DYSELXIA, TRAUMATIC SCHOOLING AND CAREER SUCCESS:
Investigating the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling.

Neil Alexander-Passe

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Abstract

This thesis aims to: investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling. It details seven studies that investigate the emotional coping amongst individuals with developmental dyslexia, investigating successful post-school careers as ‘post-traumatic growth’, an outcome from school-based trauma.

The first two studies with school-aged dyslexics were quantitative and whilst helpful in understanding different coping strategies utilised, it was perceived to lack depth in understanding the emotional side of the dyslexia experience, and any long-term emotional ramifications from school-based trauma. A third study sought to understand the discrimination, stigma, and the dangers of self-disclosure of dyslexia, experienced by adult dyslexics. Two investigations of self-harm and possible post-traumatic stress disorder followed to better understand how adults with dyslexia emotional cope with learned helplessness experienced at school. Lastly, two studies investigating post-school workplace success, firstly to understand concepts of ‘success’ amongst adults with dyslexia, and secondly to understand how school-based trauma could be used positively.

This thesis offers original contributions to literature through the use of standardised measures to measure emotional coping in school-aged dyslexic samples (especially depression); comparing the sources and manifestations of stress between school-aged dyslexics and their siblings; the types of self-harm used by dyslexic adults and where the source of their helplessness/depression begun; and how the concept of ‘post-traumatic stress disorder’ could be correlated to the reactions that many dyslexic adults experience now as parents returning to school. Original contributions were also made regarding adult dyslexics in regard to self-perceptions of success and understanding the role that school plays in motivating them to post-school success in the workplace, argued to be a form of ‘post-traumatic growth’. Lastly, the author proposes the use of ‘bi-abilities’ to better understand the experience of dyslexia, rejecting both the medical and social models of disability, as dyslexics reject a disability identity.
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1.0 Introduction

This thesis details seven studies investigating the emotional coping in individuals with developmental dyslexia. The first two studies were quantitative and identified coping in two samples of school-aged dyslexics, using measures of coping, self-esteem, depression and the sources and manifestations of stress. Whilst such data was helpful to understand different coping strategies used, it was perceived by the author to lack depth for understanding the emotional side of the dyslexia experience, and any long-term emotional ramifications from school-based trauma. Later studies were qualitative in methodology and sought to first understand the discrimination, stigma and the dangers of self-disclosure of dyslexia, a hidden/invisible disability, in adults with dyslexia. Investigations of self-harm and post-traumatic stress disorder followed, to help understand how adults with dyslexia emotionally coped with learned helplessness from their school experience. Lastly, two qualitative studies investigated post-school workplace success, to help understand how school-based trauma could be used positively, making use of the concepts of ‘post-traumatic growth’ and ‘bi-abilities’, which challenge the current use of ‘social models of disability’ in dyslexia studies.

Contemporary definition of dyslexia

As an adult with dyslexia, I have personally experienced difficulties relating to dyslexia, teaching students in both primary and secondary education, working with parents of children with specific learning difficulties, and lastly first-hand research with dyslexic individuals (from children to adults).

Developmental dyslexia (called ‘dyslexia’ in this thesis) manifests with a spectrum of difficulties and severities, starting before attaining literacy, and affecting the abilities to read and write, phonological delay, severe poor short-term memory, and a lack of coordination (Rose, 2009). Other theories, such as ‘automaticity’, suggest that dyslexia difficulties may exist without phonological delay, reflecting more than just literacy-based difficulties (Nicolson, Fawcett & Dean, 2001), with dyslexia being associated with cerebellar impairment in about 80% of cases. Developmental dyslexia is argued to be different to acquired dyslexia, which comes from brain injury after literacy and numeracy skills have been acquired (Temple, 2006). Dyslexia is understood to fall under the umbrella term of
‘neurodiversity’ (Cooper, 2006), which suggests that individuals can have a combination of learning differences/difficulties: dyslexia, ADHD (attention deficit hyperactivity disorder), SEBD (social, emotional and behavioural difficulties), autism; with sub-groups of: dyspraxia, dyscalculia, dysgraphia and Meares-Irlen Syndrome (Ekblad, 2013).

Developmental dyslexia is often overlooked in both primary and secondary education due to the lack of special educational needs (SEN) awareness in class teachers and school leaders. Through experiencing educational failure and resulting humiliation, individuals can develop emotional strategies in order to avoid further detection of their educational difficulties, and to retain their self-esteem (Carawan, Nalavany & Jenkins, 2015; Eissa, 2010; Burden, 2008; Snowling, Muter & Carroll, 2007; Burden & Burdett, 2005; Pollak, 2005; Ridsdale, 2004; Riddick, 1996; Scott, 2004; Dahle, Knivsberg, Andreassen, 2011; Alexander-Passe, 2016a, 2017). This can be understood to be similar to the ‘fight or flight response’ (acute stress response) which is a physiological reaction occurring in response to a perceived threat, such as moving your hand unconsciously away from a hot flame (Walter, 1932; Lazarus, 1984; Folkman & Lazarus, 1988).

Behavioural manifestations can also be in evidence as a means of coping with, for example, aggression, bullying etc. (Boetsch, Breen & Pennington, 1996; Carroll, Maughan, Goodman & Meltzer, 2005). Scott (2004) argues that emotional strategies in dyslexics can have life-long mental health implications, and this is one of the foci of this thesis. Children and teenagers tend to perceive their dyslexia negatively, by talking about ‘difficulties’, whereas some adults perceive their dyslexia as a learning ‘difference’ and view their dyslexia positively, while others remain frustrated and believe dyslexia is the cause of many of their life/career difficulties (Scott, 2004; McNulty, 2003).

Chapters 2–8 of this thesis support previous empirical studies on emotional coping (for example Ridsdale, 2004; Riddick, 1996; Pollak, 2005; and Scott, 2004) and build on them by developing further understanding of the emotional ramifications of long-term educational trauma through the development of depression and self-harm as coping strategies, as well as how such trauma can positively assist in the development of successful post-school workplace careers (using the theory of ‘post-traumatic growth’). Chapter 9 challenges the suitability of the ‘social model of disability’ for individuals with dyslexia to encapsulate their perceptions of impairment, and offers other models which might be more useful in understanding the phenomena of dyslexia.
Key issues

UK National Statistics data (2016a, 2017a) suggests only a fraction of individuals with developmental dyslexia are diagnosed at primary school (6–11 years old), with many more being recognised in Secondary School (11–18 years old). It could be argued that later, in post-16 education and the workplace, many adults remain undiagnosed in the general population. Hewitt-Mann (2012) and Harris (2012) suggest there are high frequencies of undiagnosed dyslexics in UK prisons, and Alexander-Passe (2017) found in one study that only 33% of N=54 unemployed/less successful participants were diagnosed at school, and a further 31% at college/university. In a second study only 47% of N=138 successful dyslexic participants were diagnosed at school, and a further 28% at college/university. It is argued by the author that late SEND identification and reduced SEND funding for interventions can result in many children with dyslexia experiencing long periods of learning failure, with possible mental health ramifications (Scott, 2004; Humphrey & Mullins, 2002; Threlkeld, 2015). The author also argues that emotional manifestations as a result of long-term failure in mainstream education have been a neglected area of study compared to investigations into identification and intervention models, especially concerning adults with diagnosed and undiagnosed dyslexia (Scott, 2004; Humphrey, 2002, 2003; Morgan & Klein, 2003; Eissa, 2010; and Carawan, Nalavany & Jenkins, 2015).

Dyslexia is largely misunderstood in the general adult population, causing confusion about how some dyslexics can be highly successful (for example, Sir Richard Branson, Lord Alan Sugar, Sir James Dyson, Sir Steve Redgrave, Lewis Hamilton), while others can be found amongst the UK, US and Swedish prison populations (Helen Arkell Centre, 2017; Alexander-Passe, 2016b; Mottram, 2007; Rack, 2005). For example, Rack (2005) concluded that dyslexia in UK prisons is three to four times more common amongst offenders than in the general population, with an estimated incidence of 14–31% (Loucks, 2007). However, Harris (2012) reported to the UK parliament that dyslexia rates could be estimated to be between 4% to 56% in UK prisons, numbering as many as 26,000 inmates. This dichotomy is a key aspect of this thesis, to investigate why some individuals with developmental dyslexia are able to succeed despite experiencing similar traumatic schooling, whilst other are less successful in their adult post-school careers, and concepts such as ‘post-traumatic growth’ and the ‘bi-abilities’ model of disability are discussed.
Aims and objectives

This thesis aims to investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling.

The objectives of this thesis are:

- To investigate how school-aged teenagers with dyslexia cope with the stresses of school.
- To investigate the adult experience of dyslexia and how this impacts on their confidence in society.
- To investigate self-harming coping strategies used by individuals with dyslexia, and possible ‘post-traumatic stress disorder’ when returning to school as parents.
- To investigate the role school-based trauma plays in the motivation for success in adults with dyslexia.
- To investigate any gender bias in the recruitment process, in the results of the studies highlighted in this thesis, and how this is reflected in gender theory.
- To develop a holistic approach by applying the bi-ability model to represent the experiences of people with dyslexia.

Justification for theoretical stance

The author of this thesis is an individual diagnosed with developmental dyslexia, being someone who experienced difficulties in mainstream education, a late-diagnosed but unsupported young individual with dyslexia, and who left school with few academic qualifications. The author was fortunate to have found a talent in art and design, and was able to proceed to Art College, gain an undergraduate degree in Graphic Design, and develop a successful career as a graphic designer, later achieving a research postgraduate degree investigating coping amongst young people with developmental dyslexia. Now, as a leader in special educational needs for a large secondary school, the author is responsible for developing provision for students with dyslexia and for other special educational needs and disabilities.
The author recognises the ‘informed’ researcher position taken, with first-hand ‘insider’ knowledge of having developmental dyslexia, experienced in the UK education system, which the author argues resulted in experiencing a lack of differentiated teaching, difficulties gaining employment, and difficulties returning to school as a parent. The ‘insider–outsider’ narrative (Dwyer & Buckle, 2009) is discussed later in this chapter in the methodology section. The author also brings to this study the experiences of developing resilience and coping strategies which have allowed the development of several successful post-school career paths.

The choice of ‘interpretative phenomenological analysis’ (IPA, developed by Smith, 2004, 2007) for Chapters 4 to 8 of this thesis allowed the author an active part in assisting participants through developing their own life journey narratives. This was important, as the author was able to, through selective self-disclosure, create a ‘safe space’ for participants, so their barriers could be lowered and new insights/leakage could occur. The author was positioned as ‘similar and dis-abled’ to the participants, rather than as ‘able-bodied’, with few or no similar life experiences. The use of the IPA methodology was perceived by the author as a space to develop themes without perceived outcomes. The choice of IPA was made to gain the greatest connection with participants in order to understand their emotional journeys living with a learning difficulty that touches each aspect of their lives, from learning to interacting, from childhood to adulthood, from nursery to university and the workplace, and from personal relationships with partners to their own children.

The author was positioned with a ‘psycho-social’ stance (Terras, Thompson & Minnis, 2009), interacting with both psychological and sociological perspective methodology to understand any emotional coping that has taken place in individuals with dyslexia, and sociological factors which may interplay. The psycho-social model of disability is explained in Figure 1.

The use of standardised measures in Chapters 2 and 3 was based on the psychological need for testing a hypothesis with quantitative measures. However, whilst challenging the Social Model of Disability (Oliver, 2013) and offering the ‘Bi-Ability Model’ (Valeras, 2010), the author places this thesis in the sociological sphere, investigating how those with learning difficulties/differences feel when labelled as having a ‘disability’, and why they might reject such a perceived ‘negative’ label from society.

This ‘psycho-social’ positioning is also reflected in how the author recruited a sample for both the studies included in Chapters 4 to 8 (emotional coping), and Chapter 9
(successful), which are detailed in Appendices 1 to 3 of this thesis, aiming to help prospective research participants understand the emotional coping that took place in their lives, due to social influences.

![Psycho-social Model of Disability](image)

**Figure 1.** Psycho-social Model of Disability.

**Why is the study of mental health and dyslexia important?**

The author has personally experienced dyslexia in mainstream education, university and the workplace, the author’s research began by asking ‘were my own traumatic experiences of school typical of other individuals with dyslexia?’ What I discovered was that my experiences were ‘typical’ for those with dyslexia, and that the vast majority of individuals with dyslexia ‘never’ talk about their negative school and life experiences, even to life partners/spouses and family – a hidden, silent and secret pain, affecting every aspect of their lives with interactions/relationships at home and in the workplace (Moody, 2016; Scott, 2004; Alexander-Passe, 2010, 2012, 2017). Understanding this repression is important to this thesis, and Chapter 4 talks about the dyslexia experience in regard to difference, disclosure, labelling, discrimination and stigma.

Primary school experiences, especially negatives ones, can be ingrained in a person’s personality/identity, and early experiences of authority are fundamental, a view supported by Dombeck (2017) regarding the effects of bullying, and Tran (2014) and Drew (2001) regarding the effects of teacher assessment on a learner’s identity. At school many young dyslexics withdraw, turning to self-harm and attempting suicide as a means of self-
School, which is meant to nurture children’s talents and potential, turns into a feared environment that needs to be survived on an hourly basis, to avoid the constant humiliation of their inabilitys/difficulties (for example, learning to read, write and spell), a view supported by Frank and Livingston (2002), Burden (2008), Burden & Burdett (2005), Scott (2004) and Alexander-Passe (2016c). At home, in many cases, their parents commonly compare them unfairly to their non-dyslexic siblings (discounting any undiagnosed learning difficulties), turning what should be a safe haven into a place of shame, with many withdrawing into their bedrooms to hide/survive (Ryan, 2004; Alexander-Passe, 2004a, 2004b, 2016c), and this is a theme investigated in Chapter 3 of this thesis. Both Chapters 2 and 3 of this thesis evidence the gender-differentiated emotional and task-based coping manifested from experiencing dyslexia as a school-aged young person.

Leaving school, many young adult dyslexics see their peers succeed in gaining paper qualifications (for example, GCSEs/A-levels), allowing them to continue to university or to gain an apprenticeship; meanwhile, they themselves have very little to show for their own time at school, as their camouflaging of their difficulties meant they were happier to be seen as slow or lazy rather than stupid, and importantly without their learning difficulties being discovered (Riddick, 2009; Scott, 2004; Alexander-Passe, 2015a, 2016c) – they survived, but with little career prospects.

Leaving education without the skills and qualifications to attain a job, many found themselves either unemployed, employed in part-time, low-paid positions, or turning to crime as a means to gain money in order to live as their peers (Boden, 2009; Macdonald, 2010a; Alexander-Passe, 2017). This area of the adult dyslexia experience is investigated in Chapter 4 of this thesis, regarding dealing with the stigma and humiliation that comes with having dyslexia as an adult, and issues regarding self-disclosure. However, some adult dyslexics managed to succeed in academia/the workplace despite their traumatic schooling, and this thesis argues they were motivated to ‘prove others wrong about them’, but they still commonly relive their negative school experiences every time they are asked to read, write, spell or take a test, or return to a school environment again (Fink, 2002; Leather, Hogh, Seiss & Everatt, 2011). This resilience, persistence and empathy towards others who struggle is investigated in Chapters 4, 7 and 8 of this thesis, and these things are argued to have developed from overcoming impairments/barriers at school. Chapter 8 investigates the motivating factors from traumatic schooling, to ‘prove others wrong about them’, to be successful ‘despite not because of school’, and to create successful post-school
careers and emotional balance, and this is argued to be a form of ‘post-traumatic growth’ (Calhoun & Tedeschi, 2001).

Whilst dyslexia was first identified in 1890, the vast majority of research has focused on how it should be identified, and the possible educational (literacy) interventions. As Miles & Miles (1999) note, dyslexia is *medical in origin, but educational in treatment*, and this is reflected in the difficulty in diagnosis and the debates about its treatment (Elliott & Grigorenko, 2014). By comparison, there has been very little investigation into the human experiences of dyslexia – the experience of having a ‘hidden’ disability from many years of failing in education, the effects of camouflaging difficulties to others, and living with a ‘secret’ shame of the inability/difficulty to read, write or spell (Hales, 1995; Scott, 2004; Threlkeld, 2015; Agahi, 2015); this is investigated in Chapter 4 of this thesis. This ‘double-life’ identity has been compared to living a life as a spy (Alexander-Passe, 2010, 2015a; Threlkeld, 2015), never being able to show their true self as it is too unbelievable. It is this identity crisis that pushes many individuals with dyslexia into mental illness (Scott, 2004; Ryan, 1994, 2015; Alexander-Passe, 2010, 2015a; Terras, Thompson & Minnis, 2009; Carroll & Iles, 2006; Boetsch, Green & Pennington, 1996; Burden, 2005; Ingesson, 2007), and is investigated in Chapters 4 and 5 of this thesis. This author argues there is a void of research in this area, and so this thesis aims to increase such knowledge and bring greater understanding, so that dyslexics can better understand themselves, and non-dyslexics (including partners, parents, educators and employers) can understand the huge emotional and psychological battle faced by the lifelong experience of dyslexia.

Chapter 5 of this thesis discusses the long-term emotional effects of mainstream education, including manifestations of self-harm and attempted suicide as a means of coping with inhospitable educational environments, and generally coping in society with a learning difference. Chapter 6 investigates possible manifestations of post-traumatic stress disorder (PTSD) as a reaction to returning to school as parents for their own children, with stimuli such as the smell of floor cleaner, being made to sit on small chairs, being talked down to by authority figures, or seeing children’s drawing stuck on walls triggering withdrawal, anxiety or anger.

Chapter 7 investigates perceptions of success, and identifies that adults with dyslexia can set unreasonable self-expectations of success, not based on monetary value but on hard-to-measure personal satisfaction and reaching one’s own potential. This thesis argues that adults with dyslexia can have mental health issues as their personal self-concept targets are set too high, making success virtually impossible to achieve. However,
it was found that those who recognise and celebrate small successes gain a higher level of personal satisfaction and build self-esteem as a result of more realistic expectations. Lastly, Chapter 8 discusses how the long-term effects of school can affect the career prospects of individuals with dyslexia, with low self-esteem/concept and learned helplessness triggering withdrawal from society. Nevertheless, the same school-based trauma can also be a motivating factor for many with dyslexia (argued to be a form of ‘post-traumatic growth’), albeit, as the study found, with repressed emotions/trauma from school authority figures still featuring strongly in adulthood.

Changes in educational policy throughout these studies

This thesis aims to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, and the author argues that an understanding of any educational policy impacting on teacher pedagogy, provision, assessment and funding is needed in order to understand the causes of any ‘educational trauma’ researched in this thesis.

The terms SEN (special educational needs) and SEND (special educational needs and disabilities) are used interchangeably in this thesis, whilst noting the latter includes individuals with (physical and medical) disabilities.

This author argues that there has been a reduced focus on SEND in mainstream education over the last 15 years, and therefore a reduction in its ability to identify and support those with different learning needs, with Bercow (2011) and OFSTED (2010) suggesting a ‘postcode lottery’ regarding inconsistencies in provision, a view recently supported by Scott (2016). Dyslexia is commonly termed a ‘specific learning difficulty’ (SpLD) in UK educational policy, and forms one of the largest SEND groups found in mainstream schools. Research for this thesis began in 2000 and has continued to the present day. During this time, educational policy has changed, for example, from the first Special Educational Needs Code of Practice (1996) being implemented, where schools were required to have ‘regard’ to the code and that whilst it noted that ‘SEN children should be educated in mainstream schools’ (p.86), there was a proviso that ‘it doesn’t interfere with the education of others’, and makes ‘efficient use of resources’. Baroness Warnock’s report (1978) was powerful in pushing the government into creating the Education Act (1981) specifying that 20% of children would experience learning difficulties at one or more times
in their school career, with 2–3% requiring additional funding as part of a ‘Statement of SEN’. These percentages are still used today as guidelines for the level of SEN in school.

The enhanced SEN Code of Practice (2001) specified that schools needed to ‘make reasonable adjustments’, the same provided to the adult workforce in the Disability Discrimination Act (1995). As part of the Special Educational Needs and Disability Act (SENDA, 2001), the Code aimed to tackle discrimination in educational environments and allow SEN children (in mainstream education) to reach their potential. However, this also led to many special schools closing and a substantial (funding) refocus on creating ‘inclusive’ mainstream schools, supported by the Audit Commission Report’s conclusions (2002) that 69% of SEN resources were focused on the 2–3% of pupils with Statements of SEN, many in special schools. The Audit Commission Report (2002) also noted a ‘postcode lottery’ in gaining a statement, with parents using SEN Tribunals to overturn many negative local educational authority funding decisions.

Between 2006 and 2010, there were many reports and enquiries criticising the government’s policies regarding SEN in schools. The Education and Skills Committee (2006) noted the system was again ‘unfit for purpose’, and the OFSTED report (2010) entitled ‘A Statement is not enough’ reflected the need for further changes in SEN policy. The SEN Green paper (2010) promised ‘the biggest reform to SEN in 30 years’ in the form of: the views of children, parents and young people being heard in the assessment process; ‘Statements of SEN’ being replaced by ‘Educational Health and Care Plans’ (EHCPs) to run from birth to 25 years old (replacing the old system that finished when students reached 21 years old); replacing the terms ‘School Action’ and ‘School Action Plus’ to define the level of provision pupils receive to a single-term definition (for example, ‘School Support’); parents being given greater choice of schools; and parents having greater control over monies put aside for their SEN child’s education. However, this draft new ‘Code of Practice’ as part of the proposed new Children and Families Act (2014) was heavily criticised, with SEN being changed to SEND to include medical needs and physical disabilities.

The draft ‘SEN Code of Practice’ in 2013 was again argued to be ‘unfit for purpose’ and was quickly withdrawn. Nevertheless, a further amended version was finally approved (as part of the Children and Families Act, 2014), but this version still left many areas ambiguous – for example, no national standards for SEN, and no clear framework for the creation of EHCPs (House of Lords Scrutiny Committee, 26 June 2014). The SEND Code of Practice was again updated in 2015, with a new emphasis on teaching pupils without the need for an EHCP, supporting the need for mandatory ‘quality first’ teaching by class
teachers. This emphasis placed the need for ‘effective differentiation’ onto class teachers, making them the main focus for supporting SEND pupils.

During the course of the research presented in this thesis, educational policy has changed, shifting focus from special schools to the development of inclusive policies in mainstream schools, so the majority of SEN pupils can be educated with their peers in a mainstream school environment. However, there could be a knock-on effect to the emotional well-being of pupils with learning difficulties, where even gaining funded provision for full inclusion in mainstream learning environments is argued not to be sufficient to support ‘all’ their needs (OFSTED, 2010). This highlights the need for a broader discussion into what is ‘effective differentiation’ in schools and whether this is achievable for most pupils with SEN. The research in this thesis shifted from quantitative to qualitative analysis in order to truly understand the emotional repercussions of mainstream SEND educational policies.

The discussion regarding SEND educational policy is important to this thesis due to its ability to affect the screening, diagnosis and intervention for pupils with SEND, and specifically those with unidentified dyslexia. Chapters 2 and 3 investigate the sources and manifestations of stress, self-esteem, types of coping and depression that result from educational policies that are argued to cause a ‘postcode lottery’ and be ‘unfit for purpose’ (Bercow, 2011; OFSTED, 2010). The change resulting in the closure of special schools by directing more funds into mainstream school provision has meant that specialist knowledge and experience has been lost or diluted, and more pupils are made to learn in educational environments which are argued to be unsuited to their needs (OFSTED, 2010), and frequently taught by teachers who lack SEN training and experience to provide ‘quality first’ differentiated lessons (Carter Review, 2016; Scott, 2016), as only from 2017 was SEND training a mandatory element of initial teacher training (Department of Education, 2016a).

The report ‘A Statement is not enough’ (OFSTED, 2010) reflects the need for ‘inclusive’ education in mainstream schools to evolve beyond just providing an untrained teaching assistant to pupils with SEND funding (Sharples, Webster & Blatchford, 2015), resulting in pupils being alienated in classrooms (which may result in negative emotional coping strategies) and an unhealthy reliance on adults without teaching qualifications (resulting in poor educational outcomes). Sharples, Webster & Blatchford argue that the provision of an untrained teaching assistant to replace qualified teachers as the primary educator for children with SEND is still commonplace in mainstream schools.
Such themes are developed further with a discussion of ‘Neoliberalism and Education’ in Chapter 9 of this thesis, based on the privatisation of education through the closure of special schools for increased ‘inclusivity’ in education and the development of centrally funded Academy schools. It is argued in this thesis that, as a reaction to ‘market pressures’, there has developed a concept of ‘personal ownership’, placing the individual not the institution with responsibility for personal development and self-concept. It is argued that the ‘bi-ability’ model (Valeras, 2010) is a reflection of the need for personal ownership of the self, requiring the ‘rejection of difference to achieve in the workplace and society’. With this perspective, the ‘bi-ability’ model has more in common with the ‘social model of disability/psycho-social model’ (Oliver, 2013; Terras, Thompson & Minnis, 2009) than that of the ‘bio-medical model’ (Barnes, 2012), as it is in reaction to society and the work environment that many with disabilities have sought to remove any stigma (Valeras, 2010). However, it differs to the ‘social model of disability’ by taking personal ownership of any disability or difference, requiring ‘passing’ and other strategies to compensate, rather than relying on society to change through political means.

Publications such as ‘The Sprit Level’ (Wilkinson & Pickett, 2009) are discussed in Chapter 9 to help understand the argument that a more equal society is richer and stronger, and that neoliberal government policies of the free market erode trust, increase anxiety and illness in populations, and encourage excessive consumption. However, this view, and this publication, were not without their critics, who argued that their argument was not based on solid evidence, and its selective use of sources/statistics, therefore, should be questioned due to their inability to be replicated (Sanandari, Sanandari, Malm & Snowdon, 2010; Saunders, 2010, Snowden, 2010). The views of Friedrich Hayek and Milton Friedman are also discussed, as they sought to find a ‘middle way’ between the enemy of collectivism and the excesses of 19th century liberalism, to protect men from each other. These two Nobel Prize winners, promoting liberalism, had a huge impact on the UK Prime Minister Margaret Thatcher (1979 to 1990) in the development of educational, economic and social policies that form the basis for this thesis.

To conclude, Chapters 2 and 3 of this thesis provide evidence from studies with school-aged samples that avoidance strategies are still being utilised by young dyslexics to cope in mainstream classrooms with teachers who may lack the training and resources firstly to deliver ‘quality first’ educational experiences, and secondly (due to their lack of SEND knowledge and experience) to refer struggling students for further
investigation/diagnostic assessment, so they can receive the specialist targeted interventions needed to achieve their potential.
Assessment and funding of SEND

The Rose Report (2009) argued that the lack of an agreed definition and assessment route has meant that dyslexia is misunderstood by many in education, leading to low identification rates in schools (Carter Review, 2016). It is also argued that the majority of dyslexics leave school without diagnosis, and suffer at school through unsuitable and discriminatory teaching methods by teachers who lack SEND awareness (Hartley, 2010; OFSTED, 2010).

