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## **Dyspraxia in Medical Education: A Collaborative Autoethnography**

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*In this paper we adopt an autoethnographic approach to explore the lived experiences of a UK medical student with dyspraxia within the current culture of UK medical education. An initial review of the literature revealed that there is now growing evidence regarding the difficulties experienced by, and support needed for medical students and doctors with dyslexia. However, no research has been conducted concerning dyspraxia on its own in medical education. Here we seek to provide an in-depth account of a UK undergraduate medical student with dyspraxia. It is hoped that this will have three outcomes: to support both students and staff across multiple disciplines, who have had similar experiences; to inform educators; and to promote further interest and research into this important area. Keywords: Medical Education, Dyspraxia, Developmental Co-Ordination Disorder, Learning Difficulties, SpLDs, Medical Students, Student Support, Career Pathway Choice, Qualitative, Collaborative Autoethnography*

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**November 2016**

**Lucy:** “So, a bad day is just a day when everything goes wrong. I cannot decide whether to take the bus or cycle... I walk into things... I drop my knife on the floor, which has tomato sauce, so I get a stain on the carpet... I lose my phone... just days when things don’t go your way... And you can’t just pick up, pick up the mood as much. And it is hard being self-motivated... Yeah, like that is just my dyspraxic tendency. Just to lose things, to drop things, to forget things, like, and although I do try to be over organised, and overcompensate, it just doesn’t work.... I know everyone loses things, but I seem to lose things on a very regular [basis]...”

### **Dyspraxia**

Developmental Co-ordination Disorder (DCD), also known as Dyspraxia in the United Kingdom (U.K.), is one of a family of Specific Learning Difficulties (SpLDs) that also includes: dyslexia, dyscalculia and dysgraphia (Griffin & Pollak, 2009; Musto, 2013). Dyspraxia was historically also known as “clumsy child syndrome” (Gibbs et al., 2007). Dyspraxia has been defined as: “*The inability to plan, organise and co-ordinate movement, it results in fine and gross motor problems and/or speech difficulties*” (Gibbs et al., 2007, p. 534), although it is also associated with a number of wider academic, social and emotional difficulties. Symptoms vary with age and development (Dyspraxia Foundation, 2012; Missiuna et al., 2008).

Dyspraxia has an estimated UK prevalence of 6-10% with 2% having severe symptoms, and it is more common in males than females with a ratio of 4:1 (Gibbs et al., 2007). Whilst commonly documented in children, it is increasingly being diagnosed later in life (Kirby et al.,

2008). The number of students with SpLDs at university is also increasing, and this is likely to be the case in medical education (Kirby et al., 2008a).

A scoping review identified five studies relating to dyspraxia; four within higher education (HE) and one of registered doctors (Griffin & Pollak, 2009; Kirby et al., 2008a; Kirby et al., 2008b; Missiuna et al., 2008; Musto, 2013). The results of our literature review are published elsewhere (Walker et al., 2018). In brief, this highlighted that students with dyspraxia (SWD) had difficulty learning new skills, especially those requiring motor coordination and manual dexterity (Musto, 2013). In addition, participants highlighted concerns about disclosing their conditions to colleagues due to fear of future discrimination in the workplace (Musto, 2013). We found no autobiographical or autoethnographic accounts in this area.

Griffin and Pollak (2009) suggested that people may hold one of two perspectives on their dyspraxia; a “difference” view, or a “medical/deficit” view. People who held a “difference” adaptation emphasized their strengths, had higher career aspirations and were less likely to seek help. Those with a “Medical/deficit” adaptation focused upon weaknesses and were more likely to give up on challenges.

There is no research on the impact of dyspraxia on medical students and their experiences. This study is a first step in addressing this deficit. We aimed to both explore the lived experiences of a UK medical student with dyspraxia and to shed light on any associated sociocultural issues.

### **Disability as a cultural phenomenon**

Here we shall consider the question of “*what is a disability?*” In doing so, we will introduce our readers to some of the models of disability – exploring the ways disabilities may be viewed and defined by our society.

Bleakley et al. (2011) define a discourse as

a set of practices and associated structures of knowledge that are considered at any one time in history to be legitimate, or claim “truth.” Once this discourse becomes dominant, other views are marginalized (an effect of power), and the dominant view is treated as if it were self-evident or transparent. (p. 4)

Within the medical model

a disability is seen as a problem with the individual in question, where their difficulties prevent them from performing as expected by society. It is seen to reduce their quality of life, and emphasis is placed on “fixing” the individual. (Walker & Shaw, 2018, p. 98)

This may therefore be a comfortable view for those of us from healthcare backgrounds where, by training, it has become our nature to “diagnose” and “treat” problems. Due to the more traditional nature of this view, it is also possible that it may have influenced a longstanding societal discourse regarding individuals with disabilities – that such individuals require fixing in order to better comply with “normal” socio-cultural expectations.

A slightly more contemporary view is proposed within the social model of disability – challenging the potential societal discourse. This states that “a disability stems from issues with the attitudes of society, causing environmental, organisational and social barriers, which act to ‘disable’ an individual” (Walker & Shaw, 2018, p. 98). Building further on this, Musto (2013) also outlines the relational model of disability. This “describes how disability is the result of a

mismatch or “poor fit” between an individual and their capabilities and their environment or society. In this view a person is considered to be disabled if an impairment (limitation, disease or loss) results in them experiencing barriers in their life” (Musto, 2013, p. 23). This steps beyond the social model to also consider disabilities as situation-specific, rather than typical of life in general (Musto, 2013).

We therefore propose that our readers consider their views on the following questions: Does “disability” actually exist? Or might it just be difference – whereby the expectations of our society create the illusion of disability, reinforced by a longstanding discourse?

*Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.* (Albert Einstein)

### Introduction to the Authors

Here we present an overview of ourselves as the authors of this paper. We explore our backgrounds, our academic interests, and our involvement with this study.

#### Lucy

Due to the competitive nature of medical studies and the inherent vulnerability induced through autoethnographic enquiry, the pseudonym “Lucy” has been adopted throughout this paper. Initially, this was intended to mask the author as, although I was ready to share my story with strangers who were distant from the small bubble of my world, I was not ready to share my experiences with those closer to me. This was partly as I felt those closer to me would be more judgmental and subsequently treat me differently once they were aware of this side of me, which I had long attempted to hide. Furthermore, I was worried that identifying my faults so openly would affect future opportunities in my working life. Whilst I am now aware and happy that my position as an author of this paper reveals my identity, I find the use of “Lucy” in the body of text a comfort blanket when re-reading – and subsequently reliving – some of the more negative experiences discussed in this paper.

Throughout my childhood and adolescence, I had various personal issues which I had to come to terms with and which contributed to the impact of my dyspraxia. I have always been known for being clumsy. My first recollections of this are at primary school where I had trouble with learning to ride a bike. I was the only pupil that could not take my hands off of the bike to cycle. My father was in charge of this class, and I could see that he was disappointed with my poor performance. As I have grown, my difficulties have become more noticeable. I still have problems with balance and am more likely to fall or trip over than my friends. In addition, I lack spatial awareness and I constantly lose things.

My difficulties peaked in my last few years of secondary school during my GCSE’s and A-levels (GSCE’s – General Certificate of Secondary Education taken at age 16 and A-levels, Advanced level education certificate taken age 18 in the UK). In retrospect, it was increasingly obvious that I was “different” from my peers; but everyone put it down to “Lucy being Lucy.” I was regularly told that I needed to “grow up,” “stop losing things,” “be tidier,” and “do not work as hard.” Although I could see that all of these held some truth, I had no idea how to go about rectifying any of these problems. The latter was my most regular reprimand; I found learning difficult and therefore worked much harder than my peers – determined to achieve my full academic potential. I found it frustrating when others could not see that I needed to work so hard, and would pass judgment on me. However, it was this determination to succeed that drove me to pursue a career in medicine - to prove that I was capable of competing with the best [top 10% of people in the country].

