Sellman 2013; Farmer, Riddick, and Sterling 2002; Griffin and Pollak 2009; Madriaga 2007; Pollak 2005). other rich and insightful studies (for example, Collinson and Penketh 2009; McNulty 2003; and Palfreman-Kay 2000), which do look in depth at a small number of student experiences of support, are over 10 years old. The higher education landscape has changed quite significantly over the past 10 years, and so arguably a fresh exploration is justified. none of these studies used interpretive phenomenological analysis (IPA) as a research method, but tended to draw upon grounded theory, the narrative approach, or other means of qualitative analysis of described experience. The current study, however, looks in depth at the experiences of three university students with the dyslexia label and uses IPA as the method of choice. This small participant number was an advantage because it permitted attention to detail that a larger study would have prevented (Smith 2004).

The terms 'dyslexic student' and 'student with the dyslexia label', or similar, are used interchangeably throughout. The former is often preferred by students, and the latter is a reminder that the label is given rather than essential to the individual.

## Methodological approach

Jonathan Smith (2011, 9) describes IPA as 'concerned with the detailed examination of personal lived experience, the meaning of experience to participants and how participants make sense of that experience'. In other words, the researcher is trying to get as close as possible to understanding what it is like for a person in a particular social context, and how it is that this person makes meaning of that experience. Phenomenological analysis is informed by the work of the original phenomenologists, Husserl, Heidegger, Merleau-Ponty and Sartre, who focused their attention upon the person-in-the-world rather than the person-as-isolated-unit-of-study (for further discussion see Smith, Flower, and Larkin 2009). In the words of contemporary phenomenologists, 'we are a fundamental part of a meaningful world ... and the meaningful world is also a fundamental part of us' (Larkin, Watts, and Clifton 2006, 106). IPA researchers are interested in reaching out as far as is possible into the meaningful worlds of the participants.

In phenomenological research, therefore, the person is not separated from the relevant context; the researcher is 'trying to make sense of the participant trying to make sense of what is happening to them' in that context (Smith 2011, 10). likewise, the researcher cannot 'jump out' of the world in order to examine the person (Larkin, Watts, and Clifton 2006, 106); they can only attempt to acknowledge and reflect upon their own preconceptions and assumptions in interpreting the descriptions of others (Rodham, Fox, and Doran 2015). IPA is particularly suited to research questions which in some form ask 'what is it like?' in relation to a named phenomenon, rather than those which ask how things are (Larkin, Watts, and Clifton 2006).

IPA involves 'exploring, describing, interpreting, and situating the means by which our participants make sense of their experiences' (Larkin, Watts, and Clifton 2006, 110), or in Smith's words (2004, 39) it is 'idiographic, inductive, [and] interrogative'. The different elements in IPA can be undertaken in stages which shift attention from description to more overt interpretation, although interpretation is part of analysis throughout. The researcher moves from the experiences of the participants to the wider context and back again in what is named the Hermeneutic circle. Although analysis is very detailed, there is no 'cookbook approach' (Smith 2004, 40), but the guidance suggests familiarisation, initial coding and thematic analysis for each individual case in full before moving to the next.

### ***Data collection***

The three participants in the current study were asked to keep a diary over a three-week period during semester time. Loose guidance was given on how these diary entries might be structured, which requested comment upon a learning situation, what happened in that situation, how they felt they participated in that situation, what that felt like and, finally, some reflection upon why they thought they might have felt as they did. These diaries were taken in by the researcher, typed up and categorised, and used as the basis for discussion during the subsequent interviews. Interview questions drew directly upon the experiences described in the diary entries. Questions were shaped in order to gather richer descriptions and reflections upon the different experiences of the participants and included questions such as 'can you tell me more about how this felt?' and 'what was that like?'. The interviews were recorded and transcribed by the researcher in preparation for detailed analysis.