OFSTED’s UK review of SEND (2010) argued that: pupils were often incorrectly identified as having SEND; good or outstanding teaching should remove any barrier to learning; identification was generally inconsistent and many SEND pupils were unidentified; children with similar difficulties were treated differently; parents’ views of inconsistency were well-founded; parents pushing for a statement of SEND (now replaced by EHCPs) may not be enough to guarantee the high level of specialist interventions required; many schools misidentify pupils with SEND to cover up for their poor-quality teaching; and diagnosis of SEND helped in removing poor GCSE results from school result league tables and gaining additional government funding. The Bercow Report (2011) supports OFSTED’s view that SEND is inconsistently supported in the UK, and that even having a statement of SEND does not guarantee the specialist support needed, noting that the current system is characterised by high variability and a lack of equality. It is routinely described by families as a ‘postcode lottery’ (Bercow, 2011, p.14), and the report stresses the need for early screening and intervention in schools, argued to lead to the best academic outcomes for SEND pupils.

A new report (Scott, 2016) also suggests a ‘mixed picture’ of SEND provision in UK schools, noting that more SEND training is needed for teachers to identify those with educational learning barriers. The report also suggests that SEND funding is not reaching schools and is being held by local authorities, in one case helping them build up reserves of £150 million. Lastly, Scott questions whether schools have ‘sufficient SEND expertise and experience to provide adequate support to students’ (Scott, 2016, p.7), suggesting a lack of SEND trained staff in schools.

The recent changes to the SEND Code of Practice (2015) have meant that, firstly, children are only added to a school’s SEND register if the school can afford to provide them with provision/intervention. Therefore many children may still have a SEND but their school may be financially unable to provide for their needs, meaning they remain anonymous and
schools unaccountable as no ongoing needs have been identified. Secondly, the SEND budget in UK mainstream schools is not ring-fenced, and is called ‘nominal’ as it is used at the discretion of the headteacher, resulting in the opportunity for such funds being misappropriated (used for non-SEND staffing or other general costs).

Schools are liable for the first £6,000 spent per child with a SEND, and gaining a Statement of SEN/EHCP means additional funding over this amount, commonly used to pay for a teaching assistant and support at lunchtime (for example, an additional £8,500 is provided to pay for an unqualified staff member). However, this amount is insufficient to cover the actual costs involved, and schools need to make up any shortfall (approx. £6,000–£15,000), and in addition this does not cover the cost of any specialist tuition needed, leaving some schools with huge SEN deficits (for example, £114,000 a year in some cases), and this is argued to discourage inclusivity in schools. Therefore, SEND pupils can be argued to be a burden on school budgets, and schools would prefer funds to be used to the benefit of large numbers of pupils (for example, school trips), rather than focused on a single pupil (Murray, 2013). Lastly, Sharples, Webster & Blatchford (2015) and Blatchford, Bassett, Brown et al. (2009) argue firstly that teachers tend to delegate the majority of teaching of SEND pupils to poorly trained assistants, to the detriment of the pupil’s education, and secondly that class teachers should have greater direct input with such pupils for better learning outcomes, as they found the least qualified staff commonly teach the neediest pupils (with them attaining lower outcomes as a result). They argue that teaching assistants are generally poorly managed in schools, being insufficiently briefed and resourced for lessons they are about to support pupils in.

In every UK state-funded school the identification, assessment and management of SEND is headed by the Special Education Needs and Disabilities Co-ordinator (SENCO), and all new SENCOs are required to gain the National SENCO Award, according to the SEND Code of Practice (2015) and the Children and Families Act (2014). The aim is to reduce barriers that pupils face at school and to raise educational achievement, for example, teachers being taught to differentiate their teaching to deliver ‘quality first’ education to all learners in their classrooms. The Equality Act (2010) also requires schools to make learning environments accessible to all by removing discrimination, for example, by providing wheelchair ramps and wheelchair-friendly toilets, etc. However, this promoted inclusivity does not reflect the workplace they will soon enter (Cooper, 2006). The recent Scott report for the UK government (2016) suggests that SENCOs are generally ‘over-
stretched and not adequately supported by senior management’ (p.7), which affects their effectiveness.

Alexander-Passe (2016d), in a research presentation to UK Members of Parliament and Peers, found many SENCOs in one inner London education authority commonly: lacked assessment skills and qualifications; felt overworked; relied heavily on reduced educational psychologists’ visits for assessment; and acknowledged that many SEND pupils remained unidentified in their schools. Many state-funded schools only gain three half-day visits each year from educational psychologists, with pupils with autism and more serious behaviour problems being prioritised. However, as argued by Hales (2004), Scott (2004), Humphrey (2002, 2003), Humphrey & Mullins (2002) and Firth, Frydenberg, Steeg & Bond (2013), it is not uncommon for the unidentified dyslexic, due to their frustration, to manifest behaviour problems as a means to gain attention; unfortunately this misbehaviour is then seen as the primary problem to be addressed. The huge rise in diagnosis of ADHD (attention deficit hyperactivity disorder) in the USA is one example of how treatment for behaviour is seen as more important than assessing underlying learning difficulties (George Washington University Milken Institute School of Public Health, 2015). Wolraich, McKeown, Visser et al. (2014) suggest more students are diagnosed for ADHD and medicated than actually meet established diagnosis guidelines.

Chapters 4, 5, 7 and 8 of this thesis highlight the low SEND identification in mainstream education, the incorrect diagnosis of SEN, and the variability of SEND provision in schools (Rose, 2009; Bercow, 2011; Scott, 2016) – this is argued by the author to camouflage the real picture of SEND in schools. This shift to understanding the problems in schools is reflected in the shift of methodology in this thesis from quantitative to qualitative, to understand the emotional journeys that many with dyslexia experience in mainstream education. It is not enough just to quantify the numbers of SEND pupils in schools or what emotional symptoms they manifest, but we must also attempt to understand how the lack of diagnosis or misdiagnosis may have resulted in many such pupils developing emotional and mental health issues, as indicated in Chapters 5 and 6 of this thesis. Chapters 6, 7 and 8 of this thesis aim to help understand the long-term manifestations of educational neglect, and how they can later be a motivating force for career success.

The SEND Code of Practice (2015) could be argued to have a direct effect on those with dyslexia, as they tend to be harder to identify in schools, and the avoidance strategies
used by many with undiagnosed dyslexia can mean, unless their needs are obvious, they will not be seen as a priority to diagnose/support.

Zigmond & Kloo (2011) pointedly sum up the issue (supported by Kauffman & Hallahan, 2005), that ‘The disgrace is not that general education teachers are not adequately prepared to deliver a special education to the students with disabilities in their large and diverse classrooms. The disgrace is that we have come to believe that special education is so not-special that it can be delivered by a generalist, busy teaching 25 other students a curriculum that was generated at the school board, or state, or federal level. The disgrace is that we have forgotten that special education is supposed to be special and that wherever it is delivered, it is supposed to be different. That's what we fought for... We fought to have some students with disabilities treated differently, given more opportunity, more intensive instruction, more individually tailored curriculum, more carefully designed instruction. It's time to renew the commitment to students with disabilities and to ensure the programs and resources necessary to fulfil that commitment’ (p.170).

**Frequency of SEND**

National Statistics (2017a) indicate the percentage of funded ‘Statements of SEN or EHCP’ in the United Kingdom has remained constant over the last five years (2.8% of all pupils), but the numbers have increased (from 232,760 pupils in 2007 to 242,185 in 2017). However, National Statistics (2016a, 2017b) also indicate the number of applications processed within the allotted 26-week time timetable has dramatically fallen (55.7% within the time limit in 2016, compared to 89.0% in 2014), suggesting a reluctance by Local Authorities to process EHCP applications, many with large SEND deficits.

The number of pupils with identified special educational needs has declined substantially over the last six years (from 1,704,980 pupils in 2010 to 1,244,255 in 2017; 21.1% of all pupils in 2010 to 14.4% in 2017), and this drop is surprising as in the three years prior to 2010 it rose (19.3% in 2007, 20.1% in 2008, 20.7% in 2009).

Overall, 11.6% of all pupils are now currently on ‘school support’ (interventions/provision funded by the school) and 2.8% with an ‘SEN Statement/EHCP’ (interventions/provision partly funded by the state and the rest by the school), making a total of 14.4%. This figure is much lower than the 20% level initially suggested in the
Warnock report (1978). ‘School support’ frequencies have also declined in each of the last five years, falling from 18.3% of pupils in 2010 to 11.6% in 2016 and 2017.

National Statistics (2017a) indicates that boys are twice as likely to be diagnosed as having an SEN at primary school (16% compared to 8.2% for girls); overall (across both primary and secondary schools) it is 11.4% for pupils on ‘school support’ and 2.8% for those with a ‘SEN Statement/EHCP’, resulting in a total of 14.2%.

Secondary school data also reflects this gender imbalance (13.3% for boys and 8.1% for girls on ‘school support’). Data suggests that SEND peaks at 10 years old, probably to help schools gain better SATS results (‘school support’ being 14.7% of all pupils), but as soon as pupils join secondary schools the figures reduce again (‘school support’ being 13.1% of all pupils at 11 years old, down to 10.6% of all pupils at 15 years old, with ‘SEN Statements/EHCPs’ being constant at 1.8–1.9%), combined figures (12.5% at 15 years old) are again significantly lower than the 20% projected by Warnock (1978).

National Statistics (2017a) further indicate that pupils with ‘specific learning difficulty’ (SpLD, the UK educational term to include dyslexia as its biggest group) significantly increases from 9.7% in primary school to 21.1% in secondary school for ‘school support’, with a similar rise in pupils gaining ‘SEN Statements/EHCPs’ (3.4% in primary school to 8.7% in secondary schools). However, pupils with ‘speech, language and communication difficulties-SLCN’, a term commonly used to include undiagnosed dyslexics, decreases from primary school (29%) to secondary (10.8%) for ‘school support’. This suggests that diagnosis of SpLD may be left mainly to secondary schools, and many pupils are being misdiagnosed as having ‘SLCN’, with their needs being misunderstood and the wrong interventions being provided. This could be explained by the unwillingness/inability to assess dyslexia and other SEND in young children, as this has a possible knock-on effect to budgets. The author argues that if schools assess and recognise a need, they are more obliged to deliver specialist provision; however, if they tell parents their child ‘just needs more time’ they can avoid such costs.

An important focus of this thesis has been to highlight the reduction of SEN frequencies in mainstream education, from 20% in 1978 (as highlighted by Warnock, 1978) and 21.5% in 2010 to the gradual erosion of SEN to 14.4% in 2017 (National Statistics, 2017a). The change from ‘need-based’ to ‘provision-based’ recording has meant that SEN registers in schools are highly dependent on funding and not on actual need, which, as argued by the author, encourages mainstream schools to camouflage the actual level of need in their schools. If the actual need is 20% and the provision is 14.4%, then 5.6% of
pupils need SEN provision but are not receiving any, and this reflects the research in this thesis that many dyslexic pupils are ignored or misdiagnosed in school, with a knock-on effect to their emotional well-being.

Chapters 2, 3 and 8 of this thesis indicate that avoidance is commonly used by young people with dyslexia to protect themselves from further educational trauma and humiliation from school teachers who misunderstand the nature of their learning difficulties/learning barriers, and are less likely to refer pupils for assessment as they themselves lack awareness of SEND, a view supported by Bercow (2011), Scott (2004), Scott (2016) and Alexander-Passe (2016c, 2017). The methodology used in this thesis shifted from quantitative to qualitative in order to better understand the educational trauma experienced and the long-term manifestations from such trauma, with a qualitative methodology being chosen to gain a richer understanding of the mental health issues experience by those with dyslexia.

This thesis aims to investigate the motivations of the many individuals with developmental dyslexia who are successful despite experiencing traumatic schooling. The objectives of this thesis include investigating the reasons behind the educational trauma which has occurred in many with developmental dyslexia, and which begins with the reducing SEN frequencies in school, from the 20% suggested by Warnock (1978) to the 14.4% in today’s mainstream schools (National Statistics, 2017a). The data could suggest that schools are using early identification and effective provision to overcome many of the impairments faced by pupils with SEND, reducing the need for them to be listed as having SEND. However, the more likely reason, it is argued, is due to reduced SEND funding in schools, for schools are only able to support the number of SEND pupils their budgets will allow – so the size of SEND budgets, and not actual need, is the deciding factor. Interestingly, the monies provided to schools for SEND are not ring-fenced and are only used for SEND at the ‘discretion’ of headteachers, allowing the possibility for it to be used for non-SEND specialist staffing and general costs, which the author argues can propagate educational neglect for the most needy and vulnerable pupils.
Educational trauma

The author, as a school teacher himself, recognises that each teacher’s journey, from initial teacher training, to entering a school to starting practicing, and finally as a seasoned educator, is long and continually develops through time. The author also recognises that teaching is a profession with a long tradition, and each year provides a high quality education to millions of young people worldwide. Whilst the vast majority of teachers provide outstanding education, this thesis will now look at the small number who fall below these high standards, and/or are still early into their teaching careers and are still gaining the skills around effective differentiation/awareness of students with differing educational needs. Such teachers could be struggling to cope with a large classroom, and may choose negative strategies such as bullying and discrimination by error.

This thesis argues that there is a lack of research investigating neglect and bullying by teachers in mainstream education; however, Twemlow & Fonagy (2006) is one such investigation with N=116 teachers in the USA. Results in Table 1 indicate that humiliation is frequently used by teachers to control disruption, making fun of (known) SEND students, and setting up students to be bullied by peers. They also note the void of research in this area, compared to peer-to-peer bullying. A UK study (Terry, 1998) of N=101 teachers in 7 urban areas investigated students bullying teachers, however, found that 70% of teachers had seen other teachers bullying students. A ‘bullying teacher’ was defined as a ‘teacher who uses his/her power to punish, manipulate, or disparage a student beyond what would be reasonable disciplinary procedure’ (Twemlow & Fonagy, 2006, p.4). In their study they noted that ‘courageously, 45% of teachers admitted to having bullied a student’ (p.6), with many noting being the ‘victims of traumatising childhood bullying themselves’ (p.7). The study noted that transgenerational transmission was frequently reported in the literature on bullying, therefore a bullied child can grow into an adult that bullies other children. Lindsay & McPherson (2012) argue that children with physical and/or developmental disabilities are bullied at disproportionately high rates (Gini & Pozzoli, 2009; Nadeau & Tessier, 2006; Vreeman & Carroll, 2007) and those with visible disabilities are twice as likely to be bullied as those whose disabilities are hidden (Gladstone, Parker & Malhi, 2006; Fujiki, Brinton & Tood, 1996; Huurre & Aro, 1998).

Lindsay & McPherson (2012) observed that children reported some teachers treating disabled students inappropriately. Key themes can be found in Table 2. Lindsay &
McPherson concluded that, whilst the majority of research on bullying for disabled students is from their peers (other children), it is under-explored from school teachers. They note that teachers were a ‘source of social exclusion due to [their] lack of knowledge about disabilities, while in other instances the exclusion was more explicit... consequently, this lack of knowledge often led to explicit forms of exclusion because teachers did not fully realise the needs and abilities of the child’ (p.4). The researchers indicated that teachers’ attitudes towards children with disabilities often influenced how students’ peers treated them as well (p.5), suggesting indirect approval. Kaltala-Heino, Rimpela, Marttunen, Rimpela & Rantanen’s (1999) *British Medical Journal* paper is strong support for the correlation between bullying, depression and suicidal ideation in adolescents, a theme found in Chapters 4 to 6 of this thesis.

Young, Ne’eman & Gelser (2017), Siebeker, Swearer & Lieske, (2005), and Regional Education Laboratory (2010) indicate that students with a wide range of visible and invisible disabilities face increased bullying victimisation, with physical, developmental, intellectual, emotional and sensory disabilities and others. Unnever and Cornell’s (2003) study found that 34% of students who reported taking medication for ADHD faced bullying victimisation at least 2–3 times a month, a substantial increase over the rate of bullying victimisation from other students surveyed. Love (2007), a UK Member of Parliament, commented in Parliament on Mencap’s report on bullying, that 8 out of 10 children with learning difficulties were bullied, and that 4 out of 10 such bullying continued after they had told a responsible adult about it, which could mean teachers were only effective in stopping 50% of such bullying (Love, 2007), or that teachers condoned such bullying.

UNESCO’s (2017, p.17) report on ‘school violence and bullying’ points to bullying from both teachers and peers, as Tables 3 and 4 note, that ‘punishment by teachers may be more likely to target children and adolescents from stigmatised and marginalised populations, for example, refugee and migrant children may be punished for not being able to speak the language of instruction, as noted by The United Nations Children’s Fund-UNICEF, (2014)’. In the case of this thesis, it is argued that those with SEND or dyslexia are stigmatised and marginalised populations. The UNESC report notes that disability and other differences were the causes of violence and bullying in schools. Whilst critics might suggest this report only investigated third-world countries, Table 4 from this publication reports on UK school student outcomes.

The manifestations sited in Table 4 are related to many of the chapters in this thesis, for example self-esteem and depression in Chapter 2, Stress in Chapter 3, and suicide in
Chapter 5. Anxiety, loss of confidence and fear are themes running through this thesis on both school-aged and adult samples investigated. Table 4 also details the long-term post-school effects of school violence and bullying, where leaving school with lower qualifications meant difficulty gaining training and employment, resulting in lower employment earning prospects/capabilities. These reflect the themes discussed in Chapter 8 regarding the impact of schools on successful and less successful career prospects. It should be noted that other factors play a part in poor post-school outcomes, such as socio-economic.

This thesis recognises the DSM-V definition of ‘Post-Traumatic Stress Disorder-PTSD’ in that there is a requirement for exposure to one or more traumatic events where the person felt their own or someone else’s life was under treat, or that they were going to be injured, and where, at some stage, they felt helpless or terrified (American Psychiatric Association, 2013; US Department of Veteran Affairs, 2018). It is argued by this author that children with developmental dyslexia in mainstream education experience long-term trauma through regular humiliation from teachers who lack SEND awareness, resulting in the lack of differentiation when teaching unidentified or unsupported learning difficulties. Such young people with dyslexia can also experience secondary trauma through the continuation of bullying and humiliation from their peers.

<table>
<thead>
<tr>
<th>Question</th>
<th>Sadistic Bully Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeatedly punished same child</td>
<td>0.837</td>
</tr>
<tr>
<td>Humiliates students to stop disruption</td>
<td><strong>0.816</strong></td>
</tr>
<tr>
<td>Defensive about teaching style</td>
<td>0.79</td>
</tr>
<tr>
<td>Spiteful to students</td>
<td>0.773</td>
</tr>
<tr>
<td>Hurts students’ feelings</td>
<td>0.769</td>
</tr>
<tr>
<td>Shuts down show-offs</td>
<td>0.765</td>
</tr>
<tr>
<td>Puts students down to punish them</td>
<td><strong>0.765</strong></td>
</tr>
<tr>
<td>Repeatedly punishes same child</td>
<td>0.719</td>
</tr>
<tr>
<td>Complains about work conditions</td>
<td>0.68</td>
</tr>
<tr>
<td>Sets up students to be bullied</td>
<td>0.665</td>
</tr>
<tr>
<td>Makes fun of SEND students</td>
<td><strong>0.616</strong></td>
</tr>
<tr>
<td>Uses rejection to discipline</td>
<td>0.585</td>
</tr>
<tr>
<td>Dislikes a lot of children</td>
<td>0.564</td>
</tr>
<tr>
<td>Frequently suspends same child</td>
<td>0.532</td>
</tr>
</tbody>
</table>

Table 1. Sadistic bullying by mainstream school teachers (Twemlow and Fonagy, 2006). Note: the author has emboldened key results.
Table 2. Key themes from Linday & McPherson (2012).

The bi-ability model

This thesis seeks to understand the nature of a ‘hidden disability’ such as dyslexia and whether it aligns with the main two models of disability in national debate – ‘medical’ and ‘social’. The ‘medical’ model was rejected, as it suggests that those with dyslexia are abnormal and require ‘fixing’ of their impairments before they can re-enter society as ‘normal’ individuals (World Health Organization, 1980, 2002, 2010) (the term ‘normal’ will be discussed in more detail in Chapter 9). Many with a hidden disability/impairment do not see themselves as abnormal, in fact they see themselves as part of ‘normal’ society but with slight differences which can be easily overcome with strategies. Therefore they do not see themselves as requiring any ‘fix’ to interact with society (a view supported by Agahi, 2015 and Threlkeld, 2015).

The ‘social’ model (Macdonald, 2009a, 2009b; Riddick, 2001) rejects the concept of needing to be ‘fixed’, and suggests that all individuals are different, and such differences should be utilised to make society better and bring about improvements (Cameron, 2011; Morris, 1991). It also suggests that ‘inclusive’ practices should encourage changes to environment so they can be accessible to all (for example, wheelchair-friendly rooms/entrances to buildings). It argues that it is ‘okay’ to have an impairment, but inclusive practices should remove any barriers so that all can achieve according to their potential (it is argued that removing these barriers removes the disability). However, the ‘social’ model is very much rooted in the removal of physical barriers to environments and public spaces (Oliver, 2009; Shakespeare & Watson, 1997; Reeve, 2004), along with the concept that disabilities/impairments should be celebrated for offering alternative perspectives to society, and should not be ignored. Barnes (2012) suggests that with the ‘social’ model of disability a hierarchy of disability can develop, and those with physical and accessibility barriers are seen as more deserving than those with lesser barriers, for example those with hidden disabilities such as asthma or dyslexia. Reeve (2004) found those who try to camouflage any disability were perceived as ‘traitors by others within the disabled people’s movement’ (p.92). This thesis argues that many with dyslexia and other ‘hidden or invisible’ differences have difficulties relating to the ‘social’ model of disability, as they reject the notion they are actually disabled (Grewal, Joy, Lewis, Swales & Woodfield, 2002; Threlkeld, 2015). However, they are willing to claim under such legislation (Equality Act, 2010) to gain allowances in higher education and the workplace (e.g. Access to Work
support), whilst not identifying with a ‘disabled ideology’, as they believe they are able-bodied (Alexander-Passe, 2016a; Threlkeld, 2015).

The ‘bi-ability’ model was first suggested by Valeras (2010) for those with various ‘hidden disabilities’ such as diabetes, coeliac disease, juvenile rheumatoid arthritis, polio and epilepsy. However, it is also very relevant for those with dyslexia who reject the concept and label of disability, and believe that society misunderstands them. Valeras argues that such individuals are both ‘able-bodied’ and ‘disabled-bodied’, and also neither, and feel they are ‘squished into a box... and exist in the spaces between travelling in and out of two juxtaposed identity categories’ (p.16). The ability to ‘pass’ as able-bodied means that they do not ‘look’ disabled, which can be a double-edged sword, because when they try to claim additional allowances they are seen as trying to ‘cheat’ the system as an able-bodied person. This is also reflected in the ability to gain additional allowances in formal examinations without the need for a diagnosis of SEND (however, still requiring an assessment by a specialist teacher/educational psychologist, for example for their skills in reading, writing, spelling etc. based on standardised data), suggesting an ‘other’ group exists between those with and without SEND/disabilities. This can result in diagnosed or undiagnosed dyslexics receiving extra time in examinations, questioning why they are receiving this extra provision, and rejecting such allowances as they reject a possible disability label, perhaps because they wrongly believe any academic examination certificate will mention that they received extra allowances. New research is now beginning to question whether dyslexics identify with a label of disability, and if not what label they would prefer to be used, for example ‘learning difference’ compared to ‘learning disabled’ (Threlkeld, 2015). This thesis aims to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, and the ability to live and work as both ‘able-bodied’ and ‘disabled-bodied’ means people have greater access to services and education as ‘able-bodied’ members of society, and can achieve greater career success (argued as a form of ‘post-traumatic growth’).

This thesis (Chapter 4) builds a picture of a population in society that faces difficulties or learning barriers, but because they lack physical or visual manifestations of such difficulties, their needs are frequently ignored or dismissed, resulting in emotional manifestations and avoidance coping strategies to avoid further humiliation by teachers and their peers. Their ability to ‘pass’ as ‘able-bodied’ (Cavet, 2000; Fitzgerald, 2000; Threlkeld, 2015) means that they are one of many groups in society who are misunderstood, but they can achieve success in the workplace by promoting their many
strengths and developing support networks to mitigate their difficulties (Agahi, 2015). Nonetheless, the memory of their ‘educational trauma’, from teachers who misunderstood their needs, can be a strong motivating force to prove their self-worth (Scott, 2004; Edwards, 1994; Agahi, 2015), and this is investigated in Chapters 7 and 8 of this thesis. The concept of ‘post-traumatic growth’ is very much based on using trauma in a positive way and allowing it to be a motivating force for career or personal development (Calhoun & Tedeschi, 2001, 2006; Calhoun, Cann & Tedeschi, 2010; Agahi, 2015; Threlkeld, 2015).

The mixed-method approach in this thesis has sought to understand the many factors of the ‘bi-ability’ model that highlight the emotional cost of ‘passing’ as able-bodied, and how many of those with dyslexia live with the demotivating long-term effects of educational trauma, from teacher/peer humiliation, as investigated in Chapters 4 to 6 of this thesis. Chapters 7 and 8 then highlight the ability of those with dyslexia to be highly successful in a range of careers when they understand and work to their strengths, and have in place the correct support systems to mitigate their difficulties.

It is argued that the ‘bi-ability’ model is very relevant to achieving one of the aims of this thesis (Valeras, 2010; to be discussed in more detail in Chapter 9), to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, as it can offer one explanation to how individuals with dyslexia can ‘pass’ as able-bodied to gain employment and achieve post-school success. However, the emotional effects of such ‘passing’ due to ‘concealing’ and ‘repressing’ their true identity can result in negative coping strategies, as highlighted in Chapters 4, 5 and 6 of this thesis, such as self-harm and attempted suicide.

Methodology

Chapters 2 and 3 of this thesis began with a quantitative approach, with two studies looking at the frequency of self-esteem, coping, depression and the sources and manifestations of stress in school-aged, diagnosed dyslexic young people. Using standardised measures, the studies support a hypothesis that school-aged individuals with dyslexia are at higher risk of developing negative emotional coping strategies in response to educational environments. The two studies highlighted that many types of coping strategies, such as task, emotional and avoidance, along with depression, were used to survive mainstream educational environments. These studies add to academic
understanding, and trigger a discussion of how dyslexic and other SEND groups of learners cope in mainstream education.

The data in Chapter 2 was analysed according to each of the three measure guidelines. The N=19 sample of teenage school-aged diagnosed dyslexics was split by gender (N=12 males, N=7 females), and each measure’s detailed analysis was included (factor analysis, gender and validity considerations). The data in Chapter 3 was analysed through age-standardised scores and standard deviation analysis according to the measure’s guidelines. The N=155 sample was subjected to standard deviation analysis, and was split according dyslexic and controls (non-dyslexic siblings), and then into three age groups (school years 3–5, 6–9 and 10–12), family size and birth order, resulting in much smaller samples. The measure’s internal consistency, test-retest and correlations to other measure data were included in both Chapters 2 and 3 to support their findings.

Initially, it was felt by the author that a ‘positivist’ approach (Ashworth, 2008) using standardised measures would capture the essence of the school dyslexia experience, and interesting data was discovered, for example identifying gender coping differences, and confirming that task avoidance and depression were being used by individuals with dyslexia, observations that had not yet been supported by quantitative data. There have been debates about the effectiveness of questionnaires, as whilst they can be cost effective to gain large samples of data and easy to analyse, they lack the flexibility to evolve their questions according to the sample being tested and to gain any insights beyond any closed questions posed (Adams and Cox, 2008). Such measures also require a high level of literacy to both read the questions and process the concepts noted, and it was questioned whether other samples with dyslexia would be reluctant to engage in future research due to literacy barriers, meaning only those with high literacy skills may choose to participate in such research, which might then cause possible sampling bias, amongst other problems. The measures were also unable to go into depth as to ‘why’ there was depression or ‘why’ avoidance was an important coping strategy for those with dyslexia. It was therefore felt by the author that a positivist approach did not truly uncover the ‘human’ experience of developmental dyslexia, or the emotional manifestations that come through educational trauma and possible learned helplessness (Maier & Seligman, 1976; Seligman, 2011), a view also shared in the research undertaken by Agahi (2015) with dyslexic individuals.