I thought that getting into Medical School would be the hardest challenge I was going to face. At medical school I reverted to my old study habits. This was very time intensive, working for 8 hours a day every day – unable to take an evening off to go for a meal with friends or family. Several times, I experienced complete burnout, where I would end up whimpering (literally) on my bed, unable to do anything else. Despite my mammoth effort, I did not get my distinction that I craved.

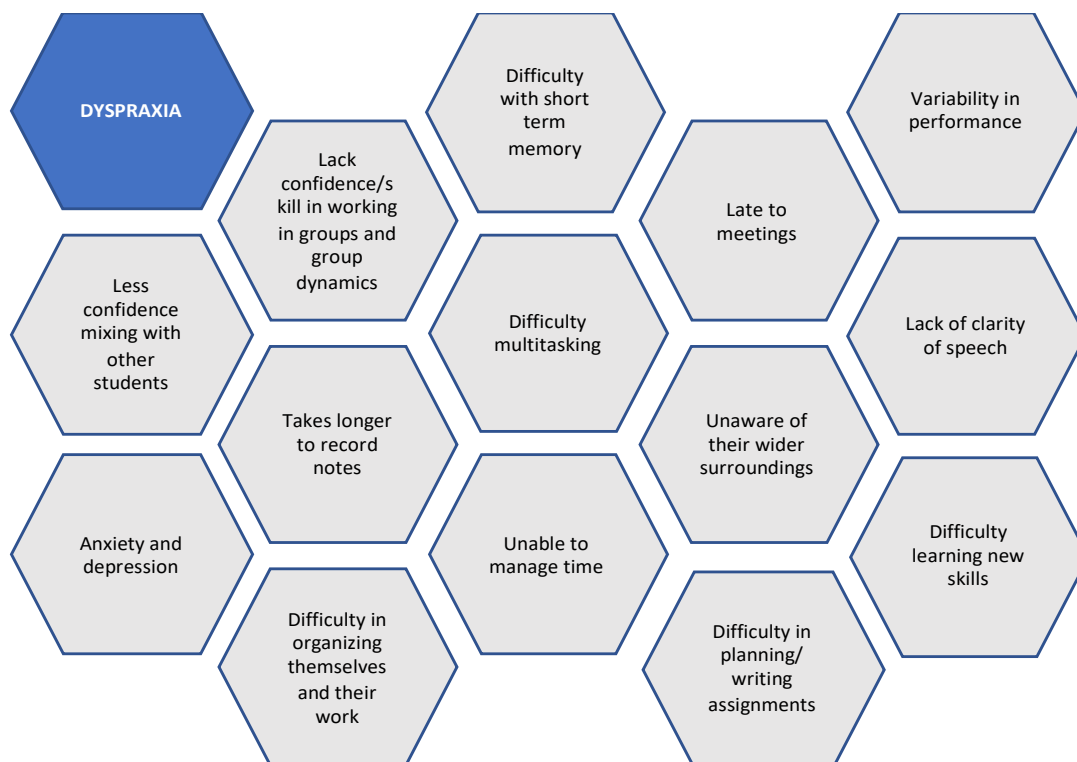
During my third year, I took a more relaxed approach to learning the required knowledge. I learnt through asking questions, letting my natural differences flourish. Through this, I found friendship and finally my hard work paid off – I received a distinction.

Prior to this study I had given little thought to what my diagnosis of, “dyspraxic type tendencies” and “problems with short term memory and phonological processing” actually meant on a practical level. I had simply assumed my incompetence was a failing purely on my behalf, and had used it as a convenient half-hearted excuse when needed. It is pertinent to note here that I had requested they did not say I had “dyspraxia” or “dyslexia” in my formal report (despite that being my diagnosis) as I felt this would preclude me from applying for a surgical career in the future.

It is only through this research project that I have been able to understand the extent to which my dyspraxia impacts upon my life. In that sense, this has been a journey of personal exploration and discovery. It has facilitated my growth as a person, and my understanding of what makes me who I am. Therefore, I have found the below diagram particularly helpful as a formal and accepted explanation of my difficulties that complemented my medical studies.

**Figure 1**

*Dyspraxic Difficulties. Information from the Dyspraxia Foundation (Dyspraxia Foundation, 2012).*



This illustration shows the wide range of symptoms that dyspraxia may present with [Figure 1]. As dyspraxia is a continuum, individuals will experience different degrees of these. All these areas affect me to varying degrees.

For any more medically minded readers, my dyspraxic difficulties can be neatly summarized as:

1. Poor coordination;
2. Difficulty learning new skills;
3. Difficulty with planning, organization and time concepts; and
4. A heavy emotional burden.

As a UK medical student, I have a very varied timetable and, therefore, I have to undertake a wide variety of activities. My difficulties with planning and organization therefore present the largest challenges in my day-to-day life. Manual dexterity is also a problem in medicine, due to the requirements of clinical and practical skills. My dyspraxia has given me a unique experience of medical education, with its advantages (hard working and determined) and disadvantages (organizational, emotional, in addition to being clumsy).

Because of my dyspraxia, I have become acutely aware of my limitations in order to create robust coping strategies. This has had a secondary consequence of making me anxious about the possibility of these coping strategies failing, and my limitations becoming exposed. The resulting anxiety is the root of a number of problems discussed below.

On talking to my peers, those with dyspraxia seem to recall similar experiences to my “unique” experience. Finding out that I am not alone in my struggles drove me to voice my experiences through writing this autoethnography.

When I set out on this project, I had little understanding of what an autoethnography would entail. I understood that I would be exploring my views and experiences but did not fully understand the full analytical intimate process I would undergo. I therefore approached Seb who I knew had previously conducted a similar project on his dyslexia. Seb (SS) is two academic years ahead of me so I felt comfortable approaching him and he was able share his experiences in a way I could relate to. I also contacted “John” (JA) who SS has worked closely with, and who is also a qualitative researcher, and would be able to provide academic supervision.

I found writing the autobiographical piece, and being interviewed, harder than initially anticipated. However, it was the intimate nature of recording the analysis that I found most uncomfortable. Having spent the majority of my life shielding my core principles from the ridicule of prying eyes of others to prevent embarrassment, it felt unnatural to let others in to my deeper levels and pick apart the details of the ideologies that I live by and have clung to for the past 20 years. At times, I felt myself slipping into old habits as I attempted to distance myself from the team – to shy away from exposing my imperfections. I am grateful to be working with such an experienced team, who were able to support me both academically and emotionally when necessary. Through drafting and re-drafting the manuscript I have been able to develop further academically as well as maturing as an individual.

### **Seb (“SS”)**

I am a medical doctor living and working in the UK. I am also an Honorary Clinical Lecturer at Brighton and Sussex Medical School, where my teaching focusses mainly on research methods and medical education. I have a particular interest in researching neurodiversity (including SpLDs) in medical education, with the goal of promoting improved understanding and a supportive, open culture. I tend to work almost exclusively with qualitative approaches, and I teach postgraduate workshops on various aspects relating to qualitative research – including analyzing qualitative data and interview skills.

I was delighted when Lucy asked me to undertake this autoethnography with her. Due to my familiarity with the methodology and experiences discussed, I felt well suited to assist with the project. Although I do not have dyspraxia, I do know how it feels to undertake medical studies in the UK with an SpLD – in my case, with dyslexia. John and I had previously published a full autoethnographic study of my own experiences (Shaw et al., 2016). John and I have also undertaken a wider programme of research into the experiences of UK medical students and junior doctors with dyslexia. These prior experiences helped me to guide and assist Lucy. Throughout this study, my role was also a supportive one – both academically and emotionally. The initial interview facilitated Lucy’s reflection upon painful experiences. It evoked unwelcome and intrusive thoughts. I helped Lucy to reflect positively and critically upon these. As a near-peer who has experienced similar difficulties, I found myself able to empathize and support her emotionally through both the interview and the analysis / write up.

It was a pleasure to watch Lucy’s academic and reflexive skills grow as she progressed through this autoethnography. I made myself available at all times, should I be needed for support or advice. I read multiple drafts and I helped Lucy to construct this manuscript over several months. My own main writing focuses related to our exploration of disabilities as a cultural phenomenon, our methods, our ethical approach, and our consideration of our study’s limitations.