### ***Data analysis***

Data from the diary entries were subjected to initial coding which was largely descriptive. This meant that each sentence or chunk in an entry was summarised using a phrase which aimed to indicate what was happening or what was being felt or experienced in that moment; for example: 'feeling stupid' or 'getting left behind'. The 'ing' form was used (after Charmaz 2014) as a way to stay focused upon process and to avoid reification of feelings and separation of feeling from the person and context (so 'feeling frustrated' was used instead of 'frustration'). Because these data were intended as a means of shaping the interviews and ensuring some grounding of interview questions in participants' experiences, they were not fully subject to secondary categorisation or thematic analysis.

The interview transcripts were then read thoroughly and notes were made on any initial impressions. The first layer of coding involved numbering each line of text and allocating to each a few words or phrases (usually in gerund form) which summed up what was happening or what was being described by the participant. In undertaking secondary coding the intention was to shift from a descriptive focus to a more linguistic and conceptual analysis. This meant looking at the kinds of words, structures and metaphors that were being used and involved greater freedom of interpretation. In the third analytical level, the research examined all of the secondary codes while also attending in detail to parts of the transcript, and reflecting upon possible themes which might group the conceptual analysis. Once this was roughly complete, the process was repeated with the remaining interview transcripts. At this point, the data were compared together, and the researcher considered the relationships between themes and reflected upon where they overlapped and where they diverged (see

Smith [2011, 10] on the importance of balance between 'convergence and divergence within the sample'). new overarching theme names were constructed from all of the data thus far produced. Themes were only considered overarching when they were reflected in all of the participants' described experiences. Throughout the analytical process, the researcher was mindful of her 'role in the creation of knowledge' (rodham, Fox, and Doran 2015, 62). The researcher's experiences and perspectives constructed within the field of specialist teaching in specific learning difficulties in higher education necessarily guided interpretation of the data. as such, 'reliability' of data analysis, in the scientific sense of the word, was not an aim of this study; instead, trustworthiness (rodham, Fox, and Doran 2015) of data analysis was sought through rigorous, transparent and systematic analysis.

## ***Participants***

a general invitation to express interest in the study was sent by email to dyslexic students registered with a specific support service at one university. Those who expressed interest were invited to ask questions and raise concerns, and were given a detailed information sheet outlining the aims of the study and expectations of participation. Those participants who wanted to take part after having read the information sheet were asked to sign a consent form, and were invited in for an initial chat to discuss the format of the diary entries and the purpose of the subsequent interview. Initially, five students agreed to take part, but for personal reasons two of the participants withdrew before the diary completion stage. Three students completed their diaries and went on to interview. The students were all white British, and aged between 20 and 36; two participants were female (Rebecca and Dianna) and one male (Antony). all names have been changed.

## ***Ethics***

This study was granted ethical approval by an appropriate higher education institution. Potential risks to participants were carefully considered and communicated to participants via their information sheet and in one-to-one discussion. It was made clear to participants that they could withdraw from the study at any time, and that their identity would be protected. although biographical information relevant to the study would be included in any final write-up or publication, it was made clear that this would be sufficiently vague to guard against chance recognition of individuals by a reader. The names of the participants have been changed, specific institutions and departments have not been mentioned, and certain extracts from the interviews were excluded from write-up because they contained identifying information.

## ***Summary of findings***

Participants' diary entries were carefully read and coded, with attention to the contexts described (see Table 1). Experiences in seminars and discussion groups received most attention in the diary entries. The diary entries and their analysis helped to shape the subsequent interviews. Following analysis of the interview data, a number of themes were constructed – and these are presented in Table 2, along with summarised secondary codes and an indication of which experiences each participant discussed. These themes were the end point of multi-layered coding. all three of the participants shared experiences aligned with each

theme, although there were differences in emphasis upon the elements under each constructed theme. These are indicated by the distribution of ticks in Table 2.