An ‘interpretivist’ approach was therefore chosen (Black, 2006) to better understand individual life experiences of the phenomenon called developmental dyslexia. Chapters 4 to 8 used ‘interpretative phenomenological analysis’ (IPA), developed by Smith
(2004, 2007), which focuses on the ‘life-world’ as our relationship with and perception of objects around us, and our experience of ourselves and our bodies (this will be explained in greater depth later in this thesis). Being larger than most IPA studies (IPA studies are typically N=1 to 3 participants, according to Smith & Eatough, 2007), in part due to using a dyslexic-friendly approach, basic quantitative data was created to identify patterns amongst the larger sample. However, the samples were still too small to be statistically significant. Agahi (2015) also recently used an IPA methodology to successfully investigate small samples of dyslexic individuals.

This approach could be argued to be a mixed-methodology, and offers the reader the greater safety of quantitative data with data-rich interpretation. It is argued by the author that, whilst the sample size shrunk, the richness of the data more than compensated, enabling a detailed analysis of the emotional trauma experienced and of the coping strategies employed by children and adults, which manifested as a result of educational trauma.

This thesis aimed to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, and it is argued that the ‘positivist’ approach assisted in identifying the sources and manifestations of educational trauma with school-aged subjects. However, the ‘interpretivist’ approach built on this by understanding ‘how’ trauma can cause many to self-harm and attempt suicide, and importantly ‘how’ trauma has also been used positively through ‘post-traumatic growth’, motivating many adult dyslexics to post-school workplace success.

Study sample recruitment

The two main studies that form this thesis aimed to recruit specific samples. The ‘depression’ study, which forms the research subjects for Chapters 4 to 8 and in part Chapter 9, was based on the recruitment target of N=30 adults with developmental dyslexia: N=10 with depressive symptoms (N=5 male, N=5 female), N=10 with criminal backgrounds (N=5 male, N=5 female), and N=10 non-depressive and non-criminal controls (N=5 male, N=5 female). The advert, which can be found in Appendices 1 and 2, was placed on the ‘Being Dyslexic’ website and on a dyslexia email forum, making no mention of the above groups but asking for general emotional and behavioural details, along with the need to be an adult with diagnosed dyslexia. No gender bias was sought, however the numbers
of females outnumbered those who were male, and likewise the numbers with depressive symptoms outnumbered those without such symptoms. In fact those who initially said they had no history of depression were then found to have either been diagnosed with depression as a child/teenager or had been diagnosed with anti-depressant medication at one point in their lives.

The ‘criminal background’ sample was sought firstly to reflect the high numbers of individuals with dyslexia found in the UK prison population (Rack, 2005); and secondly, because it is argued that many individuals with dyslexia are socially excluded at school due to their learning difficulties, leading to becoming ‘disengaged in education due to issues of disabling barriers’ (Macdonald, 2012, p.437), and that neoliberal educational policies have meant that many from working-class families lack access to the support services required for them to gain the school-leaving qualifications needed to achieve well-paid careers. As Macdonald suggests, ‘Educational barriers experienced by participants resulted in the group achieving only a very basic level of literacy, and no formal educational qualifications’ (p.438), and Riddick (2010) argues that this can have lifelong manifestations in their ability to become self-sufficient from the welfare system.

The resulting ‘depression’ study sample, of N=22 with depressive symptoms and N=7 non-depressive controls, with N=0 with criminal backgrounds, presented a challenge to the aims of the study. However, it was felt that it would better reflect the mental health of those with a diagnosis of dyslexia, rather than the true level of criminality amongst those with dyslexia. It was also noted that criminality can be stigmatised and therefore non self-disclosure is not surprising. Further, the frequency of N=11 males to N=18 females was unintended, and suggested a possible bias in the resulting data, but the use of quantitative data tables allowed a breakdown by gender and offered a means to understand gender differences, and a more detailed discussion of gender differences in those with dyslexia and similar reading difficulties is contained in Chapter 8 of this thesis. Further investigation of the data found that the female bias was only found in the sub-group of depressive individuals (N=7 males to N=15 females), which reflects the findings in Chapter 2 of this thesis regarding the higher frequency of depression amongst females. The non-depressive sub-group indicated no gender bias, with N=4 males to N=3 females. This discussion is developed further in the section on gender in Chapter 9 of this thesis.

The ‘success’ study included in Chapter 8 was early analysis for a book by the author (Alexander-Passe, 2017) on the successful dyslexic. It sought to study N=30 adults with diagnosed dyslexia (N=15 males and N=15 females) who described themselves as
‘successful’. The advert in Appendix 3 was placed on the ‘Being Dyslexic’ website and on a dyslexia email forum. No gender bias was sought, and the data in Chapter 8 of this study of N=20 diagnosed individuals with developmental dyslexia makes no distinction of gender in responses. In Alexander-Passe (2017), of N=27 recruited, the gender breakdown was males N=14, females N=13, reflecting the aim for non-gender bias.

**Empirical data selection**

The author recognises that due to a shortage of empirical knowledge in certain areas (for example, studies listing famous individuals with dyslexia or records of individuals with dyslexia committing suicide), a number of media or internet sources were used. Such sources should be treated with caution, being of less rigour than peer-reviewed publications. However, Marsh, Cochrane & Melville (2004) suggest that extracts from academic and contemporary sources can be used to form an academic debate. The author used guidance from The Yale University’s Centre for Teaching and Learning (2017) in regard to selecting and using different sources of information for this thesis.

**Methodologies used in this thesis**

The studies in this thesis can be split into three groups: quantitative studies with school-aged children/teenagers (Chapters 2 and 3), qualitative studies investigating emotional coping (Chapters 4, 5 and 6), and quantitative/qualitative studies investigating dyslexia and success (Chapters 7 and 8).

In the first group of studies, Chapter 2 used a quantitative methodology with three standardised measures (self-esteem, coping and depression) to investigate ‘How Dyslexic Teenagers Cope: An Investigation of Self-esteem, Coping and Depression’. The sample of N=19 school-aged teenagers with dyslexia was assessed through a supervised assessment system, and the data was analysed with gender as a variable. The research was further developed in Chapter 3 using a quantitative methodology with a single measure to investigate ‘The Sources and Manifestations of Stress Amongst School-aged Dyslexics, Compared with Sibling Controls’. This sample included N=78 school-aged individuals with dyslexia and N=77 sibling controls, and the data was analysed with gender, academic age group, family size and birth order as variables.
The second group of studies began with Chapter 4, an investigation of ‘The Dyslexic Experience’ using a qualitative, investigative, semi-structured interview approach to investigate numerous themes (for example, discrimination, labelling, self-disclosure and stigma), with a sample that included N=29 adults with diagnosed dyslexia. The transcript data was analysed using interpretative phenomenological analysis (IPA) to create themes, then compiled into quantitative data for further analysis. The semi-structured script had 29 items, which investigated an individual’s journey through childhood to adulthood, talking about families, school, university, the workplace, success and their mental health. This was developed further in Chapter 5 with an investigation of ‘Dyslexia: Investigating Self-Harm and Suicidal Thoughts/Attempts as a Coping Strategy’, making use of the same study and analysis model (IPA) as used earlier, but developing self-harm and attempted suicide themes in both participants’ childhoods and adulthoods. The third investigation in this group, Chapter 6 investigated possible ‘Post-Traumatic Stress Disorder Triggered by Mainstream School’, and again made use of the same study and analysis model (IPA) as used in Chapters 4 and 5, but developing themes that came from the anxiety experienced by participants returning to school as parents themselves.

The last group of studies (Chapters 7 and 8) began with an investigation entitled ‘Dyslexia and the Perceptions of Success’ in Chapter 7, using the same study and analysis model (IPA) as used earlier, but this time developing themes of post-school success and where participants’ concepts of success came from. It questioned ‘what success was’, whether these concepts were the same as for those without dyslexia, and whether their school-based trauma was a motivating force for post-school success (developing support for the concept of ‘post-traumatic growth’). The second investigation, in Chapter 8, then looked at the ‘School’s Role in Creating Successful and Unsuccessful Dyslexics’, making use of several studies. The first utilised a new study of N=20 diagnosed adults with dyslexia who identified themselves as ‘successful’ for a new qualitative study, using IPA for analysis; the second utilised N=29 diagnosed adults with dyslexia, investigating their life journeys and possible depression using IPA for analysis (as used in earlier investigations); and the third used a sample of N=46 self-reported adults with dyslexia compared to N=42 adult controls, investigating personality with two quantitative standardised measures. This last study investigated severity of dyslexia symptoms, gender, degree-education and dyslexia diagnosis as variables.

This mixed-method approach was argued by the author to achieve the thesis’ aim to ‘investigate the motivations of why many individuals with developmental dyslexia are
successful despite experiencing traumatic schooling’, offering both quantitative (information from numerous individuals) and qualitative (information from a smaller group of individuals) to gain a broader understanding of the motivations that can lead many dyslexics to post-school success despite educational trauma (referred to as ‘post-traumatic growth’ in this thesis).

**Theoretical underpinnings**

This thesis is a mixed-methodology project, drawing on both quantitative and qualitative methodologies to achieve its aims and objectives. Chapters 2 and 3 make use of quantitative approaches, using several standardised measures to understand the experiences of school-aged young people with dyslexia. Whilst this data was useful in understanding the types of coping strategies used by this sample, it was felt by the author that it lacked data-rich understanding of the reasons behind such choices. Therefore, in Chapters 4 to 8 a mixed-methodology approach was used. Qualitative interview theme data were used to create quantitative data for group reflections. It is argued by the author that this offered data-rich interview evidence to understand individual perspectives, and collective data to understand the wider interviewed sample by breaking data down by gender, depression diagnosis and academic success.

This thesis uses a collection of quantitative, qualitative and mixed-methodology to support each aim of the thesis, to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’. It intends to offer a strong argument that emotional traumatic experiences and emotional coping manifest in children in mainstream education and later in the workplace as adults; and by understanding the long-term effects of educational trauma, educationalists and policy makers can understand how trauma can be a motivating force for career success (argued being the concept of ‘post-traumatic growth’).

This thesis makes use of two theoretical concepts: first, ‘post-traumatic growth’, the ability to overcome and grow (emotional, psychologically, career-wise) after a single or multiple traumatic experiences (Tedeschi & Calhoun, 2004; Smith & Osborn, 2008a, 2008b); second, the ‘bi-ability’ model (Valeras, 2010), which frames those with developmental dyslexia within the community of ‘hidden or invisible disabilities’ rather than that of the ‘visible disabilities’ (Snyder, Carmichael, Blackwell, Cleveland & Thornton,
This ‘bi-ability model’ is argued to give a better understanding of those with ‘hidden or invisible’ disabilities/difficulties, therefore applicable to those who experience developmental dyslexia’. This was framed in a positive narrative, using both their ‘abilities’ and ‘disabilities’ to develop successful post-school careers, and by them seeing themselves as having a learning ‘difference’ rather than a ‘disability’ (Threlkeld, 2015). This means they have the ability to ‘pass’ effectively, to promote a sense of ‘normality’. The ‘bi-ability’ model was adopted in this study through the author’s questioning of the suitability of the ‘social model of disability’ when describing those with invisible/hidden disabilities/differences.

The investigation, which concluded with the ‘bi-ability model’, began with the author striving to understand the difficulty many individuals have in claiming a disability identity without visible identity markers (for example, use of a wheelchair, crutches, dog for the blind or a white cane). Alexander-Passe (2015a) points to anxiety in those with dyslexia who have tried to claim allowances for themselves, in the workplace and at university, but were thought to be trying to cheat due to them not ‘looking disabled’. Therefore, in trying to be proud and open about their disability they were denied a disability identity by others in society, a view supported by Grewal, Joy, Lewis, Swales & Woodfield (2002), Davis (2005) and Stone (2005) regarding those with other hidden disabilities. Such individuals with hidden disabilities can also feel excluded by ‘social model of disability’ political groups, who develop outward pride, reclaiming the disability narrative, and celebrating their difference, as also found in gay, bisexual and transgender groups (Brighton Pride, 2017).

Appendix 4 reviews many sub types of the ‘social model of disability’ for their suitability for interpreting experiences of hidden disabilities/difficulties such as dyslexia, concluding that due to its focus on the physical space for those with physical barriers (Shakespeare & Watson, 2001), a perceived hierarchy resulted in those with physical and visual impairments being seen as more deserving (MacDonald, 2009; Grewal, Joy, Lewis, Swales & Woodfield, 2002; Davis, 2005), while those with the ability to ‘pass’ effectively in society were seen as traitors (Morris, 1991; Barnes, 2012; Reeve in Barnes & Mercer, 2004), rather than recognising their attempts to cope with the barriers faced from society.

Whilst sub models of the ‘social model’, such as the ‘psycho-emotional model’ (Reeve, 2004), are more sophisticated versions for understanding the emotional effects of any disability or difference, and the ‘affirmation model’ (Swain & French, 2000) sought to
understand the day-today issues of identity for someone with a disability or difference, each are argued to still be focused on individuals with physical barriers/impairments.

This thesis concludes that a disability model for ‘visible’ disabilities may not be suitable for those with ‘hidden’ disabilities, and that a separate/modified model may be more suitable. This thesis does not, however, question the suitability of the ‘social model of disability’ for those with physical/visible disabilities.
Why I chose Interpretative Phenomenological Analysis (IPA)?

‘Phenomenology’ is derived from the Greek *phainomenin* (‘that which appears’) and *aoyia* (‘science, study, theory’). Thus phenomenology is the study of observable events, a research approach that concentrates on the appearances of things, or things as they appear in our experience. Where research centres on the person doing or having the experience, then this direct exposure creates ‘first-person experience’.

van Manen (1990, p.39) suggests that *phenomenological inquiry is not unlike an artistic endeavour, a creative attempt to somehow capture a certain phenomenon of life in a linguistic description that is both holistic and analytical, evocative and precise, unique and universal, powerful and sensitive*. The investigation of ‘direct experience’, gaining first-hand accounts of an experience, is argued to avoid external interference, such as reduction to closed questions, which can be found in quantitative methodologies. It is argued by Blore (2011) that such a phenomenology can reveal a phenomenon in its *purest lived form* (p.101).

Whilst Husserl is seen as the ‘Father of Phenomenology’, the term dates back to the middle of the 18th century, used by Lambert, Kant, Fichte and Hegel (Moran, 2000, p.6). Lambert used the term to mean ‘science of appearance’, and in 1901 Husserl stated that phenomenology was descriptive psychology, presupposed nothing, and provided intuitive evidence through reflection (Moran, 2000, pp.106–7, 110–21).

Giorgi (1994) argues that phenomenology avoids the reductionist tendencies of other research methodologies, and uses the researcher’s assumptions/divergent links to inform new insights from data, rather than forcing data to fit predefined categories. Such intuition by the researcher allows ‘outside the box’ thinking. The researcher is an interpretative element to understanding themes and body language, compared to discourse analysis (Potter, 1996) which focuses on precise analysis of language used.

It is argued by Blore (2011) that there are four overlapping branches of phenomenology: realist, constitutive, existential and hermeneutic. ‘Realist phenomenology’ emphasises the search for true essences of human actions, motives and self. ‘Constitutive phenomenology’ focuses on transcendental phenomenological epoché to remove biases. ‘Existential phenomenology’ is concerned with action, conflict, desire, finitude, oppression, death, politics, ethnicity, gender and old age. ‘Hermeneutic phenomenology’ seeks to uncover the nature of human understanding and interpretation, though the senses of the world.
Grbich (1999, p.170) suggests phenomenology’s ‘access to concealed meanings (has) the tendency for phenomenology to produce only superficial narratives of social phenomena.’ (p.170). Mason (2002, p.14) argues that ‘...the problem of clarifying accurately the nature of phenomenology has been exacerbated by the application of the term to any vaguely descriptive kind of philosophising, or even to justify proceeding on the basis of hunches and wild surmise’. Therefore Blore (2011) argues that what was seen as a means of supporting science through non-empirical/non-quantitative means, is limited by its use of non-empirical/non-quantitative methodologies, and is therefore perceived as an unscientific research methodology.

Hermeneutics is derived from the Greek hermeneuo, meaning ‘translate or interpret’. Therefore hermeneutic phenomenology is the phenomenology of interpretation and, as Collins & Selina (1998) note, the term is associated with Heidegger’s use of the term ‘Da-sein’ to mean the understanding of being, or the study of understanding. Blattner (2006) suggests the central component of hermeneutics is the method of understanding a piece of text and interpreting its meaning. Heidegger understood this as a circular process, requiring the researcher to understand both the whole and the parts, but also to make an interpretation based on cultural and historical contexts. The process requires the investigation of both questions and answers to gain an interpretation.

Critics of hermeneutic phenomenology began with Heidegger himself with his later writing, where ‘he abandoned many of his earlier views especially on the centrality of Da-sien’ (Honderich, 2005, p.375). Gadamer (in Coltman, 1988) criticised hermeneutic phenomenology on Heidegger’s concept of ‘intersubjectivity’, and whether it was truly possible to arrive at a position in which multiple subjectivities could result in objectivity.

**Interpretative phenomenological analysis (IPA)**

Smith (1996) introduced a new qualitative methodology, IPA (belonging to the hermeneutic school of phenomenology), in order to resolve a current debate between social cognition and discourse analysis paradigms: ‘It may prove useful to look at an interpretative phenomenological approach as being able to mediate between the opposed positions of social cognition and discourse analysis’ (p.264). ‘Social cognition’ focused on a radical move away from an observable externality to focus on inner mental states, whereas ‘discourse analysis’ insisted that what people say is contingent on context, therefore each were criticisms of the other. IPA was therefore a compromise, with roots in
phenomenology, with the Husserlian philosophy (Smith & Osborn, 2008b) of symbolic interactionism (Smith, 1996), a rejection of the positivist paradigm.

Symbolic interactionism considers that meanings allocated to events by individuals are of paramount importance, that these meanings are only accessible through interpretation, and that meanings also involve social interactions (Smith, 1996).

IPA has its historical origins in phenomenology (Husserl, 1970a, 1970b). This refers to the notion that ‘to return to the things themselves is to return to that world which precedes knowledge, of which knowledge always speaks’ (Merleau-Ponty, 1962, p.ix–x). Husserl was very interested in the life-world, comprised of the objects around us as we perceive them, and our experience of our self, body and relationships. It is used in this thesis to understand the private and hidden experiences of individuals with dyslexia.

Chapman & Smith (2002) argued that IPA offers ‘a distinctive approach to conducting qualitative research in psychology offering a theoretical foundation and a detailed procedural guide. As such, it has been utilised in a burgeoning number of published studies’ (Brocki & Weardon, 2006, p.87–8). From its inception it was considered ‘intellectually connected to hermeneutics and the theories of interpretation... and combines an empathic hermeneutics with a questioning hermeneutics’ (Smith & Osborn, 2003, p.51).

One fundamental assumption of IPA is that humans self-reflect, and the intention of IPA is to explore this self-reflection and form an understanding of an individual’s life. This is gained by investigating an individual’s experience, perceptions, understanding and idiosyncratic views (Reid, Flowers & Larkin, 2005). IPA is a complex interactive process (‘hermeneutic cycle’) made more complex due to the fact that accessing a research participant’s world of understanding is complicated by the researcher’s own understanding and biases (Smith, Jarman & Osborn, 1999; Smith, 1996). This is further complicated by the need to acknowledge that participants’ abilities to express their thoughts and experiences affect their interpretations, and these are reflected in the researcher’s analytic and reflective abilities (Blore, 2011).

Put in another way, Smith & Eatough (2007) argue that IPA requires a ‘double hermeneutic’, with the participant trying to make sense of his/her world, and the researcher trying to make sense of how the participant is trying to make sense of his/her world (p.36). This is argued to demonstrate the dual role of the researcher: in one sense they are like the participant, drawing on mental faculties they share; in another sense they are different to the participant, always engaging in second order sense-making of someone else’s experience.
Smith developed IPA (Smith, Harre & Van Langenhove, 1995; Smith & Osburn, 2008) to analyse elements of the reflected personal experience – the subjective experience of the social world. Reid, Flowers & Larkin (2005) suggest that IPA is the exploration of lived experience coupled with a subjective and reflective process of interpretation, where any inferences from the data are drawn cautiously and with an awareness of the context and culture within which the study is situated.

Smith & Osborn (2008) suggest IPA asks critical questions of research participants: What is the person trying to achieve here? Is something leaking out here that wasn’t intended? Do I have a sense of something going on here that maybe the participants themselves are less aware of? There is a dynamic process with an active role for the researcher, which evolves and grows as interviews and studies progress (Lyons & Cole, 2007). IPA is commonly used to understand under-examined or novel phenomena, which are difficult to explain.

**Critics of interpretative phenomenological analysis (IPA)**

Willig (2009, p.66–68) identified five limitations of IPA: talking about an experience may not be describing the experience; the availability of language to the participant may cause a reduction where it does not exist; those without language skills may be excluded from an IPA study; IPA exclusively focuses on appearances without causal context; IPA is concerned with cognition, and this implies a Cartesian world view, which is incompatible with some aspects of phenomenological thought. The points regarding availability of language would also be a limitation with other forms of qualitative methodologies (for example, discourse analysis), and even more so questionnaires and standardised measures within quantitative methodologies. IPA forms themes through implied language from semi-structured interviews, so could be argued to be more suitable for research where the subjects may have lower language abilities.

**The interpretative phenomenological analysis (IPA) process**

IPA starts by ‘not’ having a theory to prove, and begins with the development of a semi-structured interview script to investigate the experiences of a group of individuals. IPA studies can include 1 or 2 subjects, but normally include between 5 and 10. More recently larger groups have successfully been investigated, and this thesis follows these new guidelines (Mihelicova et al., 2016; Osafo et al., 2011; Feeley & Thomson, 2016).
is important that the sample must be homogeneous, closely defined for the study to enable
detailed and rich accounts of the phenomena being investigated. It is also important to
understand that the sample ‘represents’ a perspective rather than a population (Smith &
Osborn, 2008b).

The aim of the semi-structured interview script is to allow leakage of information,
as phenomenological analysis, according to Heidegger, is the process of ‘letting things show
themselves’ (Smith, Flowers, & Larkin, 2009). The interviewer must be careful not to guide
the participant into saying things, but should also prompt the conversation to the main
themes to be investigated. Once the interviews are completed they are transcribed ready
for analysis.

The transcript is placed in the centre column of a three-column sheet of
paper/spreadsheet. The transcript is read through three times, first to gain an overview,
second to jot down initial themes or ideas that come to mind next to the relevant passages
(in the left-hand column), and finally to reflect again on the transcript as a whole and form
final themes which can be used for comparison (recorded in the right-hand column). This
is, as noted earlier, a ‘hermeneutic cycle’ or ‘double hermeneutic’, requiring a dynamic and
interactive interplay between the parts and the whole, and between the interpreter and
the object.

In this thesis the second read was conducted and the resulting themes allowed fine
tuning of the semi-structured interview script, impacting on the questions used for
subsequent interviews. When all the interviews were completed, the final read was
conducted, allowing reflections on the project as a whole. These reflections were then
added to a data spreadsheet to form basic quantitative data for secondary analysis.

**Why interpretative phenomenological analysis (IPA) was used in this thesis**

It is argued by the author that IPA can offer dyslexic research samples a means to
find greater understanding of their own traumatic schooling; to understand that they were
not alone in experiencing such school-based trauma. And through identification of
collective patterns, the researcher begins to make sense of any emerging phenomena. It is
argued by the author that the use of IPA was a dyslexic-friendly research approach for
several reasons: (1) being aligned with the ‘social model of disability’ and inclusion-friendly
(for example, only based on the spoken word), aiding understanding in special need/low
literacy samples; (2) allowing flexibility and the ability for themes from initial participants
to emerge and inform an investigative interview script; (3) not relying solely on discourse; (4) offering a means of recording data without the need for the participant to complete questionnaires or quantitative measures (the skills of reading and writing); (5) allowing the clarification of questions without compromising data results; and (6) being suited to a divergent style, commonly associated with dyslexic-type thinking.

**The role of the researcher in interpretative phenomenological analysis (IPA)**

Smith, Flowers & Larkin (2009) note the researcher is not only concerned with trying to understand how participants make sense of their own experiences, but also that access is always dependent on the researcher’s own interpretation of another’s personal world. This is argued by this author to be the ideal methodology for both understanding his own life experiences, as an individual with developmental dyslexia, and for helping others, the research participants, to make sense of their own experiences. The author furthermore recognises the challenge of helping ‘guide’ participants through the semi-structured interview script without using ‘leading’ questions. Smith & Osborn (2008) remark that ‘a good interview technique therefore often involves a gentle nudge from the interviewer rather than being too explicit’ (p.61), with pre-prepared ‘prompts’, which can be more specific (p.62), and by using ‘funnelling’ to guide the interview into specific areas of investigation. Smith & Osborn are clear in IPA that ‘the interviewer’s role in a semi-structured interview is to facilitate and guide, rather than dictate exactly what will happen during the encounter’ (p.63).

Smith & Osborn argue that IPA researchers realise that people struggle to process what they are thinking and feeling, that there are many reasons why they might not self-disclose, and that the researcher must interpret people’s mental and emotional state from what they say. They also note that IPA differs from conventional analysis in that there is no attempt to test a predetermined hypothesis; rather the aim is to explore, flexibly and in detail, an area of concern. Heaven (1999, p.301) argues that ‘stories have ontological status. We are always enveloped in stories. The narrative for human beings is analogous to the ocean for fishes’. IPA has been used in many recent research studies (Rafique & Hunt, 2012; Blore, 2011; Jeong & Othman, 2016; Charlick, Pincombe, MacKellar & Fielder, 2016; Duncan, Hart, Scoular & Brigg, 2001; Thompson, Kent & Smith, 2002; Clare, 2003; Biggerstaff, 2003; French, Maissi & Mrateau, 2005; Agahi, 2015).
This thesis will next discuss the role of the ‘insider–outsider’ researcher, as a means to understand the role the author of this thesis took as an individual with dyslexia investigating other individuals with dyslexia.

**Use of interpretative phenomenological analysis (IPA) with other dyslexic/invisible disability samples**

A phenomenological approach has recently been used by other researchers of ‘invisible/hidden disabilities’ similar to developmental dyslexia (Yee, 2013; Alias, 2016; Agahi, 2015; Philpott, 2000; Karloski, 2016; Leitão, Dzidic, Claessen, Gordon, Howard, Nayton & Boyes, 2017; Delany, 2017), and is argued by the author as being suitable to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’ (the aim of this thesis) by offering greater depth in understanding motivations, especially of those who choose to ‘pass’ to gain career success and use their traumatic school experiences in positive ways as a form of ‘post-traumatic growth’. Blore (2011) also successfully used an IPA methodology to investigate samples with ‘post-traumatic growth’.

Agahi (2015) recently undertook a similar style of investigation to Chapter 8 of this thesis, concerning the strengths and difficulties of diagnosed dyslexics, and chose to use IPA to better understand the experiences of both dyslexic adults and university students, advocating a ‘positive dyslexia’ stance first proposed by Nicolson (2014) regarding crafting careers based on their strengths. Agahi’s study identified ten skills to describe the characteristics of successful dyslexic adults, and noted a highly significant non-preference for conventional career choices. Many of these ten skills are highlighted in Chapter 8 of this thesis.