### **John (“JA”)**

Working with Lucy on this project was my introduction to *dyspraxia*. I had worked with Seb on his autoethnography and had found that an intense, intellectually and emotionally challenging experience. It prepared me for this study, but I was still moved by Lucy’s story. We are a larger team this time and Seb has adopted the main supportive role, which I had in his study. So, whilst Seb was a “big brother” I felt more of a “grandfather-figure” and an academic sounding-stone – with an overtone of concern about Lucy’s well-being. My interview with Lucy probed further into the issues which were emerging and helped me double-check with her which of these she was comfortable to share publicly. My training in TA psychotherapy helps me maintain boundaries between the academic, personal and therapeutic dimensions in this work. Yes – all three exist side by side, with a danger of overlap if one is not careful. As the “old man” in the team, I guess I see my role as being something of a safe person for Lucy to turn to for the *validation* of her ideas – something which I realise is immensely important to her.

### **Methods**

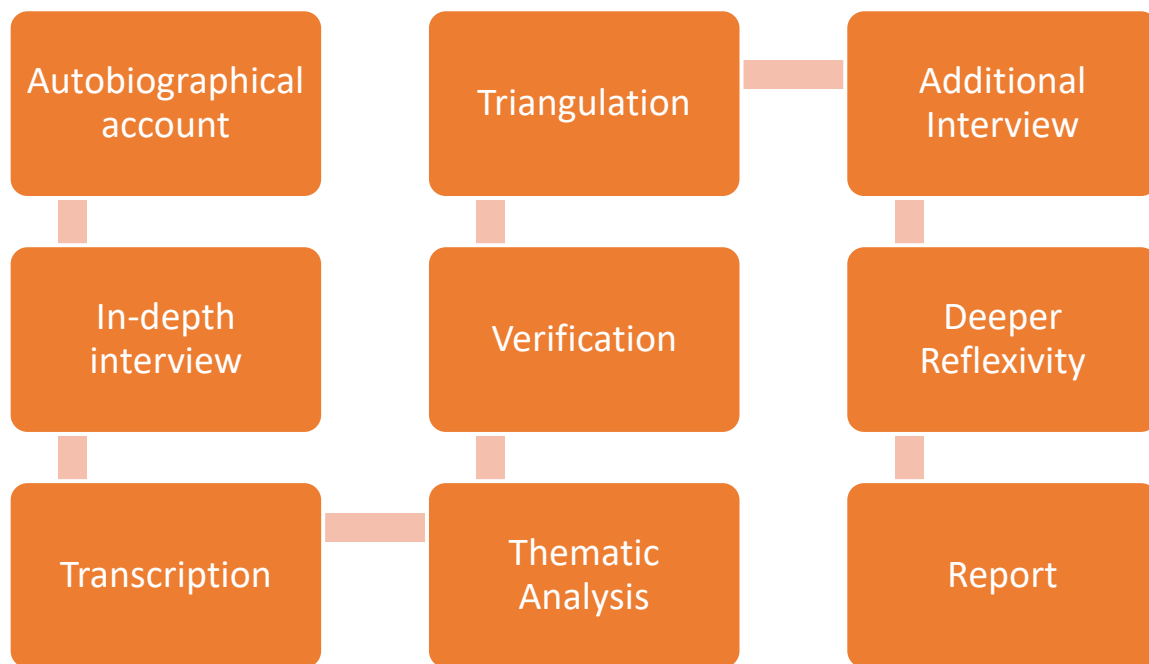
An autoethnography is a qualitative methodology that combines autobiography and ethnography (Denshire, 2014). It enables researchers to use their personal experiences (the autobiographical element), yet goes beyond pure introspection to explore and critique relevant sociocultural phenomena (the ethnographic element). It challenges “traditional,” positivist research methods where authors and participants have a “silent voice.” The autoethnographer becomes vulnerable through disclosure and the often intimate, personal nature of the accounts shared (Denshire, 2014).

In this study we adopted a collaborative autoethnographic approach. We as research team explored the experiences of Lucy, a UK medical student with dyspraxia – alongside potential cultural inferences (Denshire, 2014; Shaw et al., 2018). Wells et al. (2019) explain that “successful collaborative autoethnography research occurs when research participants establish an atmosphere of trust that allows members to be honest and vulnerable about their

individual experiences.” The collaborative nature of this autoethnography was intended to benefit from several aspects, including:

- The previous research experience of Seb and John – allowing for a more informed methodological approach and verification of the analysis.
- The “insider” experiences of UK medical education of both Seb & Lucy – enabling a wider view on potential sociocultural issues.
- The confidence it gave Lucy to deeply explore her own experiences with dyspraxia in a supported environment.

**Figure 2**  
*Diagram of Methods*



Our methods were based on a previous collaborative autoethnography Seb and John authored (Shaw et al., 2016) – making use of both an autobiographical account and an in-depth interview to generate our data. Here we present a step-by-step outline of our methods, as shown in Figure 2:

1. **Autobiographical account.** Lucy began by writing an autobiographical account of her experiences, reflecting on how dyspraxia had impacted on her throughout her medical studies. As it was her first time attempting something of this nature, it was lacking in emotional depth and only covered superficial points that would have been clear to an outsider.
2. **Unstructured, in-depth interview.** This was then supplemented by an in-depth interview, conducted by Seb, adopting the approach of Shaw et al. (2016). This explored Lucy’s experiences in a greater depth and promoted a deeper level of reflexivity.
3. **Transcription.** The interview audio-recording was then transcribed verbatim by Lucy. This allowed Lucy to immerse herself well in this aspect data. At this stage Lucy wrote down some initial thoughts and she began to record a dairy of emotional and analytical ideas.



4. **Thematic analysis.** Lucy's autobiographical account and interview transcript were analysed together. Lucy used pens/paper and highlighters to generate initial emergent themes. Mind maps were then used as a visual aid to generate the final, analytical themes. This helped Lucy to better visualize the data and the process as a whole.
5. **Verification.** Seb also independently analysed the data. Instead of mind maps, he facilitated the process using a template analysis, where he placed his initial emergent themes into a table. This is a method he has used before, as it allows him to visualize the data in a structured way – helping with his dyslexia (Shaw & Anderson, 2018). Seb and Lucy compared and contrasted their analyses. Differences were discussed and re-analysed in an iterative process until the final themes were agreed upon.
6. **Triangulation** John then reviewed the autobiographical account, interview transcript, and audio recording alongside Lucy and Seb's analyses. He identified areas where he felt the Lucy had still not fully explored her complete feelings. Due to John's psychotherapy background, he was able to offer this expertise in highlighting the areas that Lucy was still shielding to protect her inner most insecurities.
7. **Additional Interview.** John then completed a further, unstructured interview with Lucy to further explore and probe these areas. This was a more informal "therapy session," where John encouraged Lucy to open up and think about these areas. Although were not directly linked to her dyspraxia on the surface they were important to allow Lucy to understand other influences that had shaped her life to this point.
8. **Deeper Reflexivity.** Although not formally analyzed, the further interview allowed Lucy to return to the analysis with further understanding of Lucy's inner most insecurities and thus further deepen the finalized themes
9. **Report.** The final step was to document our study in the form of this report. Our analysis is presented by Lucy, in the first person, in order to further humanize her story.