Table 1. Summary of contexts discussed in diary entries

Experiences in university contexts	Dianna	Rebecca	Anthony
In lectures	✓		✓
In seminars/ group meetings	✓	✓	✓
During self-study	✓	✓	
On placement		✓	
Other	In university society discussion group		

## Findings and discussion

The four themes introduced in the findings section will be fully discussed in the following paragraphs. Extracts from each of the participant interviews will be used to illustrate each of the given themes. The extracts chosen, unless stated otherwise, are included because they are particularly representative of the ways in which the participants reported their experiences in university spaces. Attention will also be given to how the participants differed in their descriptions of their experiences. Reference to the wider literature will be made where appropriate.

### *Getting things out of my head*

[W]hat, what was going on in my mind wasn't coming out. (Dianna)

Each of the participants described frequent experiences of separation between being someone, or speaking or understanding something, in one's own head, or mind, and being someone or expressing that something out in the world. This was interpreted as an experience of a barrier between these different perceived realms, a barrier often constructed as hard to break through. most notably, getting words and ideas 'out' of the head and speaking them into the world was experienced as problematic and upsetting. For Rebecca and Dianna it was the experience of 'scrambling' words, or getting words back to front when they speak that

Table 2: themes following analysis of interview transcripts in relation to summarised secondary categories with an indication of spread across participants

Overarching themes	Note on related secondary categories	Dianna	Rebecca	Anthony
Getting things out of my head	Division of inside-outside the head or mind.	✓	✓	✓
	Difficulty getting things out of the head	✓	✓	✓
	Difficulty getting things into the head			
Holding back:	Fear of speaking in seminars or	✓	✓	✓

performance as risk	discussions.	✓	✓	✓
	Holding back or opting out to protect self from looking 'stupid' or incompetent in some way.	✓		✓
	Pushing self to perform.			
Battle of inner voices: being hard on myself; effort of constant self-monitoring.	Questioning self; doubting self	✓	✓	✓
	Telling self off/ being hard on self	✓	✓	✓
	Trying to be nicer to self	✓	✓	✓
	Feeling tired by constant inner voices or finding self-monitoring very effortful	✓		✓
Not belonging in academic spaces: metaphors of misfit	Feeling different from others; less able or less intelligent	✓	✓	✓
	Feeling like an outcast	✓	✓	✓
	Not belonging in a given space or time	✓	✓	✓
	Feeling distressed about not belonging	✓	✓	✓
	Admiring others: wishing to be like them.			

was distressing, particularly when in their heads they felt their ideas were clear. For Antony, it was not being able to find the words when speaking out loud, even when he knew the idea 'in' his head was 'intelligent'. Here is Rebecca talking about a situation on placement when she said something in a meeting the wrong way round which gave the opposite meaning to others than that she had intended:

*You know, but I said it the other way round ..., and I was just mortified that it'd come out that way round ... and I got myself into a right muddle, I mean the person I said it to LOOKED at me, and gave me the most extraordinary look and was like um, no no ... and I was just like, oh how embarrassing. Awful!*

For Rebecca, who was contributing her thoughts during a meeting with colleagues while on placement, getting her point the wrong way round was highly distressing, particularly because others did not appear to realise she had made an error and appeared to react with shock. In contexts where she wished to come across as professional and competent, not being able to get things out in the desired way limited Rebecca's willingness to speak at all. 'It's come out that way round' suggests that Rebecca had the feeling she could not control the ways in which her words or ideas were changed as they passed into the world: the 'it' as the subject of the sentence holds the agency here, not Rebecca.

Likewise for Dianna, ideas and words often did not come out as intended; something happened to them on their way out into the world:



*D: ... I like scramble, when I talk sometimes, I completely scramble everything.*

*H: So sometimes the letter of the second word goes to the beginning of the first word, and they get?*

*D: It, sometimes yeah, that, that was what happened here, but sometimes it's the whole sentence is you know, back to [front ]*

*H: [oh, really?]*

*D: and skewiff, and I make words up.*

For Dianna, this tendency to get her words the wrong way round, or 'skewiff', was something she said she used to find upsetting, but now she tries to laugh about it. However, it happens sufficiently frequently for her to worry that she cannot get what she is thinking out into the world and that people will not see her as the capable person she knows she is inside. In a similar way to Rebecca, Dianna often holds back in conversations, especially with people she does not know well or in situations where she feels it is important to make a good impression.