**Interpretative phenomenological analysis (IPA) in this thesis**

Chapters 4 to 8 of this thesis uncover new meaning to the dyslexic experience, gained through building the trust of research participants, and selective self-disclosure by the interviewer, resulting in the dropping of barriers in order to gain new insight into participants’ private ‘life-worlds’, termed as ‘leakage’ in IPA methodology. Feedback from many participants has been that they had never before disclosed their self-harming activities or the severity of their school trauma, not even to their parents or partners, and that this was the first time they had disclosed such personal information. Through the
interviewer disclosing his own dyslexia, it is argued that barriers were lowered, and together they were able to make sense of any common life experiences.
Methodology: insider–outsider perspectives

Introduction: insider, outsider and the space within?

Merton (1972) proposes that the discussion between what is an insider and an outsider researcher can be identified through two opposing views. ‘The outsider doctrine’ values researchers who are not from the communities being researched, and study phenomena from neutral and detached observer status. This doctrine challenges whether the insider researcher can analyse clearly that which they are a part of. ‘The insider doctrine’ holds that the outsider researcher will never truly understand a culture or situation if they have not experienced it. They argue the insider researcher is uniquely positioned to understand the experiences of groups which they are members of (Kerstetter, 2012, p.100).

However, Mercer (2007) and Dwyer & Buckle (2009) argue there are no complete insiders or outsiders, but identities are often relative, and can sometimes even change, based on: where and when the research is conducted; the personalities of the researcher and individual research participants; and the topic of the research. This ‘space-within’ or ‘inbetweener’ is a theme developed by Milligan (2016). Dwyer & Buckle (2009) and Serrant-Green (2002) suggest ‘the question of identity of the researcher in relation to the subject and group under study is constantly changing and not fixed’ (Serrant-Green 2002, p.4).

Dwyer & Buckle (2009) and Milligan (2016) argue the ‘insider’ researcher shares common experiences with the group being investigated, thus having insider knowledge, compared to an ‘outsider’ who comes into an investigation without any pre-knowledge of the group being investigated. In the realms of this thesis, an ‘insider’ researcher has dyslexia, and an ‘outsider’ does not have dyslexia.

Informative bias, interview reciprocity

Drever (1995) talks about how what research participants say to you is influenced by who they think you are. However, Mercer (2007) questions if this is any different to interviews with outsider researchers. Parades (1977) and Zinn (1979) suggest that research participants are likely to present ‘outsiders’ with a distorted image of phenomena. However, Preedy & Riches (1988) argue that potential for distortion can also occur with ‘insider’ researchers, who may distort results or interviews to offer greater access for future research possibilities. Interestingly, Schultz (1971) suggests that whilst the ‘outsider’ is a
person without a history regarding the phenomena, the ‘insider’ is a person who can’t escape their past.

Whilst Powney & Watts (1987) argue against interviewers disclosing their own position or membership of a certain group, which can distract the interviewee and can set up a self-fulfilling prophecy, Mercer (2007) argues against this view as he has researched both disclosing and non-disclosing to two similar groups, and found his results were similar in both contexts. However, Mercer advises researchers to be careful to how much is disclosed to research participants to avoid such criticism.

**Critics of insiderness**

The role of the ‘insider or outsider’ as the interviewer in qualitative methodology is not without its critics. Dwyer & Buckle (2009) observed that the ‘insider’ researcher tends to be able to engage research participants more easily and use their shared experiences to gain richer data. But Kanuha (2000) argues an ‘insider’ researcher may also find it difficult to separate their personal experiences from those of research participants, and may ‘know too much or is too close to the project, and may be too similar to those’ (p. 444). Serrant-Green (2002) argues that this could mean they may not confront questions about their potential bias in their research. Maykut & Morehouse (1994) sum up the challenge, ‘the qualitative researcher’s perspective is perhaps a paradoxical one: it is to be acutely tuned-in to the experiences and meaning systems of others… and at the same time to be aware of how one’s own biases and preconceptions may be influencing what one is trying to understand’ (p. 123).

**Insiders that turn into outsiders**

Collins (1986) interestingly develops the term ‘outsider-within’ regarding the role of black women researchers, ‘that Black women have an epistemic privilege of functioning within the academy both as credentialed insiders and as outsiders who are decentered in the academic context as women and Blacks’ (p.16). Brown (2012), a black woman researcher and an ‘insider’, found that due to ‘the formal boundaries between the researcher and the researched were crossed during our informal interactions, I am aware that the legislators may have been more relaxed during our formal interviews than they otherwise might have been with another researcher. Because of this, I have chosen to remove their names from their quotes in order to be respectful of the relationships
developed during my fieldwork’ (p.28). Therefore she countered any bias by anonymising any quotes used, and acknowledging how her own identity impacted her findings and conclusions (p.29). She also notes that initially she felt an ‘insider’ but at the end of the project she realised she was in fact an ‘outsider’, due to her different educational opportunities.

Smith (1999) also found whilst researching Maori communities in New Zealand that her position as an ‘insider’ changed to an ‘outsider’ during her research, as she began to recognise that she was very different to her research participants due to her education, socio-economic position and income.

This author has also camouflaged participants’ identities to counter bias, however, whilst it could be argued that he began as an ‘insider’ researcher investigating others with dyslexia, his life experience differed through his resilience to mental health difficulties, his education (to masters/doctorate level), and his development of two successful careers; therefore he was an ‘outsider’ researcher looking in.
Defining the research question

This thesis aimed to investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling.

Rather than taking a traditional perspective of dyslexia that focuses on identification and remedial interventions to mitigate any negative school experiences, Chapters 2 to 6 of this thesis focus on understanding the emotional ramifications that can come from experiencing dyslexia in mainstream education, reflecting society’s perception of those who have difficulties with basic skills of reading, writing and spelling as having lesser value. Many of these concepts and misconceptions come through understanding the models of disability common to today’s society (see Chapters 4 and 9).

Individuals with dyslexia commonly remain unidentified at school, and even when identified, mainly after many years of failure in school environments (Alexander-Passe, 2017; Threlkeld, 2015; Agahi, 2015), are denied the interventions they require to overcome their learning difficulties/barriers and achieve their potential (OFSTED, 2010; Bercow, 2010; Scott, 2016). Chapter 2 of this thesis explains the long-term educational failure commonly experienced by young people with dyslexia, and how when individuals are finally identified there is a continuation of failure through piecemeal and generally inadequate interventions, due to budget constraints, with many interventions put in place too late for maximum impact on academic results, from educational policies argued to be ‘unfit for purpose’ due to a ‘postcode lottery’ of provision (Bercow, 2011; OFSTED, 2010; Scott, 2004; Burden & Burdett, 2005). It is argued in Chapters 4, 5, 6, 7 and 8 of this thesis that a secondary trauma occurs (for example, resentment) when (commonly adult) individuals are finally diagnosed but unsupported, as they now understand they are not ‘stupid’ or ‘lazy’, and it was their teachers who had ignored blatant signs of learning difficulties (Scott, 2004; Ridsdale, 2004; Riddick, 1996).

The author (in Chapters 4, 5 and 7 of this thesis) suggests that defensive coping strategies developed in childhood, in order to cope at school and to cope with authority figures and peers, can have a long-term effect upon the adult dyslexic’s ability to form positive workplace and personal relationships (Scott, 2004; Eissa, 2010; Burden, 2008; Nalavany & Carawan, 2010; Carawan, Nalavany & Jenkins, 2016). The negative school experience, for example being judged unfairly on weak literacy skills as a measure of intelligence, can cause many dyslexics to develop careers based on their stronger, non-
literacy based skills (as investigated in Chapters 7 and 8 of this thesis, and also found by Threlkeld, 2015 and Agahi, 2015). However, this can cause resentment in such individuals because they have chosen careers based on what they can do easily with minimal reading and writing requirements, rather than based on what interests them – for example, politics, archaeology or science (Humphrey, 2002, 2003; Morgan & Klein, 2003). It could be argued that mainstream education measures the ability to read, write and remember facts over the ability to make sense of and manipulate knowledge that is required in the workplace (Cooper, 2009). Therefore, it can be argued that academic success is not a prerequisite for workplace success (Dweck, 2012).

Two groups can be identified from their experiencing similar school-based trauma: ‘successful dyslexics’ who have used their trauma positively, and ‘less-successful dyslexics’ who are defined and constrained by their trauma, and these two groups are investigated in Chapters 7 and 8 of this thesis. Many in the second group can be found in the UK, US and Swedish prison populations (Hewitt-Mann, 2012; Harris, 2012; Rack, 2005), as the possible result of leaving school with few academic qualifications, and having no means to gain employment. This thesis aimed to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, and each chapter helps to build an understanding of the educational trauma experienced, and how this trauma can, through understanding ‘post-traumatic growth’ (Calhoun & Tedeschi, 2001), result in developing the motivations and resilience required to gain successful post-school careers.

**Thesis structure**

This thesis begins with an introduction chapter (Chapter 1) establishing the author’s stance in regard to developmental dyslexia and the key issues facing individuals with dyslexia, linking how dyslexia and mental health correlate. A review of educational policy followed, spanning the duration of this research project (2000 to 2017), and offering the reader a perspective into why dyslexia can be problematic in mainstream education. Research suggests the frequency of special educational needs (SEND) is reducing in schools, however there is an increasing focus on teacher training regarding SEND (National Statistics, 2016a, 2017a; Carter Review, 2016; Department of Education, 2016a). The reduced frequency of SEND in schools can be explained as coming from a lack of teacher
awareness regarding SEND, the lack of SEND focus in teacher training (Carter Review, 2016), and reduced school budgets. This means that many SEND students are left unidentified or misdiagnosed, resulting in them struggling with a highly prescriptive educational curriculum, with a knock-on effect to school performance. Each school must publish a register of pupils receiving SEND interventions, but recent legislation suggests this list can shrink and grow according to a school’s willingness to fund SEND provision (SEND Code of Practice, 2015). Hence the ‘SEN Register’ can be argued to be based on the school’s ability/willingness to fund provision and not on the actual need of pupils, allowing, as the Bercow Report (2011), OFSTED (2010) and Scott (2016) suggest, a ‘postcode lottery’ of support, inconsistently delivered in the UK.

The ‘bi-ability’ model (Valeras, 2010) was introduced, rejecting both the ‘medical’ and ‘social’ models of disability, and arguing that those with ‘hidden disabilities’, such as those with dyslexia and asthma, reject any disability identity, and their ability to ‘pass’ as able-bodied in society allows them to succeed in the workplace like their peers. However, at school they are faced with the standardisation of education in which, Kelly (2004) suggests, ‘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’ (p.80). This quote describes the challenges faced by the many different types of learners taught, argued to be unsuccessfully, in mixed-ability classrooms, with a fixed curriculum tailored to one type of learner. Those with dyslexia, especially undiagnosed, face an inhospitable environment that should be nurturing, and one biased towards linear thinkers (Threlkeld, 2015).

This thesis continues with two studies (Chapters 2 and 3) investigating the emotional effects of poorly differentiated mainstream educational provision for young people with diagnosed dyslexia. The first investigation (Chapter 2) looked at ‘How Dyslexic Teenagers Cope: An Investigation of Self-Esteem, Coping and Depression’ using three respected quantitative standardised measures (self-esteem, types of coping and depression) with a sample of N=19 teenagers with dyslexia. Results of the small sample suggest gender differences, with females (N=7) using more emotional and avoidance-based coping, resulting in lower standardised scores in general and academic self-esteem, and moderate depression. Males (N=12) tended to use more task-based coping, resulting in normal levels of self-esteem and minimal depression. Endler & Parker (1999), Matud (2004), Kelly, Tyrka, Lawrence, Price & Carpenter (2008) and Mezulis, Abramson & Hyde (2002) also point to greater emotional coping in females, compared to problem- and task-focused coping in males.
The second investigation (Chapter 3) looked at ‘The Sources and Manifestation of Stress Amongst School-Aged Dyslexics, Compared with Sibling Controls’, using a single quantitative standardised measure (The School Situation Survey, Helms and Gable, 1989) with many sub scales. The samples (N=78 diagnosed dyslexics and N=77 non-dyslexic sibling controls) were broken down by gender, academic age group, size of family and birth order, and results suggested significant differences between the groups, with children with dyslexia in academic years 3–5 (mid-primary school years) experiencing the highest stress levels, specifically in interactions with teachers, worries over academic examinations (SATs) and performance testing, causing emotional (fear, shyness or loneliness) and physiological (nausea, tremors or rapid heart-beat) manifestations. Results also suggested that individuals with dyslexia in larger families (3–4 siblings) experience greater stress in interactions with their peers than those in smaller families (2 siblings), possibly due to unfair sibling comparison by parents.

The thesis then moves into the area of post-school experiences with adults diagnosed with dyslexia. The chapter entitled ‘The Dyslexia Experience: Difference, Disclosure, Labelling, Discrimination and Stigma’ (Chapter 4) was based on a qualitative study using IPA (Smith and Osborne, 2008), with N=29 adults with diagnosed dyslexia, to understand the dyslexia experience in more depth. Many participants perceived their dyslexia as positive, giving them unique skills, but making them feel different. This difference was perceived to come from having to work harder than their non-dyslexic peers to achieve as adults (in the work place), as dyslexia affected many aspects of their daily life (personal and professional). Evidence suggested that many dyslexics experience discrimination due to their impairment, whether they perceive it as a disability or not. Whilst many of the participants in the sample noted they had survived the last twenty, thirty or more years in the workplace and school without their difficulties being highlighted, one participant noted that they had felt successful in hiding their dyslexia for so long, and many others felt unhappy about disclosing their difficulties for fear this would go on their employment record and affect career opportunities. Many felt their dyslexia was only a disability when they were children, as school was seen as an inflexible environment with no escape from reading and writing, along with unfair comparison to age appropriate peers – ‘I’m only disabled by my dyslexia when you put me into a classroom’ (Natasha). Lastly, stigma due to dyslexia was highlighted, as many participants camouflaged their difficulties at work, attributing their difficulties to quirkiness (positive) rather than being disabled (negative).
The long-term emotional effects of school are then introduced in two studies (Chapters 5 and 6), again using IPA. The first investigation (Chapter 5) looked at how ‘Self-Harm and Suicidal Thoughts/Attempts can be a Coping Strategy to Cope with Dyslexia both at School and Post-School’. A qualitative investigation of N=29 adults with diagnosed dyslexia (N=22 with depressive symptoms) found self-harm was greater in the depressive than the non-depressive sample; however, the type of self-harm varied. Males and non-depressives tended to predominantly self-harm with alcohol, followed by food and then rarely with bodily harm, whereas females in general tended to predominantly self-harm with food, then bodily harm and lastly alcohol. Overall the depressive sample self-harmed, predominantly with food and then equally between alcohol and bodily-harm. The second study (Chapter 6) investigated ‘Post-Traumatic Stress Disorder (PTSD) Triggered by the Experience of Dyslexia in Mainstream School Education’. This qualitative study, again using IPA, with N=29 adults with diagnosed dyslexia, found support for previous empirical studies noting childhood trauma amongst this population. However, this study went one stage further and investigated PTSD as a main topic (manifested in adults and parents). Anger and resentment towards their own childhood teacher still registered as adults, along with memories of educational injustice. Much of this anger was targeted at their lack of diagnosis, which meant they suffered for many years with an undiagnosed learning difficulty. Interestingly, the triggers that affected them as adults were smell (school cleaning materials), small pictures and small chairs, as commonly found in primary schools; these produced high levels of anxiety, inferiority and flash-backs which made visiting school for their own children problematic, with some now avoiding such situations. This study concluded that emotional trauma took place in all participants, and this resulted in many having PTSD manifestations as a result of returning to school environments as parents, for career progression, and as part of their careers.

Both Chapters 5 and 6 offer the concepts of ‘self-harm/destructive behaviours’ and ‘Post-Traumatic Stress Disorder-PTSD’, and these are developed further in Chapter 9. The earlier section on ‘Educational Trauma’ sought to evidence the causes of PTSD in mainstream education from both teacher and peer bullying. This thesis recognises the biological/medical model of PTSD, as a subjective and interpersonal manifestation of a disorder which has to do with meaning, using avoidance mechanisms to escape actual or future dangers, hazards and damage (Bruene, 2008). However, it also recognises that the cause of PTSD may be related to the way individuals interpret the meaning of an event, and therefore different personalities of individuals, based on their past experiences, will vary in
their resilience and their ability to overcome adversity and traumatic experiences (Richardson, 2002). It is argued in this thesis, in Chapters 7, 8 and 9, that those who have succeeded post-school, despite traumatic schooling, developed resilience at an early age to overcome the multiple adversities they faced at school.

In the context of those with developmental dyslexia, ‘self-harm/destructive behaviours’ are discussed as emotional coping strategies used in childhood to adulthood to cope with the feelings of isolation, stigma and depression, and having a misunderstood lifelong learning difference/disability that affects all interactions with society (Scott, 2004; Alexander-Passe, 2015a), and Chapter 4 talks about this in greater depth.

The longevity of the educational trauma experienced by many young people with developmental dyslexia in the form of ‘Post-Traumatic Stress Disorder-PTSD’ is investigated in Chapter 6 of this thesis, PTSD defined by Hacker Hughes (2006; American Psychiatric Association, 2013) as being exposure to one or more traumatic events where the person felt their life or someone else’s life was under treat, or that they were going to be injured, and where, at some stage, they felt helpless or terrified. The early section on ‘Educational Trauma’ investigated the bullying that can take place in schools from both teachers and peers, finding credible evidence to support the concept that young people with a SEND are vulnerable to bullying, maybe due to their difference, having an invisible disability that is misunderstood by others, or through the lack of awareness of SEND by classroom teachers.

Chapter 6 investigates the many emotions occurring when adults with developmental dyslexia return to a school environment as an adult and parent. Returning with a dyslexic partner, each will have their own experiences of school, typically negative according to many commentators (Scott, 2004; Humphreys 2003; Humphreys & Mulins, 2002) and will support each other’s anxiety. Returning with a non-dyslexic partner, again each will have difference school experiences, each commonly misunderstanding the others, but the ability to support the dyslexic-partner will be limited to understanding possible PTSD manifestations. Chapter 6 of this thesis develops the possible sensory triggers from mainstream schools, commonly primary schools, with small chairs, work pinned to walls, etc.

The final area of study includes two chapters (Chapter 7 and 8) investigating how the long-term emotional manifestations from mainstream education can affect the development of successful careers for individuals with dyslexia. The first investigation, entitled ‘Perceptions of Success in Dyslexic Adults in the UK’ (Chapter 7), was a reflective mixed-methodology study of N=29 adult dyslexics and their perceptions of success.
Interpretive phenomenological analysis (IPA) was used to investigate their dyslexia and their perceptions of success. The investigation used both quantitative and qualitative data to understand how dyslexic adults perceive any life success, and whilst many were degree-educated, this was often not seen as enough to label themselves as successful. Many talked about reaching one’s potential, but this was seen as a personal goal-setting exercise, with those who saw themselves as unsuccessful setting sometimes unrealistic goals. Whilst many were seen by others as successful, they dismissed this and denied themselves such attributes. From the quantitative data, males felt more unsuccessful and females felt significantly more successful, suggesting females may set more realistic success criteria for themselves. Secondary questions gave a number of reasons for this: compared to females, males felt rejected by peers, felt inadequate, frustrated and self-blamed, with the strongest differences in terms of feelings of inadequacy in over 50% of both the depressed and non-depressed males. The second investigation (Chapter 8), entitled ‘The School’s Role in Creating Successful and Unsuccessful Dyslexics’, investigated school-based trauma and the life-long post-school effects of such trauma, creating successful or unsuccessful individuals in society. Three samples were investigated, with a mixed-methodology approach: (1) N=20 successful dyslexics, many in business and the charity sectors, were interviewed; (2) N=29 dyslexic adults, many indicating depressive symptoms, were interviewed; (3) N=88 adults using a screening measure to indicate severity, looking at gender and degree-education, with profiles created to aid understanding with two quantitative personality measures. School-trauma was frequently found in the samples from investigations (1) and (2), with successful individuals enjoying higher parental support, and success in sports and non-academic subjects.

From the three final investigations, adults were found to be more willing to take risks, perceived failure in a positive light, and frequently were self-employed, allowing a focus on strengths rather than weaknesses. It was argued that these positive outcomes following school-based trauma could be categorised as ‘post-traumatic growth’, with a willingness to perceive advantages from failure, for example, perceiving their experiences as a journey towards success, rather than opposite to success. Unsuccessful adults were found to be prone to self-doubt (of their abilities), self-blaming, pessimism and getting upset when things go wrong. The chapter concluded that school was a crucial environment that can be the melting point of a young dyslexic’s life, an environment in which they learn how society works and whether they can succeed or fail, setting them on a path for life. Whilst both successful and unsuccessful dyslexics agreed that their educational
experiences were mainly terrible, and in most cases traumatic, each took different lessons from their time at school. This thesis aimed to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, and it is argued the research in Chapters 7 and 8 identified that many adult individuals with dyslexia were motivated to use their traumatic school experiences for post-school career success, and hence – it is argued – developed ‘post-traumatic growth’.

Finally, the conclusion chapter (Chapter 9) looked at making sense of the introduction and research chapters (Chapters 1 to 8) through the six objectives, proposing a number of educational changes to improve policy and practice. These changes would offer a greater awareness of SEND amongst class teachers, and greater identification of needs in mainstream education through better teacher training and continual professional development in SEND – aiming to reduce the need for the avoidance and negative coping strategies highlighted in Chapters 2 and 3 of this thesis. The upskilling of SENCOs – schools’ SEND experts – is needed as they require the skills to assess and diagnose learning difficulties in school-aged pupils to enable fast referrals and reliable identification so that the correct interventions can be put in place to overcome learning barriers.

SEND funding was discussed, proposing that a school’s ‘nominal SEND budget’ becomes ring-fenced for SEND, to safeguard it being used for its intended purpose. Again, Chapters 2 and 3 of this thesis detail the avoidance strategies used by SEND and dyslexic students, many undiagnosed, which can lead to educational neglect and students being denied the opportunity to work to their full potential. It is also argued that the early identification, diagnosis and provision of suitable interventions would prevent the severe mental health manifestations of self-harm/attempted suicide as detailed in Chapter 5, and the development of post-traumatic stress disorder as detailed in Chapter 6. Lastly, it is proposed that schools should aim to recognise not only what children ‘can’t do’, but what they ‘can do’, in order to develop their strengths for future careers.

Home life and parenting skills were then discussed, identifying a need for parents to recognise their child’s strengths and weaknesses. It was recognised in Chapter 8 that successful individuals with dyslexia were able to develop due to parents who praised ‘effort’ and not just ‘achievement’. It is also argued that teachers and parents have a duty to immerse all children in as many hobbies or activities as possible in order to identify their personal strengths, so these can be nurtured and developed into possible post-school careers, and suitable career guidance can be given. Lastly, the need was identified for parents to avoid unfair sibling comparisons, and to recognise that their child ‘is trying their
hardest to achieve at school but are still struggling’, as most individuals would to acquire any new skill. This was recognised in Chapter 3, comparing the sources and manifestations of stress between siblings, finding that unfair sibling comparisons were common, causing home to be as hostile as school environments, and so causing increased peer and parental stress.

Chapter 9 uses a number of themes to pull the thesis together, combining four overview concepts (the influence of gender; neoliberalism, SEND policy and provision; post-traumatic stress disorder/post-traumatic growth; and bi-ability) with the nine aims of this project: coping strategies used by school-aged individuals with developmental dyslexia; understanding the life experiences of individuals with dyslexia; destructive behaviour used by individuals with dyslexia; possible post-traumatic stress disorder (PTSD) in adults returning to school as parents; post-traumatic growth (PTG), an underlying theme; and finally, bi-ability, a new way of understanding those with invisible disabilities and developmental dyslexia.

It was felt by the author that if Chapter 9 only included the four themes of gender, neoliberalism, post-traumatic growth and bi-ability, it would not reflect the research part of the thesis (Chapters 2 to 8), and therefore additional sections were included on coping strategies, life experiences, and destructive behaviours. These are argued by the author as important for understanding the narratives of those living with developmental dyslexia, and for greatly enhancing an understanding of their many traumatic emotional journeys and their sometimes negative coping strategies as a result.

The influence of gender arose as a theme in this thesis, as each chapter used gender analysis to indicate that males and females had different coping strategies at school, with males using task-based and avoidance, and females using emotion-based coping, avoidance and moderate depression as a result of perceived social exclusion (see Chapters 2 and 3). As adults, gender differences still occurred, with different self-harming strategies used to cope with perceived social exclusion, discrimination and stigma (see Chapters 4 and 5). Looking at individuals experiencing success, gender was a factor in the strategies used, with academically successful females not regretting past actions and behaviours, and academically successful males being more self-confident, not craving order, taking risks, and being more optimistic than females (see Chapters 7 and 8). Gender also arose in this thesis as, on the surface, the main study of N=29 adults with dyslexia had N=18 females to N=11 males (see Chapters 4 to 8), suggesting a female bias not found in the population. However, after investigation the bias was only found in the depressive sub-sample (N=7
males to N=15 females) and not in the non-depressed participants (N=4 males to N=3 females). It was argued that more females were drawn to the advert (see Appendices 1 to 3) as they sought talk-based help (emotion-based coping), compared to males as found in the study in Chapter 2, who tended to choose task-based coping strategies (for example, sport).

Gender theory is discussed, as ‘gender’ refers to the cultural differences expected (by society/culture) of men and women according to their sex. A person’s sex does not change from birth, but their gender can. In this thesis, gender is discussed in how different emotional coping strategies are developed between men and women, and whether these are developed due to behaviour stereotypes, thus the development of ‘gender roles’ (Levesque, 2011). The World Health Organisation (2010) defines ‘gender roles’ as ‘socially constructed roles, behaviours, activities and attributes that a given society considers appropriate for men and women’. However, debate continues as to what extent gender and gender roles are socially constructed (non-biologically influenced), and to what extent ‘socially constructed’ may be considered synonymous with ‘arbitrary or malleable’ (Hacking, 1999).

Neoliberalism occurred as a theme from the research in this thesis. It interestingly pulled together the investigations of educational policy regarding SEND, free market influences, greater perceived parental choice, reduced local educational authority services, and schools making difficult decisions about the level of SEND provision they are will to provide.

The short-term effect resulted in many young people with dyslexia being taught by teachers who lacked the resources, skills and training to fully support their learning needs. The long-term effect has meant many with dyslexia left school without realising their potential, being vulnerable and lacking the means to gain worthwhile employment. Research (Tack, 2005) indicated such vulnerability has meant the frequencies of dyslexia in UK prisons are much higher than in the general population (14–31% compared to 5–10%). This thesis argues that the ‘bi-ability’ model (Valeras, 2010) can be understood by those with ‘hidden disabilities’, such as dyslexia, creating successful careers through ‘passing’ (not self-disclosing) and promoting their ‘abilities over their dis-abilities’ by rejecting a disability identity and pursuing their own agenda in the workplace. This is compared to identifying with part of a broader disability agenda to promote ‘disability pride’ (Brighton-Pride, 2017) and being part of a collective body pursing social change as part of the ‘social model of disability’ (Oliver, 2009, 2013).
This thesis proposes a new understanding of the dyslexia identity. Appendix 4 reviews the medical and social models of disability, and how these models have created a public persona of disability which is firmly based on physical barriers. This means other groups with non-physical and non-visible barriers could be seen by some as faking disability to gain unfair advantage over their peers. It is argued that whilst the promotion of the ‘social model of disability’ as a political force highlights how many work and public areas are inaccessible to those with physical/mobility barriers, it has also meant that the lived experience of disability is commonly ignored and the value of people’s experiences is downgraded. Whilst the social model sees disability barriers coming from society and the environment, it champions the contribution that those with disabilities can bring to all areas of society, but this relies on individuals taking ownership of a disability identity. The ‘bio-psycho-social’ model of dyslexia was also discussed as a possible option to remedy the negative aspects of the ‘social’ model, recognising that many disabilities have both biological (requiring medical interventions) and social (requiring environmental changes) elements.