### **Ethical Issues**

This project received ethical approval from the Brighton and Sussex Medical School Research Governance and Ethics Committee prior to its commencement. We also adopted a relational ethical approach throughout the overall conduct of this autoethnography (Shaw, 2019). Relational ethics refers to the conduct of a research study in a socially and culturally ethical way (Ellis et al., 2011; Shaw, 2019). This is particularly important in qualitative research, which provides a window to the experiences, beliefs, thoughts or feelings of its participants. Ellis et al. (2011) explain that "in using personal experience, autoethnographers not only implicate themselves with their work, but also close, intimate others." In practical terms, this required us to pay special attention to the experiences discussed and the vignettes presented throughout this paper. The aim of this was to ensure that the paper would not negatively impact on other individuals in Lucy's life – such as patients, colleagues or relatives. Seb has elaborated thusly in a previous article:

*We must remain true to our participants, our research questions, and ourselves at all stages. And we must ask ourselves: is this the right thing to do? Is this the right thing to write? And have I considered the wider implications of what is done or written?* (Shaw, 2019, p. 157)

## Collaborative Autoethnographic Analysis

### My Dyspraxia / Being Different

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#### October 2014

It is the start of my second year at medical school. I am sat in doorway of my small messy bedroom, fiddling with a piece of string. I am, talking to my housemate as we wind down from our first week of lectures after the summer holidays.

**Lucy:** \*Rambles on about something\*

**Housemate:** \*laughs\* “You are so weird Lucy.”

**Lucy:** \*laughs\* “Everyone is weird...”

**Housemate:** “Hmm... not really though Lucy. I don’t know how you think of some of the things that seem to come into your head! They are just so bizarre.”

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I have always been *different*. I think I have always known it too. However, I definitely have not always embraced it. I used to want to be one of those cool kids, to be in the “popular group.” All though my childhood and into my adult life I desperately tried to fit in; with what I wore, with what I said, with what I thought. I foolishly thought that if I could fit in, it would give me friends and make me happier. The more I tried, the less I fitted in.

I struggle with the basic skills of human interaction; I am constantly misinterpreting verbal cues and accidentally interrupting people when they are talking. This combined with my easily excitable state means that I can come across as rude. Although it is possible to get used to my manner, strangers can be affronted by it. This meant that I spent much of my adolescence on the edge of the school cliques. It was a *lonely* existence – friends with everyone, but I had no “best friend” to confide in. This meant I often-felt alone in a group. I would consciously try to contribute but would end up interrupting inappropriately. The group would then shun me, leaving me on my own once more. I suppose I got used to it after a while. I tried to stay positive and think of the perks of having no strings attached when the drama got too much. But it was lonely.

This made moving to medical school even harder. I suddenly had to build a new support network away from my parents at home. I also expected university to be different, and I would find the friendship group that I had longed for – the cliquey group of girls that I could do everything with. I did not appreciate how difficult it would be until the first two people I spoke to gave me three one-word answers before walking away.

Medical school is a very competitive environment. Individuals are expected to conform to the perfect medical student persona, so I tried to hide my differences and quirks. But, I still found it difficult to conform in the same way as my peers. I think this contributed to my ongoing difficulty with finding a friendship group. At times I felt *forgotten* by my peers.

I *over-compensated*. I became known as the “keen” student in my cohort - known for doing “too much” work and attending every timetabled session. This means that I bear the brunt of people’s jokes as they try to “make me relax,” or they try to justify themselves missing lectures. Often, I do not mind, as I have learnt to take this in my stride. However, sometimes people go too far, and I feel *humiliated and embarrassed*. I have felt *pressured to conform* to the stereotype that I have been assigned. I would often stay home instead of socializing, as I

felt I should be working all the time. So, people stopped asking if I would like to join them in social activities. Thus, by the end of my second year I was an *invisible entity* within my cohort – blending into the background. I ended up back in my cycle of overworking.

Medicine is a long, intensive, and demanding course. Therefore, if you are unable to establish supportive social networks you may struggle with the constant competition and emotional stresses of life in class and on the hospital wards. This becomes increasingly intense in the later years of study (based primarily in the hospital, learning “on the job”) and you need to find and maintain revision groups. During the first two years I had given up on making friends. During my third year, however, I realized the importance of going out of my way to create a *friendship group* – to ensure that I had people to enjoy downtime with, away from work. This was a turning point in my life. I now have a lovely support network. It has also helped me take time away from working without feeling guilty.

### **Pervasive Emotional Impact**

My dyspraxia carries a huge emotional burden. It affects every thought and decision I make. It is a driver for most of the choices in my life.

There are two sides to the emotional coin of dyspraxia. There are (a) my highly excitable mood states, facilitated by my “*little victories*,” and (b) the *panic states* that happen when I am asked to make a decision. During my first three years at medical school, the latter unfortunately prevailed.

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### **April 2015**

It is heavily raining outside. I have to make a decision: do I cycle to university in the rain or do I take the bus? The bus will take slightly longer and cost £3, whereas cycling is free. If I take the bus I can bring my laptop and then work on campus, if I cycle however, I cannot (in case I clumsily fall and break it). If I cycle then I can do more work in the day though, because I won't be waiting for the bus. It is a clinical day (where I get to interact with real patients) so if I cycle in my smart clothes, they will get creased. Whereas if I take the bus, they will be fine... the different arguments get louder and louder in my head until I start panicking. I leave the house in a rush, marching to the bus stop. I turn around in tears after 10 meters; maybe I should actually go and get my bike? I then run back inside to change, but once in my room my head gets so loud, my thoughts are so all over the place – I am now becoming hysterical. I crawl into bed and hope it all goes away.

My housemate walks out of her room: “Get a grip, girl, we need to go. We have lectures in 40 minutes. You can't just not go. You are getting the bus with me.”

She drags me out of the house towards the bus stop. That is it – the decision is made. Now I have to try to recover my dignity, and be thankful for waterproof mascara.

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This kind of emotional crisis was common in my first three years of medical school. I found the stress of having to make any decision overwhelming and debilitating. Each outburst was so exhausting and time consuming. This affected my work. I would often try to continue to work whilst in hysteria. I was so convinced that I had to get eight hours of solid work completely each day, that I would continue to work regardless of the state I was in. This work was never productive, and proved to be self-destructive. It led me to *burnout* near the end of

my second year – I crawled through the exams at the end of the year and, luckily, made it through.

***“I don’t seek support, I know I should, but I am far too proud to admit I have problems most the time and go and seek support.”***

At this point, I had considered seeking professional help. I had little knowledge of what the Student Support department was at the time. I also was not sure that my problems were significant enough for them to take any notice. I was concerned they would dismiss me an emotional child and tell me I was not ready for a medical degree. In hindsight, this was exactly why I should have gone to them. A friendly, generic email from student support at this time would have prompted me to discuss my concerns.

On the flipside, there have always been the “little victories” in my life that keep me going. They can be anything at all, such as taking blood, being useful or just making a decision. They are the small things that most people can do and take for granted. But when I manage them, I get an immense feeling of pride. I rely heavily on them when I am going through a rough patch or having a bad day. They remind me that a bad day does not mean a bad life. They have been a fundamental aspect of my success in my recent years of medical school. They spur me on to keep going, to reach my goals. Although mostly these victories were self-driven, doctors within the hospital often helped to facilitate them, through gently pushing me beyond my comfort zone. They would give me opportunities to take blood, or to talk to patients. Each of these was a little victory in itself – something I did not believe I could achieve at the start of the year. I believe that everyone can benefit from “little victories,” but especially those who struggle with work, such as others with Specific Learning Difficulties like dyspraxia. These victories enable me to monitor progress and to see where I can improve.

## **Impact on Studies and Career**

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### ***October 2015***

It is a sunny autumn day in October. All twenty of my peer-group are arriving on mass at the Gastroenterology ward. It is our first day on the hospital wards, and we have just had lectures emphasizing the importance of using the wards as a resource at our disposal. There is considerable nervous excitement in the air as we gathered. For some of my peers and myself it was our first time on a hospital ward as students. We were finally going to put our clinical skills and core knowledge into practice. Although I roughly understood the morning lectures, the new terms had not made much sense to me. I had no idea of their context, and this meant I had very little understanding of what was going to happen. I was anxious. I felt physically sick.