For Antony, the difficulty getting ideas out when speaking in university spaces, such as seminars, is less about scrambling words and more about not being able to find the correct word to describe the idea 'in his head'. Antony describes the feeling of frustration when he has to pause his speech to try and find the word he wants, and although he knows he could substitute it for a different word, he does not want to compromise the perceived quality of what he wants to say by doing so. As such he remains silent for an extended moment, which is socially awkward and demoralising for Antony:

*and and I'll be trying to say this and it'll get to that word, and I could give a different word, maybe, but it's very frustrating when I've got what sounds to me in my head like a very intellectual answer and something that to me, if I said that, I I'd be happy saying it and it makes it for me sound, feel like quite an intelligent person.*

In Antony's head his idea sounds 'very intellectual', but as he tries to get it out into the world he feels the 'intellectual' impression is lost. What is left is a frustration that his peers and tutors never come to see that he is fully engaging in the academic work they are doing together, and build an impression of him that he does not feel represents what he is really like and what he is really capable of.

There is evidence in the literature that dyslexic-type literacy difficulties and speech difficulties are linked (Stackhouse and Wells 1995). Difficulties with phonological processing appear to impact upon certain elements of speech (Brady and Shankweiler 2013; Snowling 1995) which can manifest as difficulties getting the correct sound out, problems in getting sounds in the right order, stammering and general lack of speech clarity (Stackhouse 2006). There is also some evidence that there is a dyslexia-specific difficulty in retrieving or generating the correct sounds of words from long-term memory (Swan and Goswami 1997), and a link between short-term memory difficulties and word-finding problems (Vance and Mitchell 2006) which may be relevant to some of Antony's experiences finding the right word in a particular context. All of the participants' confidence in seminar-type contexts may also have impacted upon the experience of not being able to get the right word out, or a feeling of not being clear. As for stammering (Ezrati-Vinacour and Levin 2004), it is possible that increased anxiety or stress increased the speech difficulty.

The tendency to separate what is in the head from what is out there is pervasive in western culture. From this perspective, it is easy to think of reified objects like 'intelligence' and 'dyslexia' as situated inside our heads without any connection to the social world which constructed them (Carroll 1982); and they become further harder to question once they are woven into everyday metaphorical language (Säljö 2002). In the twentieth century, Gilbert Ryle warned that the use of 'in-my-head' metaphors encouraged people to view the process of thinking as a physically located one; when in fact, one cannot open up the head to find such 'thinking' (Ryle 1951, 35). For dyslexic students, it is arguable that the habit of viewing 'intelligence', 'knowledge' and thinking as something inside their heads that they struggle getting out may be connected to the impression that the challenges they face are related to a deficiency in their mental apparatus, rather than a consequence of the environment. A student quoted in Cameron (2015, 219) spoke similarly of the inside–outside divide: 'r: so for me, it's getting the knowledge from in my head, onto the paper. There's something that doesn't quite connect'. Ryle writes:

*[t]his antithesis of outer and inner is of course meant to be construed as a metaphor since minds, not being in space, could not be described as being spatially inside anything else, or as having things going on spatially inside themselves. (1951, 12)*

### **Holding back: performance as risk**

*[I]t's a case of what about if I open my mouth and it all goes aradrawawa hahaha. (Dianna)  
[J]ust be quiet, just be quiet and don't speak, because then [you won't] make an idiot out of yourself.*

(Rebecca)