Valeras’ ‘We don’t have a box: Understanding hidden disability identity’ (2010), first mentioned in Chapter 1, is further developed to better understand the ‘hidden disability’ that many with dyslexia experience, along with those who have other medical conditions (for example, diabetes, polio, epilepsy, etc.). This introduced the concept of ‘bi-ability’, a concept describing how some groups can look and act ‘able-bodied’ and see themselves as both ‘dis-abled’ and ‘able-bodied’, or ‘neither of these labels’, depending on the environment they co-habit. Many such individuals reject any ‘disability’ label as they perceive themselves as ‘able-bodied’, which reflects the public perception that disability is correlated with lack of mobility, for example needing the use of a wheelchair. However, they live with a constant fear of being found out and a lowering of their self-esteem/self-image. The term ‘passing’ was introduced to link to how many groups can act ‘able-bodied’ to advance their career and position in life without the stigma attached to their gender, race, sexuality or disability. The links were made to the avoidance (passing) that many dyslexics manifest at school as a means for survival, and this places dyslexia within a much broader group of individuals struggling to make sense of their identity within a society that craves conformity and safety through perceptions of ‘normality’ (Scott, 2004; Threlkeld, 2015). Dyslexia was applied to the ‘bi-ability’ concept to understand how the model proposed by Valeras might correlate, with a focus on ‘successful dyslexics and bi-abilities’. This section helps the reader to understand the many facets of the dyslexia experience.
To conclude, each of the seven research chapters contained in this thesis presents an original contribution to the empirical study of developmental dyslexia – looking at the positive and negative emotional manifestations that come from the lifelong lived experience of dyslexia. There is little research in this area, especially based on actual samples of dyslexics; whilst several professional case studies and reflections have been published from general perceptions, it is recognised that this is a difficult area to study, with limited funding opportunities, and this body of research aims to assist this discussion.

This thesis aims to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’. It describes a journey from educational trauma at school, from educational policies that underfund SEND provision, and teachers who lack the skills and awareness to understand the emotional impact of policies that discriminate against those who struggle with gaining literacy and numeracy using traditional teaching strategies. Educational neglect can result in the development of avoidance strategies as a means to protect many diagnosed and undiagnosed dyslexics from discrimination and humiliation from teachers and peers (see the section on ‘Educational Trauma’ in this thesis). These avoidance strategies prevent both the identification of their learning difficulties and the provision of support they need to achieve their potential at school, resulting in many leaving school without diagnosis, with minimal academic outcomes, and with few, if any, university or employment options. The long-term emotional effects of educational trauma can result in ‘learned helplessness’ in dyslexics, with many turning to self-harm and attempted suicide as an attempt to regain control of their lives. As adults, many individuals with dyslexia enter the workplace with a lack of academic qualifications, and they can face issues of discrimination, labelling, disclosure and stigma from workplace environments. However, despite traumatic schooling, many dyslexics do gain post-school success, often through the development of their ‘abilities’ rather than their ‘dis-abilities’, especially through innovative/entrepreneurial careers requiring fewer literacy requirements, or through developing effective support networks that allow them to concentrate of what they can do well without being limited by administrative difficulties.

It was argued by the author that a review of disabilities studies regarding ‘hidden/invisible disabilities’, which dyslexia falls within, and the correlation with a ‘bi-ability’ model of disability (Valeras, 2010) might offer a means to better understand how many with dyslexia can gain post-school success through ‘passing’ as ‘able-bodied’ individuals in the workplace, rejecting a disability identity, and seeing any difficulties as
‘differences’ which can be overcome. It is argued that their ‘reconceptualising’ of their negative school experiences is key to developing ‘post-traumatic growth’ (Calhoun & Tedeschi, 2001), and that rather than attempting to fix a broken educational experience, they take the broken pieces and use them to repurpose a new outcome based on their strengths rather than weaknesses.
2.0 How Dyslexic Teenagers Cope: An Investigation of Self-esteem, Coping and Depression


Abstract

Research into how dyslexics cope and the effects of their coping has received little attention in the 100 years since dyslexia has been recognized. Why is this? Well it is not an easy area to investigate, partly as most qualitative studies have looked only at coping strategies of specific dyslexics. These are individual and are unsuitable for generalizations to larger populations.

This study takes a different approach to the problem. By using three standardized tests for self-esteem, coping and depression, a picture is painted of how teenage dyslexics cope and whether this affects their self-esteem and depression.

Results strongly suggest gender differences, with females using more emotional and avoidance-based coping, resulting in lower percentile scores in general and academic self-esteem and moderate depression. Males tend to use more task-based coping resulting in normal percentile self-esteem levels and minimal depression.

This study takes the view that coping and the effects of coping by dyslexic children at school should not be underestimated. It also suggests that such issues will aid educationalists in the remedial process.

Keywords: dyslexia; self-esteem; coping; depression; avoidance; strategies

Introduction

When dyslexics enter school, they enter a world where their abilities and strengths are different from those around them. What may be easy to their peers is very difficult or impossible for them. Thus when they recognize this difference, stress begins. Thomson (1996) isolated two types of reactions to stress at school in dyslexics. Firstly, ‘under’-reactions, where the dyslexic withdraws and manifests extreme anxiety, e.g. trembling and
sweating when asked to read. These dyslexics have low self-opinions of themselves and generalize every aspect of their life as a failure. Secondly, these individuals have ‘over’-reactions to stress, e.g. being seen as successful in other areas, being the class clown, hiding their failure under a ‘couldn’t care less’ attitude and manifesting silly behaviour. This can also lead to aggression, with extreme cases leading to delinquency.

This study investigates teenagers with dyslexia with standardized tests in self-esteem, coping and depression to gain knowledge of not only how they cope, but the effects of their coping (self-esteem and depression).

**Self-esteem**

**Low Self-esteem**

Morgan’s (1997a, b) study of delinquent/criminal dyslexics found that, when dyslexic children fail to keep up at school, their self-esteem drops as they begin to question their academic abilities (develop inferiority complexes). There are suggestions that both unrecognized and recognized dyslexics receiving insufficient or inappropriate support can feel devalued at school and turn to deviant behaviour. This is a response to their sense of low self-esteem induced by school and as a way of gaining recognition from their peers (Kirk & Reid, 2001; Scott, 2004). Riddick, Sterling, Farmer & Morgan (1999) and Peer and Reid (2001, p. 5) suggests ‘frustration leads very often to antisocial or deviant behaviour’ among dyslexics, especially those with low self-esteem.

Some pupils might disrupt a class because they interpret the class work as threatening, and use attention seeking to protect self-esteem, according to Molnar and Lindquist (1989). They suggest that if the teacher, in class with pupils, can help re-interpret the nature and purpose of class work (keeping the child’s self-esteem), the child’s behaviour will change. But most teachers, Molnar and Lindquist believe, hand out reprimands, as this is the only skill teachers know to quickly influence a child’s present and future behaviour. Low self-esteem will also mean the development of a poor or negative self-image. Such beliefs can become a self-fulfilling prophecy of expecting to fail (Riddick, 1996). Morgan and Klein (2001) note that childhood experiences of being labelled ‘thick’ and public humiliation caused by failing often result in choices which reinforce low self-esteem.
**High Self-esteem**

Dyslexic children with high self-esteem display more confidence and will volunteer answers or try out new subjects/tasks than lower self-esteem children. These high self-esteem children expect to succeed and attribute success to their skill/ability, according to Riddick et al. (1999) and Burden (2005). Coopersmith (1967) also found that dyslexic teenagers with high self-esteem were usually more successful in both academic and social environments compared to teenagers with low self-esteem. Wszeborowska-Lipinska (1997) investigated successful dyslexics who reached university education in Poland. To reach such a level, the study found that successful dyslexics had higher self-esteem than their peers.

**Coping (task/emotional/avoidance)**

In the study of coping, Endler and Parker (1999) suggests that three areas (task, emotion and avoidance) should be investigated, as each play a part in coping.

**Task-Based Coping**

Coopersmith (1967) found that successful dyslexic teenagers were active, expressive individuals. Wszeborowska-Lipinska (1997) investigated successful dyslexics and found that successful dyslexics were pro-active to overcome hurdles, which required high levels of self-confidence. Scott, Scherman & Philips (1992) study found key factors to success among dyslexic to be: encouragement of talents and hobbies (from peers, etc.) and a search for self-worth. Reiff et al.; (1997) study of successful dyslexics also found that persistence and stubbornness were assets.

McLoughlin, Leather & Stringer (2002) found hard work and determination to be underlying factors in success at school. All these traits: expressive, pro-active, search for self-worth, persistence, stubbornness and determination are descriptions of task-based coping strategies.

**Emotional-Based Coping**

Trying hard or asking for help and not receiving any, can cause children enormous frustration (Edwards, 1994). Parents and teachers see bright and enthusiastic children who are not successfully learning to read and write. Ryan (1994) comments that no one knows
how hard the dyslexic is really trying, and each year their peers surpass them in reading skills, their frustration increases.

It is important for teachers to recognize the frustration that dyslexics feel at school in the classroom: an inability to express their ideas in written form; an inability to read books of interest (rather than for their reading age) and having to work considerably harder than their peers to attain the same achievement level (Thomson, 1996). The negative experiences of school, as found by dyslexic teenagers in Edwards (1994) had associated reactions of lack of confidence, self-doubt/denigration, and sensitivity to criticism, behavioural problems, truancy/school refusal and competitiveness disorders.

In Butkowsky and Willows’ (1980) study, average to good readers attributed their success to their ability, while poor readers attributed their lack of success to luck. Poor readers however tended to blame themselves by attributing failure to their own incompetence, and success to environmental factors, e.g. luck.

Correlations to ‘learnt helplessness’ (Burden, 2005; Diener & Dweck, 1978; Miller & Norman, 1978) can also be made. Dyslexics often react to their difficulties by withdrawing emotionally, or conversely becoming aggressive, compensating... by obtaining negative attention from others (Thomson & Hartley, 1980, p. 19).

Supporting Butkowsky and Willows, Hales (1995) suggests there is strong evidence to suggest that dyslexics are more disturbed by criticism. Hales found dyslexics experience considerable amounts of criticism at school, especially before their condition is diagnosed. All these traits: frustration, lack of confidence, self-doubt, sensitive to criticism, behavioural problems, competitiveness disorders, self-blame, aggressiveness are all descriptions of emotion-based coping strategies.

Avoidance-Based Coping

In large schools, avoidance of competing or reaching potential goes unnoticed, compared to smaller schools. This extreme non-participation through lack of confidence is a recurring characteristic in dyslexics (Scott, 2004). Avoidance strategies deflect attention from low academic ability and under-performance and teachers see these avoidance strategies very differently, with perceptions such as laziness and lack of parental support.

Edwards (1994, p. 61) also noticed that some dyslexics suffer from competitiveness disorders, with many withdrawing both academically and socially ‘Gareth only tries hard if
he thinks he can win. If not he merely gives up...Nevertheless, he had to be very sure of his good standard of work before making himself vulnerable again’.

Anxiety causes humans to avoid whatever frightens them, and dyslexia is no exception. However, Ryan (1994) notes that teachers misinterpret this avoidance as laziness. In fact he notes that the avoidance is more related to anxiety and confusion than apathy. Reid (1988) found when pupils feel ‘unwanted, rejected, uncared for and disillusioned . . . they start to manifest their disaffection by staying away, disrupting lessons, or underachieving’.

If academic success cannot give dyslexics self-worth, then they begin to withdraw from classroom activities (negative environments), according to Morgan (1997). There is a growing body of evidence to suggest that children with dyslexia avoid tasks, which highlight their difficulties. Avoidance techniques can be as simple as constantly breaking the tips of pencils, so as to spend maximum time sharpening them and consequently less time at the desk doing work, although dyslexics (especially females) tend to prefer less obtrusive ways to avoid academic work, by rarely putting up their hands or sitting at the back of classes to be invisible (i.e. not picked by teachers to take part in the class). Riddick (1996, p. 131) suggests ‘by secondary age all children claim that they avoid difficult to spell words and over half of them claim that they put off or avoid doing writing’.

In a study of dyslexic school children (primary and secondary), Riddick (1996, p. 130) found pupils commenting that they: daily avoided using difficult words to spell, wrote less (avoiding making mistakes) and put off starting work as coping strategies.

In fact, out of 45 noted strategies found by Riddick, avoidance was featured in 35 of them. The other 10 were characterized by asking classmates to help. These findings were similar to Mosely’s (1989) study concerning adults and children with general spelling difficulties. Pollock and Waller (1994) found that dyslexic children were perceived as immature (in their vocabulary choice and mode of expression) by schoolteachers and examination board markers, as they preferred using words they knew how to spell. But, if they did use words where the spelling is uncertain, they were accused of being careless and risking lower self-esteem.

Thus word avoidance has attractive advantages to young dyslexics they think it is better to be seen more immature than to risk embarrassment.

Another aspect of school refusal is shown by those individuals who develop psychosomatic disorders or other illnesses to avoid school ‘I used to pretend I was sick, make myself puke, and say I don’t wanna go today’, one dyslexic teenager commented.
A powerful example of psychosomatic pain is the following story of a 12-year-old dyslexic ‘Trevor developed a pain in his right leg requiring crutches. To him it felt like a rare disease. The hospital doctor concluded that he was dyslexic but intelligent, was therefore frustrated, and that the frustration was expressed as pain in the right thigh, which occurred about once every 6 months and could last 10 days at a time’ (Edwards, 1994). Strangely enough, this same teenager was reluctant to be truant, as he felt there would be ‘repercussions and (that it) was pointless anyway’ (p. 39).

This suggests a main difference between truants and dyslexics avoiding school (social conscience). Another 12-year-old called Gareth used to get into fights with larger or other (dyslexic) kids to get off school. The injuries were for mutual avoidance reasons, not anger, and usually meant 2–3 days off school.

Depression

Riddick (1996) found dyslexic primary and secondary school children reported themselves as disappointed, frustrated, ashamed, fed up, sad, depressed, and angry and embarrassed by their dyslexic difficulties. Depression is a frequent complication in dyslexia, according to Burden (2005), Ryan (1994) and Scott (2004). Although most dyslexics are not clinically depressed, children with this type of learning difficulty are at higher risk of intense emotional feelings of pain and sorrow. Evidence suggests that dyslexics commonly manifest low self-esteem, explaining why many dyslexics (especially female) internalize such sorrow and pain. Depression in school-aged children may be manifested by their being more active in order to cover up painful feelings (extrovert) or their being loath to enjoy anything from their day (introvert). Both types will manifest negative thoughts about themselves and see the world in a very negative way. To date no study has investigated depression with standardized instruments on dyslexic populations.

Introduction to study

The literature review highlighted certain emotional and behavioural aspects of how the dyslexic/learning disabled school-aged pupil copes with school, especially self-esteem, avoidance and depression.

So three types of tests were regarded as required:
• A test for self-esteem: ideally looking at parental and academic forms.
• A test for avoidance: ideally to be compared with other types of coping, both positive and negative.
• A test for depression: ideally suitable for teenagers.

Three standardized tests were selected:
• CFSEI—the culture-free self-esteem inventory (Form A) (Battle, 1992).
• CISS—the coping inventory for stressful situations (adolescent version) (Endler & Parker, 1999).
• BDI-II—Beck depression inventory (Beck, Steer & Brown, 1996).

What’s in these tests?

The CFSEI
The CFSEI was designed by Battle (1992) to investigate four types of self-esteem (general, social, academic and parental). According to Battle they are explained as:
• Social self-esteem refers to individuals’ perceptions of the quality of their relationships with peers (i.e. self-esteem from friends).
• Academic self-esteem (i.e. school-related self-esteem) refers to individuals’ perceptions of their ability to succeed academically (i.e. self-esteem from teachers and school).
• Parental self-esteem refers to individuals’ perceptions of their status at home—including their subjective perceptions of how their parents or parent surrogates view them (i.e. self-esteem from parents).
• General self-esteem refers to individuals’ overall perceptions of their worth (i.e. self-esteem from themselves).

Factor Analysis and Validity and Gender Considerations
The 60 items of Form A were subjected to multiple factor analysis using a varimax rotation and then subjected to alpha (kr 20) analysis of internal consistency (n=117 boys and girls in grades 7, 8 and 9). Alpha coefficients for the five factors were as follows: general 0.71; social 0.66, academic 0.67, parents 0.76 and lie 0.70.
Content validity was built into the CFSEI by: (a) developing a construct definition of self-esteem and (b) writing items intended to cover all areas of the construct. The construct definition as measured by the CFSEI is: self-esteem refers to the perception the individual possesses of his or her own worth.

An individual’s perception of self develops gradually and becomes more differentiated as he or she matures and interacts with significant others.


The CISS

The CISS was designed by Endler and Parker (1999) to investigate multi-dimensional coping. It investigates three main types of coping (task-orientated, emotion-orientated, and avoidance-orientated). Distraction and social diversion are sub-scales to avoidance-orientated coping. According to Endler and Parker (1999), the scales are explained as:

- Task-orientated strategies are those that prioritize question information and analyse past attempts to improve subsequent attempts to deal with stressful situations or environments.
- Emotion-orientated strategies including internalizing (e.g. drug abuse, alcoholism, psychic disorders or suicide) or externalizing stressful (destructive acts against society) situations so that they blame themselves or others.
- Avoidance-orientated strategies include avoiding tasks by numerous different means (sometimes extremes): visiting friends rather than doing homework or gaining weight to avoid games.
- Distraction strategies include doing things to distract you from tasks, e.g. not noticing errors to avoid making corrections (i.e. avoiding even noticing tasks).
- Social diversion strategies include avoiding socializing to avoid having friends and avoiding situations where literacy will be tested, e.g. paying by cash rather than writing cheques (i.e. withdrawing).
Factor Analysis and Gender and Validity Considerations

The data from n= 313, 13–15-year-olds (152 males and 161 females) and n=504, 16–18-year-olds (270 males and 234 females) were subjected to multiple factor analysis using a varimax rotation and then subjected to alpha (kr. 20) analysis of internal consistency. Alpha coefficients for the five factors were as follows:

(13–15-year-old males) task 0.92; emotion 0.82, avoidance 0.85, distraction 0.78 and social diversion 0.79. In addition (13–15-year-old males) task 0.91; emotion 0.90, avoidance 0.83, distraction 0.76 and social diversion 0.84.

The construct validity for the adolescent form is supported by studies examining the CISS in relation to psychopathology, self-perception, and loneliness. The emotion-orientated coping is highly related to psychological distress, psychopathology, and somatization. Task-orientated and avoidance-orientated coping, according to Endler and Parker (1999) are unrelated to these negative variables. The CISS was found to show significant gender differences.

The BDI

The BDI-II was designed by Beck et al.; (1996) and is the third generation of the BDI scale. In the last 35 years of its use, the BDI has become one of the most widely accepted instruments for assessing the severity of depression in diagnosed patients and for detecting possible depression in apparently normative populations (Archer, Maurish, Imhof, & Piotrowski, 1991; Piotrowski & Keller, 1992). The BDI-II investigates the following main factors to classify depression:

- Major affective disorders.
- Depressive disorders, not otherwise specified.
- Dysthymic disorders.
- Adjustment disorders with depressed mood or mixed emotional features.

Factor Analysis and Gender and Validity Considerations

The means, standard deviations, percentages symptomatic and correlated items for the outpatient and for the college samples (Beck et al.; 1996) indicate significant differences; these would suggest the BDI-II differentiates between depressive and non-depressive groups. The factors of the BDI-II were subjected to multiple factor analysis using varimax rotation. Coefficients alpha for the outpatients sample 0.92 (n=500 mean age 37.20 years SD. 15.91) and for the college student sample 0.93 (n=120 mean age 19.58
years SD. 1.84). The mean coefficient alpha is 0.86 (Beck et al.; 1996). When the BDI-II was administered to outpatients (n=317 females and n =183 male); the authors found a mean difference with respect to sex (females: mean 23.61 SD. = 12.31 and males: mean 20.44 SD. 13.28) [t (498p<2.29, p50:01]. With college students (n=67 female and n= =53 male) there was also a significant mean difference with respect to sex (females: mean 14.55 SD. 10:74 and males: 10.04 SD. 8:23) [t (118p<2:53, p50:05] (Beck et al.; 1996).

The BDI-II was developed for the assessment of symptoms corresponding to criteria for diagnosing depressive disorders listed in the Diagnostic and Statistical Manual of Mental Disorders-4th ed. (DSM-IV) (American Psychiatric Association, 1994). Validity questions are resolved by its high correlation to the DSM-IV criteria. The BDI was found to show significant gender differences.

**Why These Particular Tests**

The CFSEI has recently been used in a study of dyslexics and stress. Riddick et al. (1999) used the CFSEI Mk2 test in conjunction with anxiety scales on 16 dyslexic adults (with controls). They found that the dyslexic group had significantly lower self-esteem than controls, although no significance was found with the anxiety scales. (The adult form of the CFSEI was used, so the data cannot be easily compared with the data from this study.) Thomson (1996) tested three groups of pupils at the East Court School and found over an 18-month period that the CFSEI was able to identify how pupils’ social and academic self-esteem levels improved following specialist teaching methods designed for dyslexics.

Burns (1986) has argued that there are clear links between children’s self-concept and their academic performance, having found correlations between children with poor academic performance, low motivation and poor self-concept. As the designer of the CFSEI was a special needs teacher, the test was originally designed for use as a tool for children with special educational needs, such as dyslexics.

The CISS has been used only once before with dyslexic samples. Hartley and Watkins (2001) used it to investigate stress and dyslexia in higher education. The study used an n=21 sample of dyslexic higher education students who were receiving support from the University of Liverpool’s Student Support & Welfare Service. (There was an age matched non-dyslexic control group, N=19.) Hartley and Watkins found higher levels of task-orientated coping amongst the dyslexics than amongst the non-dyslexics, but similar levels for emotional-orientated and avoidance-orientated coping. These results must be viewed
in light of the biased sample, in that the dyslexics were receiving help from university support services and thus all were being taught coping strategies. The results suggest that dyslexics can be taught task-related coping strategies by (university) support service tutors, although emotional and avoidance defensive strategies were still prevalent amongst this group. (Avoidance was seen as a helpful strategy.)

The BDI-II is well trusted for assessing depression, and both the CFSEI and the CISS have been correlated against it. Little is known about the depressing effects of being dyslexic at school as no study has actually investigated depression among dyslexics, especially among teenage dyslexics (except as anecdotes). If the assumptions of other researchers (Riddick, 1996; Ryan, 1994) and of this project are correct, then a scale such as the BDI-II for measuring depression would be of use for defining the internalizing of avoidance and other coping methods, as well as for assessing levels of self-esteem.

**These Tests Have Been Used Together Before**

The CFSEI and the BDI-II have been investigated together (Battle, 1992) on a high school sample, grades 10–12 (n=26 with mean ages 16.0, n ¼ 15 males and N=11 females). High inverse correlations between self-esteem and depression were found, indicating that such variables are highly related among adolescents.

Students with higher self-esteem (CFSEI) scores tended to score lower on depression (BDI-II). The data suggests that depression in adolescents is associated with low self-esteem. The CFSEI and the BDI-II were also used to investigate an adult sample (n=43 males and n=86 females), where the correlation found between self-esteem and depression was-0.55 (males-0:53, females-0:56). Such data suggests that, when self-esteem increases; depression decreases and vice versa (Battle, 1992).

The CISS and the BDI-II have also been studied together with undergraduates (n=229 males and n=476 females) (Endler & Parker, 1999). Results indicate high correlations between the BDI-II depression scale and the CISS emotion scale for both males and females. There was a negative correlation between the BDI-II depression scale and the CISS task scale for both males and females. The two CISS avoidance sub-scales (distraction and social diversion) were generally unrelated to the BDI-II depression scale.
Sample

A sample was recruited from flyers included in dyslexia association newsletters, referrals from an educational psychologist and volunteers at a London 6th Form College. Out of the n=72 recruited, n=62 were chosen. From the n=19 (27% response) returned, these included 12 males (mean academic year 11.17, SD. 1.03) and seven females (mean academic year 11.86, SD. 0.38).

Scoring

Scoring was as recommended by the instrument manuals.

Results

CFSEI

Tables 1 and 3 indicate the mean raw and percentile mean scores for the CFSEI for this teenage dyslexic sample, compared to the results from other studies.

A high score equals high self-esteem and a low score equals low self-esteem for each sub-score. A high lie score (out of 10) denotes truthfulness. A closer look at Table 1 indicates scores for the Lie scale, scores are significantly higher among this sample’s males, than female population. As 5 is the average score for this scale, the higher male score in this sample suggests a greater need to cover up (avoid telling others about) their learning difficulties, e.g. teachers, friends, etc.

Table 2 denotes the scoring guide for the CFSEI (sub-scale total self-esteem).

Gender

This teenage dyslexic sample results indicate significant differences between the genders. In the majority of cases, the male sample scored significantly higher in both raw scores and percentiles. The only exception is parental self-esteem percentiles, where the scores seem to be comparable. The normative data only suggests mild gender differences using the CFSEI.

Main Study Compared to Other Studies

Total self-esteem: The teenage dyslexic’s raw data scored higher than the unsuccessful sample but lower than the successful sample from Battle (1992).
The teenage dyslexic’s raw data is also lower in total self-esteem than both the dysfunctional and functional samples from Battle (1992). As found with the successful and unsuccessful sample, the main study raw data scores were higher than least depressed but lower than the most depressed samples from Battle (1996). There are no data from Thomson (1996) for comparison with this sub-scale.

General self-esteem: The teenage dyslexic’s raw data is lower than both dysfunctional and functional samples in general self-esteem, as indicated by Battle (1992). Teenage dyslexics’ raw scores are higher than the most depressed but lower than the least depressed from Battle (1992). From percentile data available from Thomson (1996), one can see that the teenage dyslexic’s score is considerably lower than each of the three time periods of specialist teaching.

Social self-esteem: The teenage dyslexic’s raw scores are higher than both the dysfunctional and functional samples for social self-esteem, as well as the least depressed and most depressed, as indicated in Battle (1992). Turning to Thomson (1996), the teenage dyslexic’s percentile scores are higher than the initial interviewees, but considerably lower than samples after 6 and 18 months with specialist teaching methods.

Academic self-esteem: The teenage dyslexic’s raw score is lower than both dysfunctional and the functional samples for social self-esteem, as well as least depressed and the most depressed, from Battle (1992). From the percentile data one can see teenage dyslexic’s scores being lower than each of the three samples that experienced specialist-teaching methods, as found by Thomson (1996).