**Lucy:** “So what are we actually meant to do this afternoon again?”

**Classmate:** “It just says ‘ward clerking’ but I don’t really understand what that is?”

**Lucy:** “I have no clue either. So do we literally just walk on to the ward this afternoon?”

**Classmate:** “Apparently, so, we can go and ‘clerk’ or go to a clinic or shadow someone...”

**Lucy:** “Hmm, I am just nervous, I don’t want to be in the way...”

**Classmate:** “I suppose we just have to learn somehow though...”

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In our third year we were randomly split into small groups (not necessarily your friends) who you then work closely with for ten weeks. This is good as it simulates starting at a new hospital, as a newly qualified doctor, but it was particularly daunting as, although I do not struggle with teamwork, I was nervous that I would end up with students who did not understand my difficulties or anxieties.

During my first week on placement, I felt lost. I knew I was supposed to be able to go and talk to patients, but I froze as soon as I got on to the ward. I found the new environment overwhelming, and I left in tears after less than half an hour, having not spoken to a single patient.

***“I felt so awkward, I felt so out of place, all I wanted to do was run...”***

On reflection, my difficulties talking to patients seemed to stem from *low self-esteem*. I was concerned that patients would not want to talk to me and that I would be imposing myself on them. I was also nervous about my usual problems with conversational cues and accidentally coming across as rude. This led me to continually come up with excuses (to myself) about why I was not able to go and talk to a patient on my own. I therefore lived in a constant state of disappointment where I didn't manage to meet my own expectations, let alone the expectations I believed others had of me. This was reinforced by well-meaning consultants and junior doctors telling us to go and talk to patients when they had run out of jobs for us to do. I found it very difficult to tell them that I was too nervous, and ended up slipping off into the background and finding another task that I felt more comfortable with.

***“I just felt completely inadequate. Like, maybe I shouldn't be on this course if I can't function, if I can't go and talk to a patient.”***

I was lucky as, on each of my placements, after the first few days, I found more confident students who were happy to let me tag along with them. This allowed me to relax slightly more when I was practicing talking to patients, as I knew there was someone to take over if I made a mistake. This helped me to develop my skills at a pace I felt comfortable with, and to gradually settle into the role. However, as these students were not always on the ward with me, I dreaded the days when I was left on my own. It was not until the end of my third year that I began to feel comfortable on my own.

***“I was fine if I was on a ward round because I had a purpose, I was following a structure.”***

Due to my need for structure, I found that I thrived on ward rounds. Here I had a pre-defined role and I was able to undertake it successfully. Each time I completed part of the role successfully it was a “little victory,” which promoted a cycle of achievement. I would then want to complete the role again to experience the same buzz. Having this structure also eliminated the pressure and anxiety of having to make decisions myself, I could just get on with the jobs I knew I needed to do. The ward rounds were a useful experience – I found it easier to learn within a structure.

I enjoyed having the ability to ask questions and to apply my knowledge in a clinical environment. I found that the clinicians were normally helpful and happy to answer relevant questions, even on a busy ward round. This surprised me as I had assumed that they would be too busy to answer any of our questions.

Within the hospital, I ran into other unforeseen difficulties. The wards are large and crowded. Simple things like navigating through the maze of people and trolleys were a struggle. I was constantly accidentally bumping into trolleys and people. I found it embarrassing when I

had to keep on apologizing to people on the wards, because I had walked into them or their bed. I also found it difficult when I was asked to help with practical skills and then dropped something or managed to get in the way. I found this frustrating, especially when I got disapproving looks from the staff. I always felt *frustrated with myself* because I had not managed to overcome my difficulties.

I had the most difficulty on my surgical placement, due to my problems with manual dexterity. This has now made me realize that it would be very difficult for me to pursue a career in surgery. Whilst in the surgical operating theatre, I have managed to almost contaminate the sterile field twice. Once I fell head first off my stool towards the patient, who was having open abdominal surgery, and struck my head on the surgical lamp above the operation, before bouncing back to safety. This was a very near miss, and the silence that followed felt like eternity. But looking back, it can only have been 20 seconds or so whilst the room worked out whether I had hit the sterile part of the lamp or not. Although I am fascinated with surgery, I now stand well back so that there is no chance of me causing any further problems.

I observed a number of different operations with a number of different surgeons and I was very appreciative when they would go out of their way to support my learning through a number of different methods:

- Placing a stool slightly away from the table so that I would be able to see but not contaminate the area;
- Talking through the operation beforehand so that I would be able to follow it once the operation began;
- Highlighting key points in the operation and indicating the anatomy;
- Questioning my knowledge about the operation, so that I would be forced to think and learn.

## Determination

***“...But if I think there is a hope in hell that I can get there, I want to prove them wrong”***

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***“Resilience: The capacity to recover quickly from difficulties”*** (The Oxford Living Dictionaries, 2017d).

***“Determined: Having made a firm decision and being resolved not to change it”*** (The Oxford Living Dictionaries, 2017b).

***“Conscientious: Wishing to do one's work or duty well and thoroughly”*** (The Oxford Living Dictionaries, 2017a).

These words are frequently used to describe my personality and work ethic. It is my determination and conscientious nature, which has sustained me through medical school thus far, and my resilience which allows me to get back up each time I struggle.

During the first two years, the course is lecture-based with very little clinical contact. The only way I knew how to pass was to spend my eight hours per day working. This had to be pen-to-paper hours, and all breaks were deducted from this. The time was spent copying the content repeatedly until it was committed to memory. I simply accepted that this was how I had to experience medical school, and although I became quite mentally fragile and very isolated, I enjoyed the comfort of the structure that my small world provided. It never occurred to me that I could have done less work, through adapting my study skills, and could have had a life outside of anatomy and physiology during those years. At that time, I lacked critical

appraisal skills – I was unable to filter the vast amount of information given in lectures and believed I had to learn it all. I would have benefitted from having some guidance on alternative study techniques (ways to learn) and study skills (when to use each technique) (Shaw, 2017; Ferguson et al., 2002). If these had been given in a relaxed lecture or small group session, I believe I would have benefitted a great deal. It would have allowed me to develop less time-consuming patterns of work that gained better results earlier on in my studies.

This method of constant *repetition* of learning is one I still use for practical skills. I feel that repetition is the best way for me to learn, so that methods and procedures become ingrained in my mind. It also allows me to structure my work and revision in a clear and organised way, which I need in order to function. I am able to channel my determination to keep practicing and constantly improve my ability, using my generous boyfriend to practice my skills on.

***“I always used to practice taking blood off of my boyfriend with an old fountain pen. We would construct the fountain pen to take blood, and although obviously no blood would come out, it is a fountain pen, it was realistic enough to go through the motions of remembering to shake the bottle and all those things. I think it will probably be the same [in final year] although I don’t think he will like it as much with a catheter...”***

My *determination* was exemplified by my attitude to my third year. During the first few weeks of my third year I had an emotional meltdown whenever I entered the hospital. However, I persisted. I would go back into the hospital every day – even when we simply had “ward clerking.” A number of my peers took to interpreting this time as “home study.” I was determined to overcome my anxieties and to be able to approach patients confidently. Over the year I persisted in going in, initially with colleagues and then on my own, taking baby steps – one at a time. By the end of the year I received a letter of commendation from one of the consultants for the standard of my ward work. For me this was the highlight of my third year. It reminded me that hard work does pay off.

I think that I was only able to get by due to the *support* from the clinicians throughout my placements. They were always welcoming and went out of their way to help me learn and gain confidence – from watching my clinical skills to answering questions on ward rounds. This enabled me to flourish. They were confident in my abilities, and therefore I became more confident in my abilities too.

## **Coping Strategies**

***“I feel it is a challenge that I am facing mostly on my own.”***

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### **November 2016**

**Seb:** “So what is it that makes you feel like you are, as you said, ‘inherently disorganized’?”

**Lucy:** “The little things, like, I have managed to lose my bike light, I have managed to lose my [library] card. If you don’t remind me, if it is not in my diary, it doesn’t exist. And my life is very much... a mess. And it is always very scatty because I really struggle with making sure it’s neat, so I try to have a structure to overcome the natural mess of my life, to try and make it so that it is functional to the same level that I see everyone else’s lives are functional.”