*[a]nd in the end then everyone's looking at me and I go, er, and then I always do this oh er, um (looks up to sky, clicks fingers) mmm er what's the wo, er, er and then everyone's looking at you, and then I start to panic ... and then I start to get a sweat on and I'm like getting really nervous ... and in the end I, like, sometimes I say, oh just, can we come back to me, but actually it's not, it's normally the seminar teacher is looking at his watch going, ok, we are going to have to go to someone else, and like, that's really embarrassing er .... and it like, it makes me feel really stupid.*

(Antony)

The theme of this subsection is linked to experiences of the inside-my-head/out-in-the-world divide discussed earlier: not only do participants talk of the distress experienced in trying to get things out of the head, but they also appear to be taking significant risks with their academic identities when they perform in certain university spaces. All of the participants talked about feeling judged or potentially judged, in contexts in which they were under pressure to talk in seminars, study groups or meetings, and that when they did not perform as well as they felt they should have, this fed back into their sense of self-worth, sometimes making them doubt their own competence or intelligence. All participants talked about wanting to take part, but often choosing not to, because the risk of looking stupid or incompetent was too great. All three participants also felt they very readily compared themselves negatively with other students in seminars or study groups, and that this reinforced feelings that they were not good enough.

In the following, Antony is talking about this experience in seminars:

**A:** *if you start to argue with someone, and then you forget a word 'considerate'*

**H:** *yeah*

**A:** *you're going to, you [going to, going to look abs]*

**H:** *[or if there's a big gap]*

**A:** *yeah. You're going to look like you don't know what you're talking about, and so in the end, I just sometimes I I just say, do you know what, Antony, just let someone else take this, like,*

**H:** *so does that make you reluctant on the whole to to speak up?*

**A:** *yeah. massively.*

*Dianna is talking about trying to get to the end of a text in a seminar so she can join in the related discussion:*

**D:** *erm, and I just I do, I'll I'll if I've got time, it depends, if I know I haven't got time, and it, I'm going to fail, rather than getting annoyed, I think I'll just take a back seat, and think, think about how much other work I do and how I know I would be able to do it if I had the time. And sort of like, opt out [a little] bit?*

**H:** *[yeah]*

**D:** *maybe, which is aWFUL and it's not like me at all, but I'd rather do that than get upset.*

*Rebecca is also talking about the fear of getting things wrong when she speaks out loud in seminars or meetings.*

**R:** *and there's also the fear of getting like, speaking it wrong and that's partly it as well, so if I'm having to speak something out loud [as opposed to*

**H:** *[yes]*

**R:** *sitting in my bedroom, writing it, then [whhh, I I don't know]*

**H:** *[well, can you can you?] try to explain what's scary about that?*

**R:** *Um. that I'm not going to, it it, yeh it's just fear of coming across as being stupid. or not coming across as succinct.*

For everyone, arguably, speaking up in seminars holds an element of risk, and a wish to come across well; but for the participants in this study the risk seemed frequently to hold them back, and when this happened it was distressing and produced a double-bind: should they take the risk of feeling they have made themselves look stupid, or take the risk to their sense of self-worth by not taking part. Having to prove to themselves that they were worthy of being at university, that they are intelligent, pushed them to perform, while the fear of performing pushed them to stay quiet. Reluctantly, then, 'taking a back seat' (Dianna), letting 'someone else take this' (Antony), being 'quiet' (Rebecca) and deciding to 'opt out' (Dianna) were the routes frequently taken by the participants here.

The experience of performing, particularly verbally, in university spaces was described by all of the participants as challenging, and often distressing. It is not that anxiety when speaking in a group is unique to these participants, but that the feeling that verbal performance constituted a risk to self-worth was ever present in the experiences these participants described. The judgement of performance in such communal learning spaces is arguably increasingly a part of the higher education experience, leading to a feeling of pressure on students to 'speak up' (McFarlane 2014, 6). While this kind of pressure may be felt more widely, it is arguably of greater concern for students who have additional difficulties with word finding or clarity when speaking, and in students who are more likely to experience learning-related anxiety. There is significant evidence that people with dyslexia experience higher levels of anxiety and stress (Carroll and Iles 2006; Riddick et al. 1999), and some evidence that there is specific anxiety linked to self-doubt about one's intelligence in academic contexts (Mugnaini et al. 2009; Polychroni, Koukouri, and Anagnostou 2006), which has a knock on effect for self-esteem and subsequent decisions to opt out; and potentially leads