Parental self-esteem: The teenage dyslexic’s raw scores are both lower than the dysfunctional and functional samples in parental self-esteem, as indicated by Battle (1996). The teenage dyslexic’s raw scores are higher than that of the most depressed but lower than the least depressed from Battle (1992). From the percentile data teenage dyslexic’s score lower than each of the three samples that experienced specialist-teaching methods, as found by Thomson (1996).
Table 1. Culture free self-esteem inventory—Form A. raw mean scores (S.D.)

<table>
<thead>
<tr>
<th>Sample</th>
<th>Total SE</th>
<th>General SE</th>
<th>Socia SE</th>
<th>Academic SE</th>
<th>Parental SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teen dyslexics (ALL) n = 12</td>
<td>34.1 (6.5)</td>
<td>13.9 (3.5)</td>
<td>8.9 (2.9)</td>
<td>4.1 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Teen dyslexics (teacher refers) n = 7</td>
<td>37.1 (6.5)</td>
<td>14.9 (3.5)</td>
<td>9.9 (2.9)</td>
<td>4.1 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Dyslexics adults n = 16</td>
<td>34.1 (6.5)</td>
<td>13.9 (3.5)</td>
<td>8.9 (2.9)</td>
<td>4.1 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Non-dyslexics adults n = 95</td>
<td>30.2 (7.2)</td>
<td>12.1 (3.9)</td>
<td>7.9 (2.9)</td>
<td>4.1 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Non-dyslexic study 1 (Battle, 1992)</td>
<td>36.4 (6.5)</td>
<td>14.8 (3.6)</td>
<td>9.8 (2.9)</td>
<td>4.1 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Destructed n = 16</td>
<td>35.4 (6.5)</td>
<td>14.8 (3.6)</td>
<td>9.8 (2.9)</td>
<td>4.1 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Non-dyslexic study 2 (Battle, 1992)</td>
<td>38.4 (6.5)</td>
<td>15.4 (3.5)</td>
<td>10.4 (3.5)</td>
<td>4.2 (2.3)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Non-dyslexic study 3 (Battle, 1992)</td>
<td>47.2 (5.5)</td>
<td>19.3 (3.3)</td>
<td>13.3 (3.3)</td>
<td>6.3 (2.7)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Non-dyslexic study 4 (most depressed)</td>
<td>47.2 (5.5)</td>
<td>19.3 (3.3)</td>
<td>13.3 (3.3)</td>
<td>6.3 (2.7)</td>
<td>5.8 (2.9)</td>
</tr>
<tr>
<td>Non-dyslexic study 5 (most depressed)</td>
<td>47.2 (5.5)</td>
<td>19.3 (3.3)</td>
<td>13.3 (3.3)</td>
<td>6.3 (2.7)</td>
<td>5.8 (2.9)</td>
</tr>
</tbody>
</table>

Table 2. Classification of CFSEI scores for the total self-esteem sub-scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>47+</td>
<td>Very high</td>
</tr>
<tr>
<td>44-46</td>
<td>High</td>
</tr>
<tr>
<td>35-34</td>
<td>Intermediate</td>
</tr>
<tr>
<td>25-33</td>
<td>Low</td>
</tr>
<tr>
<td>24-23</td>
<td>Very low</td>
</tr>
</tbody>
</table>
CISS
Tables 4 and 5 show the mean raw and percentile scores for the CISS from the teenage dyslexic’s sample, compared to the results from other studies. A high score indicates more coping skills than a low score on that sub-scale.

Table 3. Culture free self-esteem inventory-Form A: percentile mean scores (SD.)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total SE</th>
<th>General SE</th>
<th>Social SE</th>
<th>Academic Parental SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teen dyslexics (ALL) n = 19</td>
<td>33.3 (23.8)</td>
<td>33.3 (25.9)</td>
<td>40.2 (28.7)</td>
<td>41.3 (29.3)</td>
</tr>
<tr>
<td>Teen dyslexics—males n = 12</td>
<td>39.3 (26.1)</td>
<td>38.2 (26.5)</td>
<td>44.8 (32.1)</td>
<td>49.4 (30.3)</td>
</tr>
<tr>
<td>Teen dyslexics—females n = 7</td>
<td>23.0 (15.9)</td>
<td>24.9 (14.3)</td>
<td>32.3 (21.5)</td>
<td>27.3 (23.3)</td>
</tr>
</tbody>
</table>

| Dyslexic study 2 (Thorneen, 1996) | | | | |
|----------------------------------|-------|-------|-------|
| Initial interviewees n = 15     | 50    | 32    | 45    | 87    |
| After 6 months n = 15           | 50    | 64    | 77    | 87    |
| After 18 months n = 15          | 60    | 84    | 77    | 87    |

Gender
Endler and Parker (1999) found significant gender differences in the CISS (see Tables 4 and 5) and this is no different from this teenage dyslexic sample. The pattern from the teenage dyslexics seems to indicate that males score higher in task-orientated coping than females but lower in emotional-orientated, avoidance-orientated, distraction and social diversion strategies.

The teenage dyslexic’s percentile data indicates that males scored higher average (70 percentile) than females (55 percentile) in task-orientated coping. The females however scored higher than males in emotion-orientated coping (70 percentile), avoidance-orientated coping (61 percentile), distraction (56 percentile) and social diversion (68 percentile) strategies. Lastly, the males scored average in emotion-orientated coping (56 percentile) but significantly below average in avoidance-orientated coping (35 percentile), distraction (35 percentile) and social diversion (40 percentile) strategies.

Main Study Compared to Other Studies
Task-oriented coping: The teenage dyslexics scored higher than both the self-reported non-dyslexics and the dyslexics’ from Hartley and Watkins (2001) on task-orientated coping. The teenage dyslexic’s sample also scored higher than all standardized data (psychiatric as well as early and late adolescents) for task-orientated coping, according to the test authors (Endler & Parker, 1999). The teenage dyslexic’s also scored significantly higher than the standardized scores for both early and late adolescents. This would suggest
that the teenage dyslexic sample use more task-orientated coping than would be expected, as confirmed in the percentile data for the main study being 65 percentile, thus higher than the normative average.

Table 4. Coping inventory for stressful situations: raw mean scores (SD.)

<table>
<thead>
<tr>
<th>Task</th>
<th>Social diversion</th>
<th>Avoidance</th>
<th>Distraction</th>
<th>Emotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.9 (4.9)</td>
<td>21.6 (4.2)</td>
<td>21.4 (4.0)</td>
<td>14.2 (4.8)</td>
<td>14.2 (4.9)</td>
</tr>
<tr>
<td>47.9 (4.7)</td>
<td>42.8 (14.4)</td>
<td>45.3 (13.3)</td>
<td>44.6 (10.9)</td>
<td>33.9 (9.5)</td>
</tr>
<tr>
<td>54.2 (10.0)</td>
<td>55.4 (10.0)</td>
<td>50.9 (11.0)</td>
<td>46.8 (10.7)</td>
<td>43.8 (10.4)</td>
</tr>
<tr>
<td>52.1 (10.6)</td>
<td>55.4 (10.0)</td>
<td>50.9 (11.0)</td>
<td>46.8 (10.7)</td>
<td>43.8 (10.4)</td>
</tr>
<tr>
<td>51.3 (9.8)</td>
<td>51.3 (9.8)</td>
<td>51.3 (9.8)</td>
<td>51.3 (9.8)</td>
<td>51.3 (9.8)</td>
</tr>
<tr>
<td>16.2 (4.9)</td>
<td>16.2 (4.9)</td>
<td>16.2 (4.9)</td>
<td>16.2 (4.9)</td>
<td>16.2 (4.9)</td>
</tr>
<tr>
<td>47.0 (11.3)</td>
<td>47.0 (11.3)</td>
<td>47.0 (11.3)</td>
<td>47.0 (11.3)</td>
<td>47.0 (11.3)</td>
</tr>
<tr>
<td>50.5 (12.6)</td>
<td>50.5 (12.6)</td>
<td>50.5 (12.6)</td>
<td>50.5 (12.6)</td>
<td>50.5 (12.6)</td>
</tr>
<tr>
<td>53.9 (12.3)</td>
<td>53.9 (12.3)</td>
<td>53.9 (12.3)</td>
<td>53.9 (12.3)</td>
<td>53.9 (12.3)</td>
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<tr>
<td>52.9 (9.1)</td>
<td>52.9 (9.1)</td>
<td>52.9 (9.1)</td>
<td>52.9 (9.1)</td>
<td>52.9 (9.1)</td>
</tr>
<tr>
<td>49.7 (11.0)</td>
<td>49.7 (11.0)</td>
<td>49.7 (11.0)</td>
<td>49.7 (11.0)</td>
<td>49.7 (11.0)</td>
</tr>
<tr>
<td>47.6 (11.4)</td>
<td>47.6 (11.4)</td>
<td>47.6 (11.4)</td>
<td>47.6 (11.4)</td>
<td>47.6 (11.4)</td>
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<tr>
<td>49.3 (11.0)</td>
<td>49.3 (11.0)</td>
<td>49.3 (11.0)</td>
<td>49.3 (11.0)</td>
<td>49.3 (11.0)</td>
</tr>
<tr>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
</tr>
<tr>
<td>49.4 (11.0)</td>
<td>49.4 (11.0)</td>
<td>49.4 (11.0)</td>
<td>49.4 (11.0)</td>
<td>49.4 (11.0)</td>
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<td>47.6 (11.0)</td>
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<td>47.6 (11.0)</td>
<td>47.6 (11.0)</td>
<td>47.6 (11.0)</td>
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<tr>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
<td>50.3 (10.7)</td>
</tr>
</tbody>
</table>

Table 4. Coping inventory for stressful situations: raw mean scores (SD.)
Emotional-orientated coping: Again the teenage dyslexic’s sample scored higher than both the self-reported non-dyslexics and the dyslexics from Hartley and Watkins (2001). They also scored higher than the early and late adolescent’s standardized data, but not the psychiatric patients who scored significantly higher (Endler & Parker, 1999). This would suggest that these teenage dyslexics use more emotion orientated coping than would be expected, as confirmed in the percentile data for the main study being 61%, thus higher than the normative average.

Avoidance-orientated coping: Interestingly, considering how the teenage dyslexics scored on task-orientated and emotion-orientated coping, the teenage dyslexic’s scored comparably to Hartley and Watkins’s (2001) dyslexic sample for avoidance-orientated coping, but significantly lower than the non-dyslexic sample. The teenage dyslexic’s also scored lower than all standardized data (psychiatric as well as early and late adolescents), according to the test authors (Endler & Parker, 1999). Percentile data for the teenage dyslexic’s is 44%, thus slightly lower than the normative average. Distraction-orientated coping: There is no data from Hartley and Watkins (2001) for this sub-scale. The teenage dyslexic’s scored higher than early adolescents, but lower than psychiatric and late adolescents from standardized data (Endler & Parker, 1999). Percentile data of 42% is thus slightly lower than the normative average.

Social diversion orientated coping: There is no data from Hartley and Watkins (2001) for this sub-scale. The teenage dyslexics score is on par with all standardized data compared to samples of psychiatrics as well as early and late adolescents (Endler & Parker, 1999), these confirmed by the percentile data, with the teenage dyslexics scoring 50%, thus the normative average.

<table>
<thead>
<tr>
<th></th>
<th>Task</th>
<th>Emotion</th>
<th>Avoidance</th>
<th>Distraction</th>
<th>Social diversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main study (ALL) n = 19</td>
<td>64.7 (25.6)</td>
<td>61.3 (35.4)</td>
<td>44.3 (29.0)</td>
<td>42.4 (29.5)</td>
<td>50.0 (28.4)</td>
</tr>
<tr>
<td>Main study—men n = 12</td>
<td>70.1 (23.7)</td>
<td>56.1 (39.0)</td>
<td>34.8 (23.1)</td>
<td>34.5 (23.2)</td>
<td>39.6 (29.3)</td>
</tr>
<tr>
<td>Main study—women n = 7</td>
<td>55.4 (27.8)</td>
<td>70.3 (28.6)</td>
<td>60.7 (32.4)</td>
<td>59.9 (38.9)</td>
<td>67.9 (16.0)</td>
</tr>
</tbody>
</table>

Table 5. Coping inventory for stressful situations: percentile mean scores (SD.)
Table 6. Beck depression inventory: raw mean scores (SD.)

<table>
<thead>
<tr>
<th></th>
<th>Raw score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teen dyslexics (ALL) n = 19</td>
<td>11.2 (11.0)</td>
</tr>
<tr>
<td>Teen dyslexics—males n = 12</td>
<td>6.2 (6.6)</td>
</tr>
<tr>
<td>Teen dyslexics—females n = 7</td>
<td>20.1 (12.8)</td>
</tr>
<tr>
<td>Non-dyslexic study 5 (Beck et al., 1996)</td>
<td></td>
</tr>
<tr>
<td>Hospital outpatients (n = 500)</td>
<td>22.46 (12.75)</td>
</tr>
<tr>
<td>College students (n = 12)</td>
<td>12.56 (9.93)</td>
</tr>
<tr>
<td>Mood disorders (n = 264)</td>
<td>26.57 (12.15)</td>
</tr>
<tr>
<td>Major depression, single episode (n = 62)</td>
<td>28.05 (11.75)</td>
</tr>
<tr>
<td>Major depression, recurrent (n = 103)</td>
<td>29.45 (11.74)</td>
</tr>
<tr>
<td>Anxiety disorders (n = 88)</td>
<td>19.38 (11.46)</td>
</tr>
<tr>
<td>Adjustment disorders (n = 80)</td>
<td>17.29 (12.33)</td>
</tr>
<tr>
<td>Non-dyslexic study 6 (Beck et al., 1996) n = 127</td>
<td></td>
</tr>
<tr>
<td>Non-depressed</td>
<td>7.65 (5.9)</td>
</tr>
<tr>
<td>Mildly depressed</td>
<td>19.14 (5.7)</td>
</tr>
<tr>
<td>Moderately depressed</td>
<td>27.44 (10.0)</td>
</tr>
<tr>
<td>Severely depressed</td>
<td>32.96 (12.0)</td>
</tr>
<tr>
<td>Non-dyslexic study 7 (Beck et al., 1996) n = 620</td>
<td></td>
</tr>
<tr>
<td>Female college students</td>
<td>14.55 (10.74)</td>
</tr>
<tr>
<td>Male college students</td>
<td>10.04 (8.23)</td>
</tr>
<tr>
<td>Female hospital outpatients</td>
<td>23.61 (12.31)</td>
</tr>
<tr>
<td>Male hospital outpatients</td>
<td>20.44 (13.28)</td>
</tr>
</tbody>
</table>

BDI

Table 6 shows the mean raw scores for the BDI-II for this sample, compared to studies from other samples. High scores indicate higher levels of depression.

Scoring and Marking

Each item of the BDI-II is rated on a four-point scale ranging from 0 to 3 with a maximum score of 63. See Table 7 for the scoring guide.

Gender

There is a very significant difference between genders with the teenage dyslexic's scores. The males’ mean score of 6.2, which equals to minimal depression on the BDI-II, while the female mean score is 20.1, which equals to moderate depression on the BDI-II scale. Concerning gender differences, the authors (Beck et al.; 1996) also found a significant mean difference with respect to gender. With college students and hospital outpatients, see Table 6, there was also a significant mean difference of scores, with respect to gender from both samples; the females scored significantly higher. The female scores were very similar to those with anxiety and adjustment disorders and those mildly depressed.
Main Study Sample Compared to Other Studies

Compared to Beck et al. (1996), the teenage dyslexics scored higher than the standardized data for non-depressives but lower than the data for mild depressives. Thus, teenage dyslexics could be seen as having slightly higher than average levels of depression. The teenage dyslexics also scored comparable depression levels to college students but significantly lower than levels for adjustment and anxiety disorders. It should be noted that a number within this dyslexic teenage sample scored high depression scores, thus severe depression cannot be ruled out among such a sample.

Discussion

CFSEI

The CFSEI raw scores for this teenage dyslexic sample suggest that they are moderately depressed in total, general and parental self-esteem. However, this sample had lower academic self-esteem than both the most and least depressed normative samples, but higher social self-esteem than the most and least depressed normative samples. This teenage dyslexics sample also scored lower than the successful, but higher than the unsuccessful samples from Battle (1992).

Different patterns exist with the dysfunctional and the functional CFSEI samples: the teenage dyslexics scored lower than the dysfunctional and the functional sample in general, academic and parental self-esteem, but higher than both the dysfunctional and the functional samples in social self-esteem, and higher than the dysfunctional but lower than the functional samples in total self-esteem, as found by Battle (1992).

The teenage dyslexic’s CFSEI percentile scores were lower than the three Thomson (1996) dyslexic’s samples for general, academic and parental self-esteem. The teenage dyslexics also scored higher than Thomson’s (interviewees) sample in social self-esteem but lower in the other two samples from the same study.

<table>
<thead>
<tr>
<th>Range</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal depression</td>
<td>0–13</td>
</tr>
<tr>
<td>Mild depression</td>
<td>14–19</td>
</tr>
<tr>
<td>Moderate depression</td>
<td>20–28</td>
</tr>
<tr>
<td>Severe depression</td>
<td>29–63</td>
</tr>
</tbody>
</table>

Table 7. Depression scoring guide to the BDI-II
**CISS**

Patterns from the CISS raw scores suggest that these teenage dyslexics use more task and emotion-orientated coping but less avoidance-based coping than the early and late adolescent’s standardized data would indicate. The use of distraction and social diversion as coping styles were on par with the standardized data.

The CISS percentile means scores suggest the teenage dyslexics raw scores are on the higher side of average on task and emotion-orientated coping, average on social diversion coping and on the lower side of average on avoidance and distraction-orientated coping.

**BDI-II**

Patterns from the BDI-II raw scores suggest that this teenage dyslexic sample have generally normed depression ratings, although when broken down via gender a different pattern appears. Males have minimal depression but females have moderate depression, with the female scores similar to those with adjustment and anxiety disorders. Thus, it could be concluded that these female dyslexic teenagers internalize their frustrations, whereas the dyslexic males from this sample, use other means (externally, possibly using aggression, as found by Thomson and Hartley (1980) and Svensson, Lundberg & Jacobson (2001) to deal with their frustrations.

**Conclusions**

This paper first begun with a review of the ‘under’ and ‘over’ reactions of stress that dyslexics experience at mainstream school, according to Thomson (1996).

A literature investigation was made into self-esteem and the two types of reaction identified by Thomson, looking at different task, emotion and avoidance-based coping and their manifestations.

A search was then made into different standardized instruments to investigate self-esteem, avoidance and depression, these resulted in the use of the CFSEI (Battle, 1992), CISS (Endler & Parker, 1999) and the BDI-II (Beck et al.; 1996). These instruments were used on a dyslexic teenager sample of nineteen (12 males and seven females).
The CFSEI (self-esteem) data seem to firstly suggest than dyslexic males and females score differently, indicating that they cope differently to their dyslexia and their experiences of being dyslexic at school. Females in this sample generally scored lower than their male counterparts in all sub-scales of self-esteem, with general and academic self-esteem in particular. (With academic self-esteem referring to individuals’ perceptions of their ability to succeed academically and general self-esteem referring to individuals’ overall perceptions of their worth.) This would suggest female dyslexics should be given special attention from teachers with a view to improving their low self-esteem. The males from this study seem to score as per normative data, thus they must cope in different ways, and hopefully this is evident in the CISS data.

The CISS (coping) data also indicate that gender differences are evident. The females from this teenage dyslexic sample seem to use significantly more emotional (70 percentile) and avoidance (61 percentile) based coping, favouring social diversion (68 percentile) over distraction avoidance (56 percentile), than their males. Interestingly, the males scored very low (35 percentile) on avoidance, which would suggest they cope in very different ways compared to female dyslexics in this study.

The BDI-II (depression) data suggests the female teenage dyslexics from this study suffer significantly more depression (their scores rated as ‘moderate depression’) to their male counterparts (rated as ‘minimal depression’). Such results suggest the females in this sample are affected significantly different than teenage dyslexic males.

Putting all the data together from the three standardized tests, the results suggest that teenage dyslexic females especially suffer from low general and academic self-esteem, strongly use emotional and avoidance-based coping, resulting in moderate depression. Their male counter-parts seem to score average academic self-esteem or just below average general, social and parental self-esteem.

They use task-based coping with little use of emotional and avoidance coping, resulting in minimal depression.

**The next step**

Counselling has been noted before as a good way to bridge the (emotional and avoidance) effects of dyslexia supplementing remedial education (Hales, 2004; McLoughlin, Fitzgibbon & Yound, 1994; Miles & Miles, 1999; Ott, 1997; Scott, 2004). To date, the role of counselling has been given a low priority in the remedial treatment of dyslexic children.
This neglects the secondary emotional shock and despair that dyslexic children can feel, not least because of direct criticism from their teachers.

That said, however, Edwards (1994) has found that some children are more receptive to counselling than others.

Lawrence (1985, p. 194) postulates that children who receive remedial help with the skill of reading will show higher gains if this help is supplemented by a therapeutic approach aimed at enhancing self-esteem.

Work on an individual counselling approach was consistently more successful than using a traditional remedial approach alone. Lawrence found that counsellors do not need to be highly trained professionals - any adult who can be warm and sympathetic with limited training could fulfil this role.

Hales (2001) suggests that counselling ‘involves treatment of the person, not just the remediation of the difficulty’ and suggests the dyslexic (and especially the undiagnosed dyslexic) at mainstream school needs to deal with:

- Being made to feel strange, different or inadequate.
- Being made to think they are thick or stupid.
- Knowing however much they review for a test, they will forget all memory of the learnt words or facts before they even enter the test room/classroom.
- Knowing that whatever homework they present will be seen as untidy and rushed.

However the view of Peer and Reid (2001, p. 5) should be noted; they suggest that ‘even the best counselling will not help the child whose underlying difficulties have not been identified and addressed’.
3.0 The Sources and Manifestations of Stress Amongst School-aged Dyslexics, Compared with Sibling Controls


Abstract

All school children experience stress at some point in their school careers. This study investigates whether dyslexic children, by way of their educational and social difficulties, experience higher levels of stress at school. The School Situation Survey was used to investigate both the sources and manifestations of stress amongst dyslexic children and non-dyslexic sibling controls. Samples were broken down by gender, age and the size of families. Results suggest significant differences between the groups, with dyslexics in academic years 3–5 experiencing the highest stress levels, specifically in interactions with teachers, worries over academic examinations (SATs) and performance testing, causing emotional (fear, shyness and loneliness) and physiological (nausea, tremors or rapid heart-beat) manifestations.

Results also suggest that dyslexics in larger families (3–4 sibling families) experience greater stress in interactions with their peers, than those in smaller families (two sibling families) possibly from unfair sibling comparison.

Keywords: dyslexia; stress; siblings; family; emotional; peers

Literature review

*Defining Dyslexia*

In the UK, terms such as ‘Dyslexia’ or ‘Specific Learning Disabilities (SpLD)’ are used, overseas and especially in the US, ‘Learning Disabled (LD)’ and ‘Reading Difficulties (RD)’ are commonly used terms. Whilst both sets of terms are similar in their emotional manifestations, ‘Dyslexia’ and ‘SpLD’ are more specifically concerned with difficulties that
affect most situations (not just reading, e.g. co-ordination and balance) with neurological and phonological epidemiology.

**The Dyslexic Entering School**

From the moment a dyslexic child enters primary school, they must take oral instructions from teachers and remember them long enough to act on them to finish the task. The short-term memory of children with dyslexia will put them at an immediate disadvantage (Thomson, 1995). Their slow and poor phonological awareness will cause slow and inaccurate processing of the spoken language (e.g. slowness to read, becoming confused and ending up copying from others nearby). These problems may affect the child’s ability to participate in classroom discussions or activities (Dockrell, Peacey, & Lunt, 2002; OFSTED, 1999). An informed teacher will place the child at the front of the class, allow more time for tasks, repeat instructions and link the child with a friendly classmate who can prompt where needed.

Where teachers are ill informed, problems with fine motor skills will make the dyslexic primary school pupil look clumsy and open them to ridicule from both teachers and peers (e.g. dropping their lunch tray full of food, etc.). On top of this, their inability to organize and deal with timekeeping effectively (e.g. taking the lunch time bell to mean the end of day and leaving school for home prematurely) means they are highly vulnerable at school (Alexander-Passe, 2004a, b; Edwards, 1994; Riddick, 1996).

**How Dyslexics React?**

According to Thomson (1996) there are two reactions to stress from school in dyslexics. Firstly, ‘under’-reactions, where the child withdraws and manifests extreme anxiety, e.g. trembling and sweating when asked to read. These children have a low self-opinion of themselves and generalize every aspect of their life as a failure. Depression is also common in this group (Ryan, 1994). Secondly, we have ‘over’-reactions to stress, e.g. being seen as successful in other areas, being the class clown, hiding their failure under a ‘couldn’t care less’ attitude and manifesting silly behaviour. This can also lead to aggression, with extreme cases leading to delinquency (Edwards, 1994). Alexander-Passe (2006) using standardized measures identified high levels of emotional coping along with depression amongst teenagers with dyslexia. The results suggest that gender is a major
factor in how dyslexics deal with school-related stress, with significant differences emerging between males and females.

Evidence suggests that school-aged dyslexics in mainstream schools experience both emotional bullying and humiliation at school from both peers and teachers, according to Edwards (1994) and Eaude (1999). Morgan and Klein (2001, p. 61) found that a lack of understanding at school and home, resulted in bullying by teachers and peers leading to violent reactions. One dyslexic tutor recalled her own experiences at school (as a dyslexic); she actually stabbed a teacher’s hand with the sharp end of a compass, because ‘she called me stupid once too often’.

Hales (1995) suggests there is strong evidence to support the view that dyslexics are more disturbed by criticism. Hales found dyslexics experience considerable amounts of criticism at school, especially before their condition is diagnosed. One explanation is that of Svensson, Lundberg and Jacobson (2001, p. 63) ‘early failure on a socially, highly valued skill such as reading would cause an almost traumatic frustration leading to aggression, acting out behaviour and eventually, in severe cases, to conduct disorders’.

Fergusson and Lynskey (1997) also suggest that a reversed relationship could also be true ‘social, emotional and conduct problems can lead to RD’. Dockrell et al. (2002, p. 33) note ‘problems of rejection and unpopularity in schools for pupils with SEN’, especially pupils without statutory statements.

Peer Group

According to Morgan and Klein (2001) responses from the peer group can be a powerful influence on the individual’s perception of self. Dyslexics at special schools can overcome feelings of isolation and the sense of being different, those in mainstream school are never allowed to forget they are ‘different’ and ‘abnormal’. Integration in mainstream schools is possible with the right level of support, but this is not commonly possible due to financial constraints (Audit Commission, 2002). Morgan and Klein reported feelings of isolation and loneliness, also they note it shows an awareness that reflects the ability of dyslexic people to make comparisons with peers and to recognize intuitively their undefined and unacknowledged learning differences (p. 53).

Loneliness and isolation are typical of many dyslexic people, according to Tur-Kaspa, Weisel and Segev (1988).


**siblings**

There are very few studies investigating the relationship between dyslexics and their siblings, with the majority being qualitative.

Osman (1997) suggests it is ‘generally acknowledged that the presence of a child with Learning disabilities (LD) in the family affects the social and emotional development of siblings’. Osman claims’ siblings were found to have a special and loving relationship with their LD sibling (usually as adults looking back on their childhood), the feelings during childhood are complex and emotionally charged.

Trevino (1979) suggests adverse effects on siblings are more likely to occur in families in which:

- There are only two children one of whom has a disabling condition.
- The children are the same sex and close in age.
- The child without the problem is the eldest female in the family.
- Parents cannot accept their child’s learning disability.