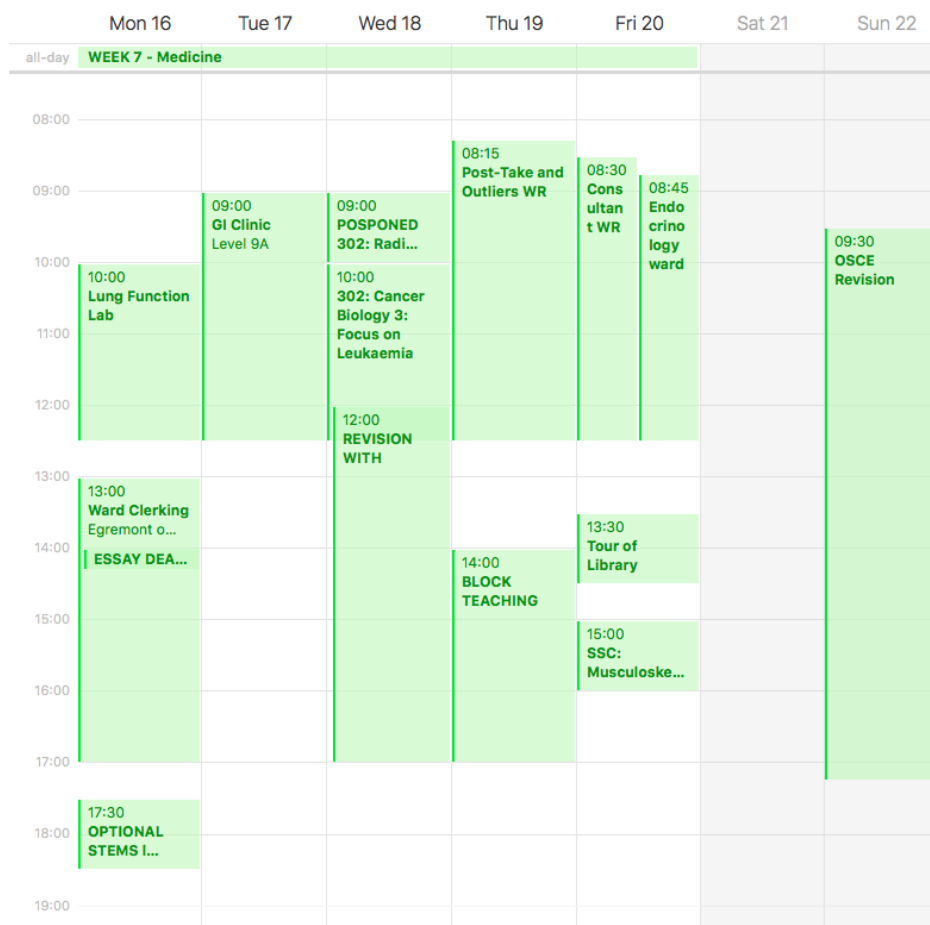
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My main coping strategy is *overcompensation*. I overcompensate to ensure that I am never caught short of my peers, as a defense mechanism to ensure I seem competent. Areas that I overcompensate for in particular are organization and timings, taking down and making notes, planning and writing assessments, and learning new information.

I had always used a paper diary. However, two years ago I transferred to the Calendar on my mobile phone. This has meant that I am now able to carry my diary in my pocket wherever I go. This is particularly useful as I am able to edit and amend my diary wherever I am, without making it look messy. I can also synchronize it to my laptop. Having an electronic calendar like this has been particularly useful as it means I can plan in advance [Figure 3]. This is an added “comfort blanket,” as it removes some of the unknown from the future. It also allows me to visualize how my day is going to look, meaning I am less likely to book two activities that overlap. It was particularly useful on clinical placements, where I had a number of different aspects to my day: a ward round, lectures, bedside teaching, clinics, or ward clerking. It also allowed me to easily swap sessions with colleagues when needed. Having this diary, allows me to impose a *structure* on my life. Without a structure I fall apart, I have no idea where to start, so tend not to start anything. I do not know how I would have survived without it.

### Figure 1

Typical week mapped using a Calendar application - you can see that on Friday there were 2 overlapping events





I always misjudge timings when leaving to go to the hospital and clinics. I either leave much earlier than needed or will leave in a huge rush and then panic about arriving on time. I normally do arrive on time, however, due to rushing – albeit out of breath.

This could be a problem for me in my career, because it I am constantly cutting timings very fine. When combined with my *poor sense of direction*, I may be late more often. This would be unprofessional and affect not only me but also my colleagues. Another difficulty could be meetings or other commitments during the day; having to work to time, so that I leave one job at the right time to then start the next one. This could be very difficult for me. To help with this problem the medical school made sure all my placements were at my local hospital, rather than one of the hospitals further away. This removed all anxieties about buses. It also allowed me to get used to the layout of one hospital rather than having to learn the layout of several different hospitals. To this day, I am very grateful for this simple supportive touch. It helped me to survive my clinical training to date.

Upon much reflection, I have found that using *humour* to lighten my problems has become my overarching coping strategy not only for my clumsiness, but also the rest of my difficulties. Outwardly, I am beginning to embrace my differences and make them into a spectacle to make people laugh. Inwardly I am not yet fully comfortable with them and often worry about what I have said and how others view me. However, through using these differences to my advantage in a humorous way, it stops other people using them against me behind my back. It is better for them to laugh *with me* than to laugh *at me*. In addition, taken on face value, seeming to suddenly throw my phone on the floor out of the blue is quite amusing.

### The Importance of Others' Reactions

***“I wanted to prove something to somebody, something to anybody. That I could do what everybody else can do.”***

As mentioned above, I worry a lot about *what other people think of me*. My parents always told me I was a “sensitive” child and took everything very much to heart. This may not be directly due to my dyspraxia, but I do believe that it is linked in a number of ways.

Firstly, when asked to complete a task I inevitably end up needing to work harder than most to complete it to the same standard, I therefore end up becoming more invested in it. Consequently, when I get feedback I feel that they are bringing into question my very being rather than just my performance on that task. This means that the feedback I am given, even if unintended, impacts significantly on my personal identity (Table 1). For others, especially those close to me, this can be frustrating, I constantly crave feedback and validation so that I can be sure I am “doing okay,” but often react defensively regardless of the feedback they give. However, since acknowledging this, I have become more aware of how I interpret feedback and am now more able to separate myself from the task in hand.

**Table 1**

*How I interpret feedback*

Positive reaction	I am doing okay OR they are just saying it and really I am not good enough
Negative reaction	I am not good enough
No reaction	I am not good enough

The second way I believe it is linked is I constantly feel that I have *something to prove*. I have often been told that I will be unable to achieve something due to my difficulties and I

see that as a challenge and make it my mission to achieve it. Although I recognize my limitations, I feel the need to demonstrate that they do not define me and I am as capable as everybody else in life. This had led me to become very competitive, not just in work but in all areas of life. Again, a further reprimand – “not everything is a competition, Lucy.” However, my competitiveness has been encouraged at medical school, as we are often competing against each other in exams, and then later for places at foundation schools. I have found this difficult, as I my strong desire to succeed is pitted against my need and want to be liked.

The third way it influences me is that I want to please everyone all of the time. This can be related to the fact that I do not want other people to go through the experiences that I have been through and, therefore, will do anything, at anytime, for anyone, to keep them happy. I also feel that this will help me to make friends through proving that I am always around. Through this, I also get praise and validation “I am doing okay.” I don’t want to be purely reliable; I strive to be dependable. Constantly trying to please people has wider consequences than people would imagine. Over and above generally being nice it means that I have developed anxieties around interactions around other people and have become paranoid about doing something interpreted as “not nice” or letting someone down. This means that I often place a lot of emphasis on trivial decisions if they involve others. This can cause complications for all associated – and more problems than solutions. This is especially difficult, as I then get upset with myself for being indecisive, which adds to the complexity of the situation.

## **Discussion**

Over the course of her medical education, Lucy has been able to identify a number of difficulties that she attributes to her dyspraxia. She has struggled emotionally coming to terms with them and has developed considerable anxiety in attempting to hide them from her peers and educators. Nonetheless, she has developed numerous coping strategies to allow her to succeed in this competitive environment. Through identifying her strengths and recognizing the need to adapt, she has been able to flourish in what could have been a very difficult degree and career choice.