to a conclusion they should 'forget it. It's not worth it' (mcnulty 2003, 371). The damaging effect of such anxiety is also potentially long-lasting (Topham 2009). The difficulties in the very area of high literacy which is so prized in western cultures understandably contribute to a lower sense of value for some students with dyslexia (Collinson and Penketh 2009). It is also worth noting that there may be a difference in approach to participation for individuals who undertake a task with low self-expectations of achievement compared with those who expect to succeed: in a study by Seibt and Forster (2004, 51), 'negative self-stereotypes fostered a risk-averse vigilant processing style as indicated by higher performance accuracy, diminished creativity, and enhanced analytic thinking skills whereas positive self-stereotypes fostered a risky, explorative processing style with enhanced speed and creativity, and diminished analytic thinking'. In other words, students who enter into a task with a negative idea of their own abilities in that context may protect themselves by taking fewer risks and by being less creative. Some of the implications for dyslexia-related negative self-stereotyping may then persist beyond the conventionally understood difficulties with literacy, in complex and context-bound ways.

### ***Ever-present inner voices: effort of constant self-monitoring***

*[a]nd then while all that's going on, I'm thinking, shut up, and take your notes.*

(Dianna)

Dianna described being accompanied by a 'negative mental chatter'; she chides herself for not being able to do things that she feels should be easy. All three of the participants likewise talked about experiences in which they got annoyed with themselves. The 'kinder' inner voices, when they located these, sometimes constituted additional, but veiled, rebuke. In the following Dianna is talking more about how it feels to have an internal dialogue after being mean to herself:

**D:** *yeah hhh and then I'm being mean.*

**H:** *yeah. So it's kind of*

**D:** *a vicious circle*

**H:** *yeah.*

**D:** *I have to break it. I have to like, BE the ADULT, Dianna*

**H:** *yeah.*

**D:** *and be NICE.*

In this extract, Dianna appears to tell herself off for telling herself off: 'BE the ADULT, Dianna ... be NICE'. She is therefore responsible not only for performing to a particular standard, academically, but also for being 'nice' to herself. This appears to require constant self-monitoring during which she tries to readdress the balance. A little later in the interview, Dianna says 'I think about my animals. Would I scold them for as long as I scold myself, because that's bullying, actually'; yet when Dianna describes telling herself off for being mean to herself, she is arguably continuing this scolding.

It is 'me making that yardstick quite wide for myself' (Rebecca); 'I'm kind of quite hard on myself, I think' (Antony). The experience of critical inner voices versus supposedly supportive inner voices was described repeatedly by the participants. Their descriptions of these experiences construct an impression of the experience of speaking in university spaces such as seminars, study meetings or on placements as exhausting and stressful. Any appearance of passivity during academic discussion belied an inner noise which did not seem to be

particularly helpful in building confidence or participation. The following are two further extracts which arguably reflect this experience of the nagging inner voices and ongoing self-monitoring. Dianna, first, describes the feeling of growing pressure on joining an academic discussion:

*going in, I'm fine, and then, listening I'm fine, but then if it comes to, when I want to say something, then there that pressure, I I don't, I feel something, tense, on myself, like, are you going to SPEAK? today PROPERLY today? hh cos I don't know what happens, I don't know when it comes.*

Again we hear an accusatory inner voice and a pre-conception that she might not speak 'properly'. The effort and stress are reproduced again by Rebecca:

**R:** *..., if I decide I am going to be quite vocal, I have to be incredibly mindful about how I'm talking, so I'm not only just talking, I'm thinking about what I'm saying as I'm saying it [so it] feels like*