Osman (1997) notes that realistically the child with LD usually requires more parental time and attention; thus, a sibling may understandably be resentful of this. Parents also tend to expect more of the non-LD sibling (e.g. better academic results) and being surrogate parents to protect their LD sibling (e.g. helping with homework or taking care of them in the playground to ward off bullies). Osman suggests that the need by parents of non-LD siblings, for other sibling to be ‘super-kids’, compensating for their damaged LD child, to protect the ‘family ego’ is unreasonable.

Osman also notes that many non-LD siblings feel guilty for being ‘normal’ and ask themselves ‘why him and not me?’ along with not wishing to do too well at school to embarrass their LD sibling. An interesting avenue for questioning was Osman’s finding that non-LD siblings were excluded from family decisions about children with LD, resulting in their lack of knowledge which led them to ‘become resentful, anxious and confused with questions they may be afraid to ask’, such questions she found to include ‘is what my brother has contagious?’, ‘If I’m bad will I get it too?’ or even ‘will I be responsible for my brother when my parents are old?’. However, she also found understanding, one sibling explained that ‘dyslexia is not a disease; rather like a kind of illness that doesn’t go away’.

Kurnoff (2000) suggests that raising a family is always a balancing act, especially if you have more than one child. If one child has a LD, but others do not, you may wonder
how to manage their different practical and emotional needs? In her study of 27 siblings (young children, teenagers and young adults) she found:

- An older sibling often tends to be more protective over a younger child with dyslexia.
- Younger non-LD siblings tend to see their older LD sibling through ‘rose-tinted glasses’. For them ‘different’ does not mean ‘better’ or ‘worse’.
- Age is a factor, but only with teenagers, who have strong concerns about being different. Young children lack the intellectual understanding and thus essentially take their sibling with LD at face value.
- Home atmosphere is a factor. Calm families with a sense of control are optimistic. Where there are concerns about differences, academic limitations, parental confusion, and the dyslexic child seems to be ‘worried and confused’.
- 67% did not resent their parents spending extra time with their dyslexic sibling.
- 35% help their dyslexic sibling.
- 76% are more understanding of others with disabilities.
- 56% are confident about their dyslexic sibling’s future.

The majority of non-LD siblings she met considered themselves ‘fortunate not to have to struggle in school’ (Kurnoff, 2000).

Dawson (2006) found that siblings of LD children often express confusion and disappointment about getting less attention from their parents, than their LD sibling. She agrees with Osman (2006) that ‘brothers and sisters need to have open and honest conversations with parents and each other about LD, in order to understand and manage the problems that arise’. Dawson noted common feelings of ‘guilt over not having a learning disability, anger and resentment about getting less attention and frustration over having to deal with a sibling who is different’.

Bloom (1990), Cordoni (1990), Dyson (1993) and Silver (1988) all note that siblings of children with LD are at risk of problem behaviours, such as:

- Non-compliance with parents and teachers.
- Difficulty with impulse control.
- Distractibility.
- Disruptive and immature social behaviours.
- They also found that siblings with LD sometimes reject their LD sibling in school and play situations.
Minuchin (1988) found that parents of children with LD expect their non-LD sibling to perform better at school or excel in extracurricular activities. From such expectations among the non-LD sibling, Dyson (1993) and Lobato (1990) found the development of positive reactions such as patience, empathy, understanding and tolerance. However, more studies (Lobato, 1990; McHale, Sloan, & Simeonsson, 1986; Stoneman, Brody, Davis, & Crapps, 1988) note negative reactions from such parental expectations, including:

- Anger.
- Resentment over perceptions of differential treatment.
- Embarrassment over their sibling to peers.
- Fear they will catch the disability.
- High demands for achievement.
- Guilt over having resentment/negative thoughts about the sibling.

Bloom (1990), Cordoni (1990), Dyson (1993) and Silver (1988) also note that families with LD and non-LD siblings are characterized by having:

- Higher levels of anxiety.
- Overprotectiveness.
- Rigidity issues.
- Family discord.

Lardieri, Blacher, and Lee Swanson (2000) found that siblings of LD children ‘held strong feelings of love and affection for one another and that they thought very highly of their (LD) brothers and sisters’ and that these findings were not significantly different from non-LD families. They also found that families experiencing high levels of stress, could be characterized by being ‘dysfunctional or chaotic’. Lastly, they found no significant differences between families with and without LD siblings in terms of sibling behaviour, sibling self-concept and perceived sibling impact.

**Experimental hypothesis**

It is hypothesized that dyslexics, when compared with sibling control groups, will show different profiles in the sources and manifestations of stress.

Specifically, dyslexics will show higher stress from academic and teacher interactions, with emotional manifestations.

The following questions will be asked:
• Do school-aged dyslexics experience different stresses, than their non-dyslexic siblings?
• Do school-aged dyslexics manifest stress differently, than their non-dyslexic siblings?
• Does age affect sources and manifestations of stress?
• Does the size of the family affect the sources and manifestations of stress?

**Methodology**

**Participants**

Participants were recruited from a flyer sent to dyslexic associations in England and Scotland, distributed by the British Dyslexia Association (BDA). Two school-aged groups were recruited; dyslexics and their non-dyslexic siblings. This control group was chosen as firstly being of comparable social backgrounds and secondly allowing analysis of both by family and as a complete group. Proof of dyslexia assessment was sent by parents to confirm diagnosis.

**Sample**

All participants were siblings in families of both dyslexics and non-dyslexics. In total, N=155 children took part, N=78 dyslexic and N=77 non-dyslexic controls. Of the dyslexics, N=22 were female and N=56 were males. Of the controls, N=51 were female and N=26 were male. An additional N=5 were excluded as having a co-morbidity condition to dyslexia (e.g. ADHD). All were school-aged with the mean age for the dyslexics being 12.76 yrs. (SD. 2.964) and for the controls 12.1 yrs. (SD. 2.602). The groups were also sub-divided into three academic year groups (3–5, 6–9 and 10–12) for further analysis.

**Apparatus**

The project uses the ‘School Situation Survey’ (SSS) questionnaire by Dr Barbara J. Helms and Dr Robert K. Gable (1989). The questionnaire identifies sources and manifestations of stress (letters in brackets will be used to differentiate between the sub-types of stress).
Apparatus-test variables

Each variable’s initials (e.g. TI) will be used in charts.

Sources of Stress

- Teacher Interactions (TI): Assesses students’ perceptions of their teachers’ attitudes towards them. Students who score high on this scale most likely have negative perceptions of their teachers’ feelings towards them and are possibly experiencing stress as a result of their interactions with their teachers.
- Academic Stress (AS): Assesses situations that relate to academic performance or achievement. Students who score high on this scale are likely to be experiencing stress relative to their grades, test taking and to general academic performance.
- Peer Interactions (PI): Assesses students’ social interactions or their perceptions of their classmates’ feelings towards them. Students who score high on this scale would have stress related to peer interactions.
- Academic Self-concept (ASC): Assesses students’ feelings of self-worth, self-esteem, or self-concept relevant to perceived academic ability. Students who scores high on this scale would indicate poor academic self-concept.

Manifestations of Stress

- Emotional (E): Assesses feelings such as fear, shyness and loneliness. Students who score high on this scale are probably experiencing frequent feelings of stress or emotional discomfort.
- Behavioural (B): Assesses actions, reactions or behaviour towards others, such as striking out or being hurtful or disrespectful. Students who score high on this scale are likely to misbehave or act out in school.
- Physiological (PH): Assesses physical reactions or functions such as nausea, tremors or rapid heartbeat. Students who score high on this scale are likely to be experiencing frequent physiological symptoms of stress.
Reasoning behind the Apparatus

Chandler (1981) and Schultz (1980) found that certain aspects of a school environment can be stressful for students; this may manifest itself in stress, tension or anxiety relating to situations that feel threatening or are perceived as threatening a student’s self-esteem, security, safety or way of life. With Moore (1975) and Chandler (1982) commenting that stress in certain proportions is important for personal growth and optimum functioning but excess levels can be threatening to one’s health, more so in children/young adults.

Students who are engaged in compulsory education spend the greater part of their day at school. They are placed in situations where high academic and social demands are made on them. Philips (1978) and others have noted that schools use an official academic curriculum and a hidden social curriculum. Both types of curriculum can cause stress, young children find interactions with their peers challenging which can sometimes lead to aggressive confrontations.

Philips found that teachers establish certain atmospheres in how they teach classrooms, favouritism by students of certain teachers is evidence that different interaction methods are used to mixed success. Encouragement and discouragement can be given by teachers in certain words or reactions, this can be taken to heart by young children, who are brought up to believe everything said whether sarcastic or not, as found by Philips. Helms and Gable (1989) found that children assign meaning to everything they see, they code it to one of three things: positive, negative or threatening and respond accordingly. Threatening events are the source of stress and can manifest themselves in numerous ways (emotional, behavioural or physiological).

Normally students learn to cope from strategies they have learned from encountering everyday minor stresses, but if major stresses develop, various manifestations can appear.

Forman and O’Malley (1984) found that students with high anxiety tend to engage in more problem behaviour (than those who do not), are more distracted by their peers, have poor self-concepts and generally have lower academic achievement. Academic work almost always suffers when higher than average stress levels are found. Many begin to lose their own self-worth, especially being part of society. Reed (1984) also found that students need ‘validation’ from teachers to tell them that they are achieving their best.

Students who suffer from stress that they cannot cope with effectively, normally manifest their stress in emotional, behavioural or physiological behaviours (Elliot &
It is common to find that students are unable to recognize that they are stressed and how their bodies manifest their stress. Symptoms include: sarcastic or verbal attacks on peers or talking back to teachers, displaying aggressive behaviour, being inattentive in class, difficulty concentrating, chronic fatigue, headaches and abdominal pain unrelated to illness.

Commonly when the stress is not recognized by peers, teachers, schools, students receive a lack of sympathy and a vicious cycle is set in motion that can have serious consequences for physical, intellectual and emotional development (Alexander-Passe, 2004a, b; Edwards, 1994; Riddick, 1996).

**Scoring**

All frequency scores were on a five-point scale: Never-5 to Always-1: The TI, PI, E and B were based on six questions, AS and PH on three questions and the ASC was on four questions. For confidentiality reasons, volunteers were coded by their postcode. From the scoring manual, a high (3), medium (2) or low (1) standardized stress rating was given, according to age and gender.

**Internal Consistency, Test–Retest and Correlations to Other Measures**

Internal-consistency coefficients of the seven scales are moderate, from 0.68 to 0.80 based on an N=7036 school-aged sample, in (3–5, 6–8, 9 and 10–12) grade clusters (Gable, 1986; Nunnally, 1978). Test-Retest reliabilities, based on N=621 grade 7–9 children with an interval of 3 weeks, ranged from 0.61 (Physiological scale) to 0.71 (Teacher Interaction scale). The SSS has been correlated to the State Trait Anxiety Inventory for Children (STAIC, Spelberger, Edwards, Lushene, Montuori, & Platzek, 1973) on an N=1111 samples of 5th, 7th & 9th grade children. Correlations ranged from 0.10 (Behavioural scale) to 0.71 (Emotional scale) with a significance of p<0.05. One explanation given by Helms and Gable (1989) for the mixed correlation was that the STAIC has a theoretical emotional base compared with the SSS which is based on theoretical behavioural (affect) base.
Results

**Part 1**

The data were analysed by both gender and academic age groups.

By Group Alone

Results in Appendix A indicate strong differences between dyslexics and controls, especially in Peer Interaction and Academic Self-concept.

By Gender Alone

The results broken down by gender (see Appendix B) suggest that the experimental four groups (Dyslexic Females, Dyslexic Males, and Control Females & Control Males) perform differently. Noticeably there are major differences with the sources of stress (Peer Interaction and Academic Self-concept) and manifestations of stress (Behaviour and Emotion). Looking at the genders more closely, dyslexic females score the highest (of the four groups) in Peer Interaction, Teacher Interaction and Academic Self-concept for sources of stress, with Behaviour for the manifestations of stress. The dyslexic males scored the highest (of the four groups) in Academic Stress for the sources of stress, with Emotion and Physiological for the manifestations of stress.

From the control siblings, females scored (like dyslexic females) higher (than control males) in Teacher Interactions, but unlike dyslexic females, they scored lower in Peer Interactions and Academic Self-concept (sources of stress). Also, unlike dyslexic females, they scored higher in Emotion manifestations of stress.

Control males scored higher than control females in Peer Interactions, Academic Stress and Academic Self-concept of the sources of stress and Behaviour and Physiological manifestations of stress.

By Academic School Year (Another Way to Look at Age)

Three academic year groups were investigated (see Appendix C): 3–5 yrs. (commonly 8–10 yrs. old), 6–9 yrs. (commonly 11–13 yrs.) and 10–12 yrs. (commonly 14–17 yrs.). To improve readability, the results have also been plotted, see Figure 1.
Part 2

N=72 families took part in this study (N=158 participants), with both dyslexics and non-dyslexics. The majority (N=59) were two sibling families, followed by (N=11) three sibling families and N=3 four sibling families. Case studies were chosen to focus on interactions in three different-sized families (one for each type).

Appendix D looks at one example of a two-sibling family taking part in this study (dyslexic male 15 yrs. and non-dyslexic male 13yrs), it suggests that the dyslexic sibling whilst being older has significantly higher Peer Interaction and Academic Self-concept sources of stress, with higher Physiological manifestations of stress. It should be noted the non-dyslexic sibling scored higher for behaviour manifestations of stress. Thus, the dyslexic sibling has stress from dealing with his non-dyslexic peers at school, resulting in feelings of self-worth, self-esteem or self-concept relevant to perceived academic ability. These result in physical reactions or functions such as nausea, tremors or rapid heartbeat.

Appendix E looks at dyslexic siblings in a three-sibling family (dyslexic male 9yrs and non-dyslexic females 9 and 14yrs). This example indicates the dyslexic, whilst being one of twins (the other not being dyslexic), has high Peer Interaction, but very high Teacher Interaction, Academic Stress and Academic Self-concept sources of stress. With very high Emotion manifestation of stress. Thus, in this three-sibling family, the dyslexic sibling finds interactions with his peers and teachers highly stressful (experiencing stress relative to their grades, to test taking and to general academic performance) and lastly with feelings of self-worth, self-esteem or self-concept relevant to perceived academic ability in the sources of stress. These would manifest in fear, shyness and loneliness as manifestations of stress. In this family, the other 9 yr. old (non-dyslexic) also experiences Academic Stress and Teacher Interaction Stress, manifesting in Physiological and Emotional symptoms. This suggests a significant coping difference between dyslexic and non-dyslexic twins, with one that finds school difficult and one that does not experience difficulties.

Appendix F looks at a four-sibling family, with two dyslexics (dyslexic male 13yrs, dyslexic female 17yrs, non-dyslexic females 16 and 18yrs). One of the dyslexic siblings is the youngest with the other being the second oldest. There are differences between the dyslexics, mainly with the manifestations of their stress. Both dyslexics show significantly moderate and high Peer and Teacher Interaction with Academic Self-concept sources of stress, also both show significantly high Behaviour manifestations of stress. The older dyslexic shows significantly high Physiological and Emotion manifestations of stress. Thus, both the two dyslexics in this four-sibling family, find Teacher and Peer interactions.
Figure 1. Dyslexic vs control and academic year data charted stressful (feelings of self-worth, self-esteem or self-concept relevant to perceived academic ability).

Their manifestations of stress include reactions, or behaviour towards others, such as striking out or being hurtful or disrespectful. The older dyslexic also experiences frequent feelings of fear, shyness and loneliness, with physical reactions or functions such as nausea, tremors or rapid heart-beat. The case study also indicates that the younger non-dyslexic (16 yrs.) also exhibits high Physiological and Behavioural, with moderate Emotional manifestations from stress, which could result from Teacher Interaction sources. At 16yrs old, the non-dyslexic is likely to be pushed academically to do well in forthcoming GCSE examinations. The other non-dyslexic (18yrs) sibling seems to be coping well with school.

Part 3

As mentioned earlier, the samples represented families with dyslexic and non-dyslexic siblings, with the latter being controls. The majority were two sibling families, with three- and four-sibling families also being represented. As we have looked at specific examples of two-, three- and four-sibling families, we now asks the question, do profiles emerge in dyslexics of different size families, for sources and manifestations of stress?

Appendix G looks at sibling families in groups, significant differences are indicated between the different-sized families, these will be discussed later in this paper.
Discussion

This study used the School Stress Survey to investigate how dyslexics, compared with sibling controls, experience the sources of stress and any manifestations from school stress.

Data were analysed from several perspectives (diagnosis, gender, age and the size of family) to gain an understanding of how school-aged dyslexics cope. The hypothesis of this study was that dyslexics experience different profiles of both sources and manifestations of stress. A discussion will now take place to answer the following questions:

- Do school-aged dyslexics experience different stresses than their non-dyslexic siblings?
- Do school-aged dyslexics manifest stress differently than their non-dyslexic siblings?
- Does age affect sources and manifestations of stress?
- Does the size of the family affect the sources and manifestations of stress?

Do School-aged Dyslexics Experience Different Stresses than their Non-dyslexic Siblings?

The initial analysis (Appendix A) points to major differences in Peer Interaction and Academic Self-concept, and to a lesser degree, Teacher Interaction and Academic stress. Results suggest school-aged dyslexics feel stressed by their perceptions of their classmate’s feelings towards them and have poor feelings of their self-worth related to academic ability. Schools in the 20th century are performance related, with SAT scores determining not only progression but also career choices. The results of such a culture is that both parents and children make a comparison with their child’s peers, whilst most children have a portfolio of skills and abilities that off-set any difficulties experienced in other subjects, many dyslexics excel in very few subjects, if any, and thus the balance is not experienced (Alexander-Passe, 2004a, b). Literacy has a knock-on effect to all subjects of the National Curriculum, which contrasts public perception of dyslexia being ‘just’ experiencing difficulty in English Language.

As found by Alexander-Passe (2004a, b), when school-aged dyslexics feel unable to compete with their peers, they begin to question their own self-worth and their ability to
be ‘normal’. As soon as they feel ‘abnormal’ the tower of bricks falls, affecting their self-esteem and self-concept concerning what they can actually achieve. This creates stress in interactions with teachers and affects their ability to achieve in academic settings.

Looking at the gender breakdown data for the sources of stress (Appendix B), gender differences exist for both dyslexics and controls. The most significant gender difference among the dyslexics were in Academic Stress, where the dyslexic males scoring higher than dyslexic females. Such stress could be understood to be related to attaining academic results, test taking and their performance. Old-fashioned values of the male being the ‘bread-winner’ in the family can drive parents to place more pressure on boys to perform academically.

Other differences between the dyslexic genders are in Peer Interaction and Teacher Interaction, with the dyslexic females scoring higher than their male counterparts. According to research (Terje & Bru, 2004) girls are more affected by social interactions at school; thus this result indicating higher stress from Peer and Teacher Interactions is not entirely surprising in this study. Greater Peer and Teacher Interaction stress among dyslexics (as compared with controls) suggests that dyslexics negatively attribute meaning to teacher and peer interactions, whether real or not.

**Do School-aged Dyslexics Manifest Stress Differently, Compared with their Non-dyslexic Siblings?**

Appendix A suggests that the differences between dyslexics and control siblings are not as great as in the sources of stress, with both groups showing moderate manifestations of stress. However, the control siblings score slightly higher in Behaviour manifestations, but the differences are insignificant. The largest differences are for Emotion and physiological manifestations, which are higher among the dyslexics. As the Emotion manifestation is the highest score, one could hypothesize that this is the primary and Physiological being the secondary manifestation. Thus, school-aged dyslexics have feelings of fear, shyness and loneliness which also manifest in symptoms such as nausea, tremors or rapid Heart-beat. Results indicate that dyslexics commonly perceive themselves as being abnormal and unable to be like their peers, both in the classroom but also in the playground and socially. The results indicate fear, shyness and loneliness which express the alienation young dyslexics feel as a result of their failing academically and failing to be recognized as needing help. Hales (1995) compares dyslexia to a physical disability, noting that no one
would ask a person in a wheelchair to walk, but teachers constantly ask dyslexics to read aloud in class; thus, physical disabilities are recognized and treated fairly, but an invisible disability is ignored and commonly discriminated against.

The results from Appendix B suggest that there are manifestation differences not only between dyslexics, but between dyslexic males and females. The highest score (of all four groups) is for Behaviour, interestingly amongst dyslexic females (the difference is also significant between dyslexic males and females), Helms and Gable (1989) explain Behaviour manifestations to be reactions, or behaviour towards others, such as striking out or being hurtful or disrespectful. Appendix B also indicates high scores for the sources of stress (Peer and Teacher Interactions), seen together, suggest female dyslexics find interactions difficult and thus strike out (Behaviour manifestations) as a defensive mechanism.

Dyslexic males score highest for Emotion and Physiological manifestations of stress, with the physiological manifestation being the most significant difference to dyslexic females. The results suggest that dyslexic males are more likely to be excluded from their peer group, not only by their inability to keep up academically but their own perception of self-worth. If they think of themselves as stupid, they will withdraw. The scores differentiating dyslexic males to control males are not as large as would be expected; thus, it could be concluded that all school-aged children, to some extent, suffer from Behaviour, Emotion and Physiological manifestations of school-related stress, be it examination nerves causing nausea, to being aggressive towards their peers, possibly caused by high testosterone levels or puberty.

**Does Age Affect Sources and Manifestations of Stress?**

Looking at the sources of stress with the three dyslexic groups (Appendix A and Figure 1), it is difficult to see a pattern, but year group 3–5 does seem to have frequently scored with the highest sources and manifestations of stress, as compared with year group 6–9 dyslexics and to a lesser degree, 10–12 yr. dyslexics. Why is this? What happens at this time which does not happen in the other years? Year group 3–5 covers the last years of primary school and the stress of gaining entry to a secondary school of their or their parent’s choice. Many children are given tutors to gain high marks in their SAT’s.

Year group 3–5 dyslexics, score highest in Teacher Interaction and Academic Stress sources of stress and Emotion and Physiological manifestations of stress.
On the basis of assumption above, teachers (and parents) are likely to put pressure on them to achieve at subjects they themselves feel unable to. Year group 6–9 dyslexics do not score highest in any of the sources sub-scales, but do in Behaviour manifestations of stress. Year group 10–12 dyslexics score highest in Peer Interaction sources of stress and no sub-scales for manifestations of stress.

Do the control groups follow the same pattern? Year group 3–5 controls score highest in Teacher Interaction, Academic Stress and Academic Self-concept sources of stress but not highest in the manifestations of stress. Looking at the dyslexic 3–5 yr. group scores, it could be said that they also score high in Academic Self-concept. Thus it could be argued, to a lesser degree, that both dyslexics and their sibling controls find Teacher Interactions, Academic Stress and Academic Self-concept stressful in 3–5 yr.

It is very interesting that the 3–5 yr. group are perceived to be of higher stress than 10–12 yr. group, the later covering GCSEs and A levels. One explanation could be that by the time dyslexics reach GCSE taking, their teachers fully know and understand their pupil’s abilities and difficulties, whereas, in 3–5 yr. group they put pressure on their pupils without full knowledge of their abilities and difficulties.

Does the Size of the Family Affect the Sources and Manifestations Stress?

This question was investigated in two ways, firstly a look at three families (two siblings, three siblings and four siblings) and secondary through group mean data. As noted earlier, out of N=155 participants, there were N=118 in two sibling families, N=29 in three sibling families and N=8 in four sibling families. It should be noted that there may be pre and post school age siblings who were unable to participate in this study. For Part 3 of this study, one family of each size (two, three and four siblings) were chosen for analysis. The three families were chosen at random.

The investigation of the three families brought in interesting results, with the dyslexic in two sibling families scoring highest for Teacher Interaction, Academic Self-concept and Physiological sub-scales. The dyslexic in the three sibling families scored highest for Teacher Interaction, Academic Stress, Academic Self-concept and Emotion. The dyslexics in the four-sibling family scored highest for Peer and Teacher Interaction, Academic Self-concept, and Behaviour (one of the two dyslexics also scored highest for Physiological and Emotion). What does this tell us? The pattern of Teacher Interaction and Academic Self-concept for the sources of stress seems constant. While interesting, the specific data are difficult to
generalize from, there could be a number of factors and variables which can affect specific individual results. With that in mind, interestingly, the dyslexic siblings in four-sibling families score the highest in Peer and Teacher interaction sources of stress and especially Behaviour, but to a lesser degree Physiological and then Emotion manifestations of stress. It should be noted that only N=3 dyslexics were in four-sibling families, compared with N=63 in the two-sibling families; thus reservations must be made to the strength of such a finding.

Appendix G looks at group mean data to begin to make generalizations.

Just using the two- and three-sibling family results found similar differences in larger families (to a lesser degree), with dyslexics in three-sibling families scoring higher in Teacher Interaction, Academic Stress and Academic Self-concept sources of stress and Emotion manifestations of stress. However, the dyslexics from two-sibling families scored highest for Behaviour and Physiological manifestations of stress. Thus, even discounting the four-sibling families, it would seem there is a difference to the sources and manifestations of stress in dyslexics in different sized families. There is also a significant difference between the dyslexics and controls in those sized families, especially in Peer Interactions and Academic Stress (three-sibling families), Academic Self-concept (two- and three-sibling families) for the sources of stress. Differences in the manifestations of stress only include Emotion (for three-sibling families).

There is stress in all families, and school work or the attainment of grades is commonly a source of stress, where the child is highly intelligent, the stress is likely to be manifest internally (Alexander-Passe, 2004a, b; Riddick, 1996). Results seem to suggest that in larger families (three siblings) where the child is having difficulties at school (e.g. dyslexia), the stress is likely to be manifest externally.

Throw in factors of unfair comparison with a number of siblings without difficulties in school can create an atmosphere which is emotionally unhealthy for the young dyslexic at home. They also choose to withdraw as a coping strategy.

**Does Birth Order Have Any Affect?**

Appendix H investigates birth order as a variable for data in this study. Mean data indicate that dyslexics are generally not first-born (be it in two- and three-sibling families). Analysis of the data found no significant mean difference between those dyslexics who are
1st and 2nd born dyslexics in two-sibling families (looking at the sources and manifestations of stress).

One could hypothesise that parents create peer pressure from unfavourable comparison, saying ‘why can’t you achieve like your OLDER brother/sister?’

Such a comparison is not only hurtful for the dyslexic, but suggests they are unable to reach the attainment of their older sibling. The work of Lobato (1990), Sloan and Simeonsson (1986) and Stoneman et al. (1988) notes there can be anger, resentment and embarrassment between family members with LD and non-LD children. As it is also common for a younger sibling to follow in their older sibling’s ‘foot steps’ and attend the same school, unfavourable teacher comparison is also a contributing factor.

Conclusions

This paper began by looking at available studies on stress among young and teenage dyslexics, followed by studies looking at how interactions at home and school can affect them on a day-to-day basis.

This study investigated school-related stress using the School Stress Survey (Helms & Gable, 1989), with two main sample groups and six sub-groups.

Results indicate that the sources and manifestations of stress were different for dyslexic and non-dyslexic siblings. The profiles for the dyslexics are as follows:

- Dyslexic females are likely to have negative perceptions of their teachers’ and peers’ feelings towards them and are possibly experiencing stress as a result of their interactions with their teachers and peers, with poor academic self-concept. They are likely to misbehave or act out in school.