### **Socio-cultural considerations**

The underlying socio-cultural issues around UK medical education on a more general level should now be considered. Although we present the experiences of a single individual, underlying themes, curriculum issues and prejudices are all uncovered. More broadly this study highlights a culture and experience that many medical students may recognise and relate to. It is possible that learning points may be taken from this case for not only dyspraxic students but also medical students in general. We wish to add at this point that Lucy’s medical school was extremely supportive if and when a student approached them for help and support of any nature.

In Lucy’s experience, she highlighted that the competitiveness for grades, jobs and educational experiences was a barrier in reaching out for help and support. This silent competition between peers led to a large emotional burden. Competitiveness seems to be one aspect that is common to medical schools in general (Dennis et al., 2012). Dennis et al. (2012) found that anxiety was exacerbated by the competitiveness of the medical school environment – participants feared that they would be considered weak by peers / faculty if they were seen to need further support, and that this may lead to dismissal from the course if they were unable to perform. This is exemplified here by Lucy, who felt that admitting to her difficulties, even though formally diagnosed, would place her at a disadvantage. This is further supported by Grochowski et al. (2014) who, in small group discussions, found that first year students highlighted high levels of anxiety and a reluctance to seek help due to the competitive

educational environment. Furthermore, Musto (2013) found that medical students chose not to disclose their SpLD during the medical school admission process as they felt they would be disadvantaged.

This study highlights how important the opinions and actions of others can be for an individual with dyspraxia. Due to a lack of education there is still perceived to be a stigma surrounding the condition, leading to a fear of negative judgment and discrimination (Griffin & Pollak, 2009; Miller et al., 2009; Social Care Workforce Research Unit, 2007). This is tied into the culture of medicine. Musto (2013) highlighted that doctors have an anticipated stereotype of “being perfect,” and that admitting to having difficulties (such as an SpLD) opens them up stigma from peers, colleagues and patients. Thus, if an individual highlights their own difficulties and potential weaknesses, it can be felt that they will be an unsafe doctor (Musto, 2013). This has been documented in doctors with dyslexia by Shaw et al. (2017) and Musto (2013). It has been further highlighted in doctors and medical students with mental health difficulties (Winter et al., 2017). This is especially challenging as it may act as a barrier to young doctors seeking help, as they may feel this will further discriminate them rather than grant them access to the support they need (Musto, 2013). Dennis et al. (2012) highlight that this can lead to a spiral of worsening anxiety as students realize they need further support but feel unable to access it. It is therefore important that we begin to consider how we can rectify this malalignment in students’ perception of the consequences of help seeking behavior and the reality of seeking help.

Through positive role modeling the opinions of prominent figures, such as support staff and academic faculty, become influential in promoting an inclusive environment for students with dyspraxia and other disabilities (Miller et al., 2009). Lucy’s story highlights how important it may be for student support services to inform all students of the support they can provide. Furthermore, they might consider helping dyspraxic students to better understand their condition and how they might best approach self-management of their difficulties (Dyrbye et al., 2005; Miller et al., 2009; Rowlands et al., 2005). Lucy’s medical school was active in offering support based on feedback and suggestions. A recently implemented scheme was a “buddy” scheme to allow students with an SpLD to have a near-peer role model with a similar SpLD – to give advice on coping strategies. For Lucy, this may have helped to alleviate her anxieties about beginning life on the busy wards. Simple, thoughtful measures like this can have a large impact on an anxious student and may be simple to implement (Rowlands et al., 2005).

The importance of regular feedback to support learning was shown to be crucial for Lucy to maintain her motivation during her studies. This is something that both dyspraxic and non-dyspraxic students may benefit from. Supportive clinical team members have been shown to be important in maintaining motivation and preventing burnout (Dyrbye et al., 2005). Oktaria and Soemantri (2018) found that students opted to approach mentors who they valued the opinions and provided feedback. For Lucy, regular feedback, alongside the development of her positive perception in the eyes of others, was important to her motivation. Urquhart et al. (2014) found that, whilst there are some examples of high-quality feedback, many students reported negative experiences of feedback within medical education. Medical schools may therefore support students seeking feedback by providing clear expectations of their clinical staff involved in teaching – to be supportive, constructive and adapt their feedback to the student and situation (Dornan et al., 2005; Dyrbye et al., 2005; Urquhart et al., 2014).

This study highlights the difficulties students with dyspraxia may face with organization and coordination in a clinical environment. It is important for educators to be mindful of this and to be helpful in offering practical support. From a curricular perspective, providing students with their timetables in advance, and making appropriate adjustments (such as allowing them to be placed with a friend) are simple measures that might make a large

difference for some. It is also important to recognize that supportive measures need to be individualized and tailored to best compliment students' strengths (Rowlands et al., 2005). In this case, providing adequate time to adapt to the new surroundings was important. This may hold implications for some clinical placements, where students may have as little as two weeks within a new department before moving on.

### **Therapeutic impacts**

The autoethnographic process in itself has been shown to be therapeutic (Cluster, 2014). If the author allows themselves to be fully vulnerable and open, the healing nature of the process becomes important for the researcher to allow themselves to fully accept their own narrative (Cluster 2014). In this way, autoethnography allows individuals to gain a deeper understanding of themselves, to develop themselves, and to move past their experiences (Cluster, 2014). In the case of our collaborative autoethnography, this effect stemmed beyond Lucy. Lucy, Seb, and John all found this a therapeutic process in their own ways. It allowed Lucy to fully understand and come to terms with issues she had previously associated with her sense of self – she learnt to accept that her difficulties do not define her, and that some of her previous coping strategies may not have been healthy for herself or for those around her. For Seb and John the benefits were more subtle. They came through watching Lucy develop as both a researcher and an individual. Furthermore, Lucy's experiences also helped Seb to reflect further on his own experiences as a doctor with dyslexia.

### **Methodological reflections**

Interestingly the autobiographical account focused more upon Lucy's weaknesses – a "medical/deficit" adaptation, whereas the interview gave a more optimistic account, highlighting a "difference" adaptation. The interviews, although not part of the traditional autoethnographic process, facilitated deeper levels of reflexivity (Denshire, 2014). In addition, the interviews provided a source of triangulation to verify the data. Considering this point, it may be noted that it is inherently easier to analyse negatives (where one could improve) than positives (what one is already doing well) – especially given the above in-depth analysis of Lucy's mind-set on this. This has previously been highlighted by Hulsman and Vloodt (2014), who found that students were more likely to give themselves negative feedback and often this was more specific than positive aspects they identified.

### **Limitations**

The concept of "generalizability" in research is an interesting and much debated one. Traditional, positivist research uses statistics to draw its conclusions from numerical data. As such, it strives to produce objective results from a representative sample that can be generalized to the wider population of interest. Due to the comparatively low number of participants, the lack of statistical analyses, and the embracement of subjectivity, many researchers may traditionally consider qualitative research to not be generalizable. For example, it can be argued that Lucy's story lacks generalizability to other settings because it represents a single, subjective case, at a single institution, during one period in time. Some qualitative researchers have, however, argued that generalizability need not be tied to an objective view on the nature of reality – that qualitative methods do indeed produce generalizable results in their own, subjective way. In relation to autoethnography, Ellis et al. (2011) elaborate thusly:

*Generalizability is also important to autoethnographers, though not in the traditional, social scientific meaning that stems from, and applies to, large random samples of respondents. In autoethnography, the focus of generalizability moves from respondents to readers, and is always being tested by readers as they determine if a story speaks to them about their experience or about the lives of others they know; it is determined by whether the (specific) autoethnographer is able to illuminate (general) unfamiliar cultural processes. (Ellis et al., 2011, para. 37)*

Whatever our readers' views on generalizability, important points can still be taken from Lucy's story. By critically analyzing her lived experience (and the "culture" of Lucy), we may learn some valuable, transferable lessons. We hope that this will promote further research in this area, which will build on the findings of this study. Through conducting further qualitative and quantitative research in this area, both within the UK and globally, we may be able to assess the transferability of the experiences discussed here. It would also be useful to assess whether these experiences are transferable to different educational settings and cultures.