**H:** *[yeh]*

**R:** *a another job just doing that. I'm getting better at doing that, just quite hard.*

None of the participants in this study felt they were able to talk in controlled academic contexts without overt self-monitoring, or doing 'another job' as Rebecca put it. This self-monitoring was very tiring. Combined with the feeling that performing verbally was risky to their sense of self-worth, as already discussed, it is understandable that 'taking a back seat' was an attractive option, at least until the need to 'prove' their worth to themselves nudged them back into verbal performance. The role of personal history in students' approach to study and self-evaluation of their performance should not be underestimated. In an unusual study by Blace et al. (2011), which used conceptual mapping to explore the experiences of dyslexic students, dyslexic students felt that others did not understand the additional work they had to put in; these students also felt that dealing with dyslexia could be exhausting, and that negative school experiences continued to intrude upon their present educational lives (2011, 73).

### ***Not belonging in academic spaces: metaphors of misfit***

The experience of being different and lesser, in some way, when compared with others in academic spaces was shared by all of the participants. All three used metaphors to help describe their experiences of not quite belonging, being cast out, or 'cut over' (Rebecca). In the followings Rebecca uses a queue metaphor to help explain how she felt when not being allowed by others in the group to fully verbalise her point during a discussion:

**R:** *so, if it's something important then it makes me feel like um I'm left at the end of the queue, as opposed to being at the front of the queue with a flag saying yes, I've said what I need to say [and that's] important to me and*

**H:** *[mmmm ]*

**R:** *you've heard me, and I think great, you haven't got time, and I'm mumbling, you know it already, and I can't seem to get it across quick enough.*

*Antony used the metaphor of the weak kid on a sports team to express a similar feeling of not belonging in academic spaces:*

**A:** *... It's bit like if you are on a sports team, you don't want to be the kid*

**H:** *[yeah yeah]*

**A:** *that's [the one ] wheezing after [five minutes]*

Dianna talked about the experiences she had of losing confidence when she could not communicate what she wanted to, or could not complete a task to the standard she thought she should be able to.

**D:** *I get quite emotional about it, like as soon as the frustration hits me then it's just all goes, I'm like a child in my head...*

Being 'like a child' can suggest vulnerability or powerlessness in ways akin to being stuck at the end of a queue, or being the weak kid on a sports team. In Rebecca and Antony's metaphorical spaces, one might ask why they persisted waiting in the queue or taking part in the sport. A possible interpretation here is that their sense of self-worth depends on taking part academically. They continue to take part – 'I want to take part ... I want to have something to say' (Dianna) – but they find it hard to maintain the feeling that they truly belong. It was in the university spaces that they appeared to feel this most keenly, as Rebecca said 'when I'm at home, I don't have that same sense of being stupid'.

A further powerful metaphor, that of feeling crippled, was used by Antony when talking about dyslexia, and in particular in reflecting upon his need to explain to peers why he was not in the main examination room:

**A:** *it's very much like um, there's a few things with exams because part of dyslexia I feel is SOCIALLY crippling and part of it is INTELLECTUALLY crippling. So, socially crippling is just something you've got to get over. It's embarrassing, and you feel like a bit of an outcast being like, oh well yeah, I didn't see you in the exam, oh well yeah, I was in my own special room doing it with a scribe. That can be embarrassing.*

The metaphor of being crippled here offers a powerful construction of Antony's experience with dyslexia. It offers an understanding that everyday life for Antony is seriously impacted by the ways in which dyslexia-related challenges interact with environmental and social factors in producing a feeling of being an outcast. The feeling of not belonging in this situation was highlighted by his physical location in a separate examination room; yet a similar sense of isolation is arguably experienced by participants when physical space is not the central issue. Feeling separated from others in places where they felt they were expected to speak intellectually was emphasised as one of the most frustrating of experiences by each of the participants.