### **What this study adds**

This study complements the findings of Shaw et al. who completed an autoethnography considering "Seb's" experience of dyslexia within medical education (Shaw et al., 2016). They found that Seb had a number of emotional and social difficulties that extended beyond the scope of his dyslexia, also struggling with isolation like Lucy (Shaw et al., 2016). Both pieces have highlighted a range of strengths and coping strategies to deal with their problems, influenced by their learning difficulties and the associated anxieties. This autoethnography also compliments a study by Griffin and Pollak, who found marked similarities in the life experiences between participants with a broad range of specific learning difficulties (Griffin & Pollak, 2009).

### **Conclusions**

Overall, we hope that medical educators, students, and others alike will read Lucy's story and be able to use it to inform their own practice. By doing so they may encourage the acceptance of difficulties at a practical and emotional level. We also hope that qualitative researchers will find our collaborative autoethnographic approach an interesting and helpful way to support researchers new to the field or anxious about the in-depth nature of autoethnographic enquiry. For the authors, the exploration and therapeutic nature of this work should not be underestimated, and we thank you for giving us the opportunity to share it with you.

### **References**

- Bleakley, A., Bligh, J., & Browne, J. (2011). *Medical education for the future: Identity, power and location*. Springer.
- Cluster, D. (2014). Autoethnography as a transformative research method. *The Qualitative Report*, 19(37), 1-13. <https://nsuworks.nova.edu/tqr/vol19/iss37/3>
- Dennis, A., Warren, R., Neville, F., Laidlaw, A., & Ozakinci, G. (2012). Anxiety about anxiety in medical undergraduates. *The Clinical Teacher*, 9(5), 330-333.
- Denshire, S. (2014). On auto-ethnography. *Current Sociology Review*, 62, 831-850.
- Dornan, T., Hadfield, J., Brown, M., Boshuizen, H., & Scherpbier, A. (2005). How can medical

- students learn in a self-directed way in the clinical environment? Design-based research. *Medical Education*, 39(4), 356-364.
- Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2005). Medical student distress: causes, consequences, and proposed solutions. *Mayo Clinic Proceedings*, 80(12), 1613-1622.
- Dyspraxia Foundation. (2012). *Dyspraxia (DCD) in further and higher education*. Available from: <https://dyspraxiafoundation.org.uk/about-dyspraxia/>
- Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview. *Forum: Qualitative Social Research*, 12(1), 10.
- Ferguson, E., James, D., & Madeley, L. (2002). Factors associated with success in medical school: Systematic review of the literature. *BMJ*, 324(7343), 952-957.
- Gibbs, J., Appleton, J., & Appleton, R. (2007). Dyspraxia or developmental coordination disorder? Unravelling the enigma. *Archives of Disease in Childhood*, 92(6), 534-539.
- Griffin, E., & Pollak, D. (2009). Student experiences of neurodiversity in higher education: Insights from the BRAINHE project. *Dyslexia*, 15(1), 23-41.
- Grochowski, C. O., Cartmill, M., Reiter, J., Spaulding, J., Haviland, J., Valea, F., Thibodeau, P. L., McCorison, S., & Halperin, E. C. (2014). Anxiety in first year medical students taking gross anatomy. *Clinical Anatomy*, 27(6), 835-838.
- Hulsman, R. L., & Van Der Vloodt, J. (2015). Self-evaluation and peer-feedback of medical students' communication skills using a web-based video annotation system. Exploring content and specificity. *Patient Education and Counseling*, 98(3), 356-363.
- Kirby, A., Sugden, D., Beveridge, S., & Edwards, L. (2008a). Developmental coordination disorder (DCD) in adolescents and adults in further and higher education. *Journal of Research in Special Educational Needs*, 8(3), 120-131.
- Kirby, A., Sugden, D., Beveridge, S., Edwards, L., & Edwards, R. (2008b). Dyslexia and developmental co-ordination disorder in further and higher education-similarities and differences. Does the "label" influence the support given? *Dyslexia*, 14(3), 197-213.
- Miller, S., Ross, S., & Cleland, J. (2009). Medical students' attitudes towards disability and support for disability in medicine. *Medical Teacher*, 31(6), e272-e277.
- Missiuna, C., Moll, S., King, G., Stewart, D., & Macdonald, K. (2008). Life experiences of young adults who have coordination difficulties. *Canadian Journal of Occupational Therapy*, 75(3), 157-166.
- Musto, J. (2013). *How do medical doctors with specific learning difficulties (SpLD) cope in a clinical setting?* Norwich Medical School.
- Oktaria, D., & Soemantri, D. (2018). Undergraduate medical students' perceptions on feedback-seeking behaviour. *Malaysian Journal of Medical Sciences*, 25(1), 75-83.
- Rowlands, A., Abbott, S., Bever, G., & Roberts, C. M. (2013). Medical students' perceptions and understanding of their specific learning difficulties. *International Journal of Medical Education*, 4, 200-206.
- Shaw, S. C. K. (2017). How can we promote and facilitate effective study skills in medical students? *MedEdPublish*, 6(1), 36. <https://doi.org/10.15694/mep.2017.000036>
- Shaw, S. C. K. (2019). An introduction to the role of relational ethics in qualitative healthcare education research. *Nurse Education in Practice*, 36, 157-158.
- Shaw, S. C. K., & Anderson, J. L. (2018). The experiences of medical students with dyslexia: An interpretive phenomenological study. *Dyslexia*, 24(3), 220-233.
- Shaw, S. C. K., Anderson, J. L., & Grant, A. J. (2016). Studying medicine with dyslexia: A collaborative autoethnography. *The Qualitative Report*, 21(11), 2036-2054. <https://nsuworks.nova.edu/tqr/vol21/iss11/2>
- Shaw, S. C. K., Grant, A. J., & Anderson, J. L. (2018). Autoethnography in action: A research methods case study on the use of a collaborative autoethnography to explore the culture of studying medicine with dyslexia. *SAGE Research Methods Cases Part 2*.

- Social Care Workforce Research Unit. (2007). *Disclosing disability: Disabled students and practitioners in social work, nursing, and teaching. A research study to inform the Disability Rights Commission's formal investigation into fitness standards*. London: Social Care Workforce Research Unit, King's College.
- The Oxford living dictionaries. (2017a). *Conscientious*. Oxford: Oxford University Press. Available from: <https://en.oxforddictionaries.com/definition/conscientious>
- The Oxford living dictionaries. (2017b). *Determined*. Oxford: Oxford University Press. Available from: <https://en.oxforddictionaries.com/definition/determined>
- The Oxford living dictionaries. (2017c). *Resilience*. Oxford: Oxford University Press. Available from: <https://en.oxforddictionaries.com/definition/resilience>
- Urquhart, L. M., Rees, C. E., & Ker, J. S. (2014). Making sense of feedback experiences: A multi-school study of medical students' narratives. *Medical Education*, 48, 189–203
- Walker, E. R., & Shaw, S. C. K. (2018). Specific learning difficulties: The meaning in the nomenclature. *Nurse Education in Practice*, 32, 97-98.
- Walker, E. R., Shaw, S. C. K., Reed, M., & Anderson, J. L. (2018). Dyspraxia in clinical education: A review. *The Clinical Teacher*, 15(2), 98-103.
- Wells, P., Dickens, K. N., McBrayer, J. S., & Cleveland, R. E. (2019). "If I don't laugh, I'm going to cry": Meaning making in the promotion, tenure, and retention process: A collaborative autoethnography. *The Qualitative Report*, 24(2), 334-351. <https://nsuworks.nova.edu/tqr/vol24/iss2/12>
- Winter, R., Rix, A., & Grant, A. (2017). Medical student beliefs about disclosure of mental health issues: A qualitative study. *Journal of Veterinary Medical Education*, 44(1), 147-156.

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