In the literature there is also a desire on the part of dyslexic students to be seen as 'normal' (Cunningham 2001), although if students recognise dyslexia as part of 'normal' variation, they may be more comfortable visibly accessing additional support (Pollak 2005). However, the students in the current study all appeared to feel that they did not quite fit into some academic environments because of perceived deficiencies (particularly in speaking). Burden (2005, 196–197) writes that 'those of us who possess characteristics considered to be socially undesirable will begin to perceive ourselves as undesirable or in some way wanting'. This perception is likely to be strengthened when peers view dyslexic students as taking unfair advantage (Denhart 2008). moreover, in the competitive educational environment in tertiary education in the United Kingdom, the tendency for all students to compare themselves with one another in order to gather an understanding of where in the hierarchy of academic worth they sit is arguably endemic (Barnett 2003).

## Conclusion

Labels of specific learning difficulty, such as dyslexia, are likely always to be surrounded by disagreement; and their usefulness will shift with the changing educational, political and social environments. However, this study helps to reinforce the understanding that dyslexia is not only a set of quantitatively measurable cognitive characteristics. To varying degrees, having the dyslexia label means being constructed by discourses of learning, disability and literacy as an outsider within the education system. It is therefore a mistake to consider dyslexia to be just about reading or to allow psychological concepts of poor working memory, processing speed and literacy skills to dominate the conversations around what dyslexia can mean for students in higher education. These measurements alone do not enable a comprehensive understanding of how these differences can be experienced in context, and nor do they enhance knowledge of how prior educational experiences impact upon present learning and relationships with peers and educators (murphy and Brown 2012).

If the themes which have emerged in this study are shown to have wider applicability, then there is arguably a justification for some adjustments to staff training and pedagogy within higher education. Engaging with the experiences of students in university spaces may be one powerful means through which teaching staff may recognise the context-bound characteristics of specific learning difficulties like dyslexia. This might be better achieved through student-led training sessions than through service-led delivery by specialist tutors, or at least through closer student–service partnership. In order for this to be achieved there would first need to be a safe space, virtual or physical, in which dyslexic students could meet one another to share their experiences and decide how their stories might best be put across to catalyse change in pedagogic practice. Student unions and support services may be able to facilitate here. However, the main responsibility for change lies with the institution and with the learning community as a whole. Although the social model of disability might be familiar to many, it may be little appreciated how the language we use in academic discussion and the way we describe ourselves and others in academic contexts can construct additional barriers to equal participation for certain students. Pedagogically, this points towards a need for greater reflection in seminars and student meetings upon the way participation happens: how are discussions structured? How are judgements about ‘intelligence’ and ‘competence’ in discussion situations made, and how far do students and educators alike make judgements about intellectual ability based upon confidence and speed or style of articulation? It is possible, by introducing different frameworks for discussions, to create opportunities for those who are less confident or articulate to participate more fairly. This might, for example, entail a simple shift in the structure of an activity to allow each student thinking time before they make a point, or time to share initial thoughts with a partner before they share ideas with a group as a whole. It might also involve purposeful and careful intervention from a tutor to tease out the ideas from students who appear to be taking a back seat in discussion and to limit the domination of those who find speaking in such situations easy. Such approaches have always been a part of training for school teachers, but are arguably neglected in the training of teachers at the tertiary level.

Because seminars can be incredibly valuable learning spaces (Evans 1990), not being able to fully take part to the extent experienced by the students in this study may alone constitute a disability under current legislation. It is therefore important that during specialist teacher training specific emphasis is placed upon the ways in which dyslexic students can internalise feelings of inadequacy that interact with their performance in spaces where they are under

pressure to offer their academic opinions, and how this can help to create a feedback loop in which their apparent 'poor' performance confirms their negative beliefs or threatens their positive beliefs about themselves, which in turn makes them further reluctant to participate (see Hacking 1995). Helping students, as well as educators, to recognise this cycle and to stand up to their own critical voices may be an important part of the specialist tutor role.

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