- Dyslexic males are likely to be experiencing stress relative to their grades, to test taking and to general academic performance. They are likely to be experiencing frequent feelings of stress or emotional discomfort and the physiological symptoms of stress.

It must be noted that both male and female dyslexics, compared with their control siblings, suggest a profile of negative perceptions of their peers’ (these can include siblings) feelings towards them and are possibly experiencing stress as a result of their interactions with their peers, with poor academic self-concept, manifesting in the likelihood of them
misbehaving or acting out in the classroom/school and experiencing frequent feelings of stress or emotional discomfort.

The SSS data also investigated the sources and manifestations of stress by age, with significant differences in the three bands identified (academic years 3–5, 6–9 and 10–12 covering primary, primary/secondary and secondary school bands).

The data suggest that dyslexics in academic years 3–5 experience significantly more Academic Stress and poor Academic Self-concept and manifest such stress both emotionally and physiologically. In the control siblings, academic years 3–5 also were the most stressful, with significant ratings of Academic Stress and Academic Self-concept, but in contrast with the dyslexics there were no significant manifestations of stress. Such a result suggests fundamental differences with how dyslexic and non-dyslexic siblings cope at school.

Lastly, this paper also investigated family size in relation to the sources and manifestations of school stress. Results suggest that the larger the family, the greater the Peer Interaction and Academic Stress causing Emotional manifestations.

It is hypothesized to be from unfair comparison of academic results (parental expectations) between peers causing dyslexics siblings to withdraw and be shy. Investigations of birth order among the dyslexic sample suggest that dyslexics are commonly not first born and thus experience peer interaction stress from unfair comparison with their older sibling. Further investigations found no significant difference (concerning the sources and manifestations of stress) in dyslexics that were first and second born in two-sibling families.

The implications for practitioners and teachers are that the secondary (emotional) implications of having a learning disability (such as dyslexia) should be taken into consideration, alongside any remedial educational assistance. The years of prior failure leading up to help being given can create emotional suffering which should not be ignored.

The next step for this research is further studies into families of dyslexics, focussing on how siblings compare themselves, family dynamics and why different manifestations of stress exist for larger families. Birth order and gender affect the sources and manifestations and may be a useful development for this body of work.
Acknowledgements

The author would like to thank the British Dyslexia Association (BDA) for help in gaining this sample, as well as the parents making time for the study in their busy lives. Thanks also go to my wife and four beautiful and lively young children for allowing me the mental space to study.
### Appendix A: dyslexic vs control data

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<th>Manifestations of school stress</th>
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### Appendix C: Dyslexic vs Control and Gender Data

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<td><strong>Dyslexics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females N = 22</td>
<td>2.489</td>
<td>0.796</td>
<td>0.646</td>
<td>2.316</td>
<td>0.706</td>
<td>2.193</td>
<td>0.766</td>
<td>1.591</td>
</tr>
<tr>
<td>Males N = 56</td>
<td>2.273</td>
<td>0.599</td>
<td>0.790</td>
<td>1.965</td>
<td>0.708</td>
<td>2.229</td>
<td>0.781</td>
<td>1.567</td>
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<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females N = 51</td>
<td>2.172</td>
<td>0.548</td>
<td>0.568</td>
<td>1.988</td>
<td>0.674</td>
<td>2.142</td>
<td>0.612</td>
<td>1.547</td>
</tr>
<tr>
<td>Males N = 26</td>
<td>2.057</td>
<td>0.511</td>
<td>0.585</td>
<td>1.978</td>
<td>0.607</td>
<td>2.087</td>
<td>0.675</td>
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### Appendix C: Dyslexics vs. Controls with Academic Year Data

<table>
<thead>
<tr>
<th>Sources of School Stress</th>
<th>Manifestations of School Stress</th>
<th>Dyslexics</th>
<th>Controls</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Teacher Interaction</td>
<td>2.526</td>
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<tr>
<td></td>
<td>Academic Stress</td>
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</tr>
<tr>
<td></td>
<td>Academic Self-concept</td>
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<table>
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<th>Groups</th>
<th>N</th>
<th>Mean</th>
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<tr>
<td>Dyslexics 3-5 yrs</td>
<td>18</td>
<td>2.526</td>
<td>0.653</td>
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<tr>
<td>6-9 yrs</td>
<td>43</td>
<td>2.556</td>
<td>1.593</td>
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<tr>
<td>10-12 yrs</td>
<td>17</td>
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<td>0.653</td>
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<tr>
<td>Controls 3-5 yrs</td>
<td>13</td>
<td>2.526</td>
<td>0.653</td>
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<tr>
<td>6-9 yrs</td>
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<td>2.556</td>
<td>1.593</td>
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<tr>
<td>10-12 yrs</td>
<td>27</td>
<td>2.526</td>
<td>0.653</td>
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</table>
Appendix D: comparison of two-sibling families

Appendix E: comparison of three-sibling families

Appendix F: comparison of four-sibling families
## Appendix G: comparison of two-, three- and four-sibling families

<table>
<thead>
<tr>
<th>Sources of school stress</th>
<th>Academic Stress</th>
<th>Manifestations of school stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Interaction</td>
<td>Teacher Interaction</td>
<td>Academic Stress</td>
</tr>
<tr>
<td>Two-siblings Control N = 55</td>
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<td>1.759</td>
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<tr>
<td>Two-siblings Dyslexic N = 63</td>
<td>0.948</td>
<td>0.751</td>
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<tr>
<td>Three-siblings Control N = 17</td>
<td>2.228</td>
<td>2.222</td>
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<tr>
<td>Three-siblings Dyslexic N = 12</td>
<td>2.155</td>
<td>2.116</td>
</tr>
<tr>
<td>Four-siblings Control N = 5</td>
<td>3.300</td>
<td>3.200</td>
</tr>
<tr>
<td>Four-siblings Dyslexic N = 3</td>
<td>2.687</td>
<td>2.687</td>
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</table>
Appendix H: comparison of birth order (two- and three-sibling families)

<table>
<thead>
<tr>
<th>Birth order (mean data)</th>
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</tr>
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<tbody>
<tr>
<td>All dyslexics, $N = 81$</td>
<td>1.772 (SD 0.678)</td>
</tr>
<tr>
<td>All controls, $N = 79$</td>
<td>1.481 (SD 0.572)</td>
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<table>
<thead>
<tr>
<th>Families of two siblings</th>
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</thead>
<tbody>
<tr>
<td>Dyslexics, $N = 63$</td>
<td>1.603 (SD 0.493)</td>
</tr>
<tr>
<td>Controls, $N = 56$</td>
<td>1.375 (SD 0.488)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Families of three siblings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyslexics, $N = 13$</td>
<td>2.385 (SD 0.768)</td>
</tr>
<tr>
<td>Controls, $N = 20$</td>
<td>1.7 (SD 0.733)</td>
</tr>
</tbody>
</table>
4.0 The Dyslexia Experience: Difference, Disclosure, Labelling, Discrimination and Stigma


Abstract

This paper reports on a qualitative/quantitative adult dyslexic study of N=22 dyslexics who presently or have in the past suffered from a depressive disorder, and N=7 control dyslexic adults. It compares depressive to non-depressive dyslexics, with gender and academic success variables. Interpretive Phenomenology Analysis was used to investigate dyslexia and stigma.

Many perceived dyslexia as positive and gave them unique skills, but made them feel different. This difference was perceived to come from having to work harder than their non-dyslexic peers to achieve in life, as dyslexia affected many aspects of their daily life. Interestingly most would not seek a cure if it was offered - suggesting they perceived their dyslexia to be integral to whom they were, and losing their dyslexia would be as great as losing a limb.

Evidence suggested that dyslexics experience discrimination due to their disability, whether they perceive it as a disability or not. They felt there was a lack of public domain information on dyslexia and its effects, as many of their peers perceived it being negative. Recent legislation in the US and the UK aims to protect dyslexics in the workplace, however to gain protection they need to disclose their hidden disability to the world, making them vulnerable.

Many dyslexics have survived the last twenty, thirty or more years in the workplace and school without their difficulties being highlighted, one participant noted that they had felt successful in hiding for so long, with many feeling unhappy about disclosing their difficulties as they may fear this would firstly go on their record and difficulty is with words, with the remainder noting a broader difficulty with learning.

Many felt dyslexia was a disability when they were children, as school was seen as an inflexible environment with no escape from reading and writing, along with unfair
comparison with age appropriate peers - ‘I’m only disabled by my dyslexia when you put me into a classroom’ (Natasha).

It was felt as an adult there was more flexibility to choose professions that play to a dyslexic’s strength and use supportive technology (e.g. computers and spell-checkers). However, a minority withdrew from a society when they felt ill-equipped to function effectively within it.

Stigma due to dyslexia was highlighted as many camouflaged their difficulties at work, attributing their difficulties to quirkiness (positive) rather than being disabled (negative). Implications for the Asia Pacific area are discussed.

**Keywords:** Dyslexia, Difference, Disclosure, Discrimination, Labelling, Stigma

**Introduction**

The aim of this study was to pose a semi-structured interview script to a range of UK adult dyslexics to investigate how they coped, their reactions to success/failure and a review of their childhoods.

Adult dyslexics were chosen as they would have the ability to review their childhoods for the origins of their coping strategies, and could give a data rich explanation of any emotional damage.

Four groups were sought: dyslexics with and without a clinical depression diagnosis, degree-educated and non-degree-educated dyslexics. This research aimed to support a hypothetical ‘Dyslexia Defensive Mechanisms’ model as first proposed in Alexander-Passe (2009a).

**Empirical Review**

**What is Dyslexia?**

‘Dyslexia’ first coined by Berlin (Wagner, 1973) described word blindness, defined through Greek roots: ‘Dys’ difficulty and ‘Lexia’ with words. In 1886 Morgan first documented the term and condition in the British Medical Journal (Snowling, 1996). Since then numerous medical and educational professionals have sought to understand the condition, its origins, its cause or causes, and its treatment.
Whilst the origins of the condition concerns difficulty with words, modern definitions are broader and this forms disagreements in the field. Symptoms include difficulties in: short-term memory, phonology, rapid naming, balance, motor skills, and organisation.

Based on the disparity between the original definition and modern symptom lists, a number of alternative names have been proposed to describe the condition better: Specific reading retardation, reading difficulties, specific reading difficulties, reading disability, learning disability, unexpected reading difficulty, and Specific learning difficulties. 75% tend to agree the secondly it might have a negative effect on promotion and career prospects.

Reflecting this disagreement, the draft revision to the 5th version of the American Psychiatric Association’s ‘Diagnostic and Statistical Manual (DSM-5)’ originally suggested the term ‘learning disorder’ to be replaced with ‘dyslexia’ to ‘render APA terminology consistent with international use’, describing ‘difficulties in reading accuracy or fluency that are not consistent with the person’s chronological age, educational opportunities, or intellectual abilities’ (Cowen & Dakin, 2013).

However its final version (APA, 2013) now uses 'Specific Learning Disorder’, based on a reasoning that the international conceptions and understandings of dyslexia (and other conditions) exist but disagree on its definition (Tannock in Elliot and Grigorenko, 2014). Elliot and Grigorenko argue that attempts to find a single definition have been hampered by factors of inclusivity, some criticised as being too inclusive and others too exclusive. Rice & Brooks (2004) and Fitzgibbon & O’Connor (2002) agree that a universally agreed definition and explanation remains elusive, and that definitions to date have been subjective and too broad, and serve self-obsessive purposes.

Fletcher & Lyon (2010) offer three primary reasons why dyslexia is hard to define: Dyslexia is an ‘unobservable construct’ meaning that attempts to measure it are imperfect and people suffering from the disorder cannot objectively report it.

Dyslexia is ‘dimensional’ meaning that there are varying degrees to which individuals may experience difficulty, from minor, severe and in between the two.

There is great disagreement from practitioners and psychologists about what characteristics to include and exclude.

The lack of an agreed definition and assessment route has meant that dyslexia is misunderstood which can lead to low identification rates, with many only being diagnosed in adulthood. It is argued that the majority of dyslexics leave school without diagnosis, and
suffer at school through unsuitable and discriminatory teaching methods by teachers lacking special educational needs (SEN) training to identify children with learning difficulties (Hartley, 2010; OFSTED, 2010; Rose, 2009). Whilst current UK education policy states that all classroom teachers are teacher of all pupils including SEN, the lack of SEN training of teachers remains a concern (OFSTED, 2010; Driver Youth Trust, 2013).

Dyslexia affects both children and adults, but as children they are less able to hide their difficulties or differences (e.g. reading aloud, having their writing critically assessed etc.) as much as in adulthood where assisted adults or technology can be utilized. However many dyslexics experience discrimination on a daily basis (Dale & Aiken, 2007; Michail, 2010). Scott (2004) and the Alexander-Passe (2004a, 2006, 2010), Riddick (1996) and Willcutt & Pennington (2000) note the frustration and anger that can build up inside dyslexics when faced with tasks that highlight their inabilities, causing stress and anxiety (the fear of an already experienced negative event or task).

Alexander-Passe (2010), Scott (2004), McNutty (2003) agree that dyslexics generally camouflage their difficulties, with advanced coping strategies, so a sense of normality can be projected.

Dyslexics are very conscious of their differences, so create a secondary persona to operate in the wider community (Alexander-Passe, 2010, 2012; Scott, 2004). However when cracks occur in this persona, it can be highly embarrassing, demonstrating how vulnerable they can be, and confirming their otherness compared to their peers.

There is however a shortage of research concerning dyslexia, disclosure, discrimination and stigma and this paper aims to shed light on this subject.

**Disclosure**

Dale & Aiken (2007, p.14) note in a recent study of dyslexic nurses ‘many have gone to considerable lengths to hide their difficulties’. Morris & Turnbull’s (2006) study found dyslexic student nurses experiencing widespread concealment of student disabilities in clinical settings, as one student nurse noted ‘when they (staff) find out they withdraw from you and make out you’re not on the same level...they try to rubbish you and make you feel you’ve got nothing in your brain’ (p.38). However without disclosure no ‘reasonable adjustments’ and mentoring can be possible, to deal with the task-based difficulties experienced – so a double-edge sword.
The need for disclosure is complicated by many dyslexics not perceiving themselves as being disabled (Blankfield, 2001) or not being recognised by others as being disabled.

However the legal and bureaucratic position of dyslexia (in employment legislation and law) defines it as a disability. Also to gain additional support in the workplace individuals would need to disclose their dyslexia within the first 6 weeks of UK employment, to gain reasonable adjustments.

To disclose dyslexia at a work interview may mean that you may not be offered the post. Is it a risk worth taking? If you avoid disclosure until you start, your employer could argue you withheld disclosure of an important aspect relating to your ability to fulfil the post - thus you could be fired for nondisclosure.

Nalavany, Carawan and Sauber (2013) investigated dyslexia as a hidden disability. They note that adult dyslexics face complex decisions over disclosure. Hellendoorn, and Ruijsseenaars (2000) found most participants felt dyslexia impacted on their daily life, experiencing many educational and career related problems. Nalavany, Carawan and Rennick (2010) noted that from 39 adult dyslexics, nine distinct cluster themes were identified, including: Why can’t they see it? Pain, Hurt, and Embarrassment from past to present; and Fear of disclosure.

Barga (1996) studied the experiences of nine university students with learning disabilities (another term often used for dyslexia in the USA). Over a six-month period, students experienced labelling and stigmatization, which they considered to be a barrier to their education. Whilst all participants were selective when disclosing information about their disability to others, 6 of them reported deliberately using avoidance behaviours and concealment to hide their disabilities, fearing ridicule and stigmatisation. They feared rejection, ridicule and stigmatisation, so adjusted their lives to avoid the likelihood of perceptions of difference. Dyslexic participants noted regular examples of clinical misunderstanding and often ignorance and hostility by staff in regard to their dyslexia. Barga argues that dyslexia continues to attract an unwarranted stigma, which in some individuals can adversely influence the development of a constructive relationship with their mentor. Goffman (1964) defined stigma as the perceived deviance of personality or characteristics from the norm, within a particular context.

Rao (2004) reported that many undergraduate students avoid reporting their disability to avoid negative social perceptions, although admitting that their academic achievement may suffer as a result.
Empirical evidence suggests that dyslexia is similar to invisible differences such as religious orientation, in that there is no obvious appearance of disability (e.g. being in a wheelchair or exhibiting so called abnormal behaviour). Such invisible groups according to Beatty and Kirby (2006) have difficulty forming group awareness, because people are reluctant to publicly claim a potentially damaging identity in the workplace and socially.

Being visible means declaring one’s hidden identity and ‘coming out’ to employers, friends and family. Such disclosure is weighed up for its advantages and disadvantages, before the plunge to openly disclose. Thus in many ways being dyslexic and sexual preference are similar as they are both (incorrectly) perceived to be negative in workplace and ‘coming out’ is required to gain protection by discrimination legislation. Gordon and Rosenblum (2001) note that ironically the laws that protect people with invisible identities also creates and reinforce stigma by naming and categorizing groups.

This points to the lack of power by certain minority groups to advocate for themselves e.g. being black or a woman in the last century or being gay in this century, along with dyslexics these groups may find it hard to advocate for themselves as many lack the skills. In the UK, the main national charity protecting the rights of dyslexics (British Dyslexia Association) was set-up and run for many years by parents of dyslexics for school-aged dyslexics. Unintentionally they supported the argument that dyslexics were unable to voice their concerns and were incapable of fending and campaigning for themselves.

However, The BDA has evolved from this model with dyslexics being involved, especially at the top, and a developing focus on adult dyslexics.

In a personal relationship when should you disclose dyslexia? If you say it on your first date, then will there be a second? If you leave it until a relationship has settled, then you could be perceived as lying e.g. not admitting that you are a drug addict or addicted to gambling. Alexander-Passe (2012) found that some dyslexics disclosure on the first date as a discussion point, such as wearing glasses for reading, whereas others waited several dates into the relationship, as they wanted to secure the relationship before dropping the bombshell. Alexander-Passe concluded this depended on how dyslexia is perceived by the individual. Is it a strength or a weakness?

Disclosure has risks in the workplace; however it can have also its benefits. In the UK and the US disclosure brings access to support required to do the job well. As noted earlier, ‘Access to Work’ and the ‘Disability Support Allowance’ can mean the difference between succeeding at work or in your studies.
These issues are particularly pertinent for the Asia Pacific region where adult support and legislation may be in its infancy.

**What is Stigma?**

Susman (1994) defines Stigma as an adverse reaction to the perception of a negative evaluated difference. It is not the attribute of the individual who bears the difference, but rather it resides in the interactions between the person with the difference and others who evaluate the difference in negative terms (Goffman, 1964). Critics of stigma argue it is too broadly conceived (Cahill & Eggleston, 1994).

Schulze & Angermeyer (2003) suggest that stigma adds a dimension of suffering to the primary illness – a second condition which may be more devastating, life-limiting, and long-lasting than the first.

Link & Phelan (2001) define Stigma as having five main components:

- **Labelling** – the recognition of differences and the assignment of social factors to those differences e.g. recognising that the individual may have different biological/neurological traits to the norm.
- **Stereotyping** – the assignment of negative attributes to these social factor differences e.g. differences that matter and are deemed by others to be undesirable.
- **Separation** – occurring when the reactions to others leads to avoidance of those with the undesired difference (felt stigma).
- **Status Loss** – when the individual with differences is not allowed to fully participate in society or a community, thus the value of their place is reduced e.g. net worth is devalued by other people’s views.
- This is perceived as ‘enacted stigma’.
- **Discrimination** – when those with the differences are viewed negatively and they are barred from certain jobs or tasks in society. Not based on abilities but perception (enacted stigma).
- **Power differential** – occurs when those with the authority use their position to bar or reduce those with the difference from taking full roles in society e.g. a company boss who feels negatively about disability may not shortlist a person with a disability for a vacant job.
Stigma comes from making a conscious choice to discriminate against another individual, be it at school, walking down the street, at work, or socially. Within the medical model of disability, stigma can cause families to send a disabled or sick person away ‘for their own good’ but really to protect families from social stigma.

Stigma and discrimination go hand in hand as part of the medical model of disability (a disability that needs medical intervention to be cured). It has meant that disabled individuals, such as those with dyslexia are unable to get jobs, based on an incorrect perception that if a person can’t read or write that they were ‘stupid’, and ‘unintelligent’. In schools children may avoid making friends with those on the slow table, or make nasty remarks when a dyslexic child is made to read aloud in class and stumbles over their words.

Unfair advantage

Green, Davis, Karshmer, Marsh & Straigh (2005) found that those with an invisible disability were perceived by others as ‘faking it’ to gain special privileges or advantages, comments such as ‘what’s the matter with her? She’s not in a wheelchair!’

Lisle (2011) argues that there is growing evidence that a stigma exists towards those with a learning difficulty (LD) e.g. speaking of LDs as being intellectually inferior (McNulty, 2003; Denhart, 2008; Gerber, Reiff & Ginsberg, 1996).

Interestingly, Snyder, Carmichael, Blackwell, Cleveland & Thornton (2010) found those with non-physically visible disabilities reported more negative experiences than those with physical disabilities, questioning the validity of invisible disabilities in public perceptions (are they really disabled?)

Are they just trying to gain an unfair advantage?

The use of a label that identifies dyslexia was found to affect teachers perceptions and actions, many felt sorry for the students (Frymier & Wanzer, 2003), some perceived them as not only more difficult to teach but also less intelligent (Gersten, Walker & Darch, 1988; Frymier & Wanzer, 2003). Frymier & Wanzer found that many negative perceptions by teachers were due to the negotiation between student and teacher about reasonable accommodations, and the teacher questioning the validity of a non-visible disability.

Lock & Layton (2001) found some college professors held beliefs that the label ‘learning disabilities’ was an excuse to get out of work and laziness/not trying hard enough.
Even though studies suggest dyslexics/LDs work themselves to exhaustion and illness to achieve at the level of their peers (Barga, 1996; Denhart, 2008; Reiff, Gerber & Ginsberg, 1997; Rodis, Garrod & Boscardin, 2001).

**What drives stigma towards dyslexics?**

Lisle (2011) argues that stigmatisation of those with dyslexia/learning disabilities persists for the following reasons:

- **Lack of Knowledge** – Duchane, Leung & Coulter-Kern (2008) found that teachers stigma towards those with dyslexia comes from misunderstanding or a lack of knowledge about disabilities. Roe (2004) found educators with better knowledge of disability legislation had a more positive attitude towards those with learning disabilities.

- **Invisibility of disability cues** – Upton, Harper & Wadsworth (2005) found that perceptions of accommodation deservedness was greater for disabilities that are more visible and have more obvious educational implications; thus the visibility/invisibility of disabilities is an important influence on the formation of disability perceptions. The lack of physical cues hinders non-disabled individuals from understanding any educational difficulties. It is still perceived that those with dyslexia/LD have lower IQ, so performing on par or better than peers and claiming extra accommodations can be misunderstood as cheating by both educators and students (Winters, 1997; Field, Sarver & Shaw, 2003; Elaqua, Rapaport & Kruses, 1996).

- **Self-fulfilling prophecies** – Jussim, Eccles & Madon (1996) and Hornstra, Denessen, Voeten, van den Bergh & Bakker. (2010) discuss the correlations between teachers expectations of LD/ dyslexic students and their resulting student achievements, with those treated as having low ability accordingly believing such perceptions and acting/achieving in line with these beliefs. Evidence suggests that students with dyslexia/LD are more likely to drop out of college and university than those with LD/dyslexia and this will lead to social and economic disadvantage, argued to lead many such individuals into criminality (Mishna, 2003; Morrison & Cosden, 1997; Kenyon, 2003)

- **Confirmation of bias** – It is argued by Nickerson (1998) that educators will interpret information in a manner consistent with existing beliefs or
explanations. Thus once a view of dyslexia/LD has been formed, maybe from teaching a single individual with such learning differences, then they will tend to ignore individual characteristics and treat all with a single definition and give a single type of accommodation (Higgins, Raskin, Goldberg & Herman, 2002). However as noted earlier, all dyslexics are different and the differences are along a continuum, thus all dyslexics need tailored accommodations.

- Out-group homogeneity – it is argued that dyslexics/LDs are viewed by others as being of lower intelligence than themselves, they tend to be grouped together and ignored in social settings. This is based on convenience, rather than treating all people as individuals.

- Abelism – Hehir (2007) explains that there is an assumption in society that those without disabilities are more capable than those with disabilities, and in society groups tend to socialise with likeminded individuals. Thus as seen in school playgrounds, those who like football socialise together, and those with disabilities socialise together. It is also argued that in schools the use of withdrawal for intervention groups will mean that some groups are viewed as incapable and abnormal, and thus can be and barred from joining certain high achievement social groups. This can create an unwelcoming and inaccessible environment for individuals with disabilities.

The effect of labelling with dyslexia

Several studies in the US and UK have investigated the impact of labelling in schools. These range from historical studies drawn from the 1970’s and 80’s to more recent studies.

Foster, Schmidt & Sabatino (1976) showed a film of a non-disabled child to two groups of 22 primary/elementary school teachers. One group was told the child was average (control), other group (experimental) was told the child had learning disabilities. The study found the experimental group rated the child more negatively, which led to researchers to conclude the label generates negative expectations in teachers affecting their objective observations of behaviour and may be detrimental to a child’s academic progress.

In a larger study of 88 teacher Foster & Salvia (1977) similar results were found ‘teachers perceived more deviance when the child was labelled learning disabled than
when he was labelled normal’ (p.533). Moreover, Gillung & Rucker (1977) found similar outcomes with 176 regular and 82 special education teachers in seven urban and suburban educational districts/authorities ‘teachers apparently perceived a child described with a label as having more severe academic or behavioural problems and required more intensive special services than the same child described without a label’.

More recently, Bianco (2005) in a study of 247 general and special educational teachers were more willing to refer non-labelled students to gifted and talented programs (91%) than the same student labelled with emotional/behavioural disability (70%) or labelled as having a learning disability (63%). Some of the teachers remarked that they wanted disabled students to be in a less pressured environment.

The focus now turns to student peers, are they affected by labels? Bak, Cooper, Dobroth & Siperstein (1987) investigated how non-disabled peers viewed students being removed for intervention sessions without the use of labels for difficulties.

Two scenarios were investigated, removal to the ‘resource room for 25% of the school day’ and removal to the ‘special needs room for 80% of the school day’. Results indicated that students were sensitive about students who leave classrooms during the day, the authors noted (p.154) ‘the absence of formal labels did not prevent children from forming negative (although realistically pessimistic) expectations based on their own experiences with special class children’s academic limitations’. Those students were aware of the differences of where students were being taught for long periods, and negatively perceived removal for intervention.

Sutherland, Algozzine, Ysseldyke & Freeman (2001) suggests students were not rejected by their peers based on a disability label, but were more likely to be rejected by their actions. However, those who were informed about the positive attributes of the learning disabled students were held in higher regard by their non-disabled peers. The authors argue teachers need to inform the classes of positive-strengths rather than purely focus on negative weaknesses.

Labels seem to have both negative and positive affects in education. Knowing a child’s label, especially those of mental retardation, emotional/behavioural difficulties and learning difficulties tend to affect teacher perceptions and expectations for student success (Bianco, 2005; Foster & Salvia, 1977), with teachers also highly influenced over student behaviour over labels (Levin, McCormick, Miller, Berry & Pressley, 1982).

More recently, studies point to labelling of dyslexia having a positive effect by mitigating the effects by providing an acceptable explanation for a student’s difficulties in
reading, spelling, or writing effectively, compared to negative concepts of laziness or having a low IQ (Solvang, 2007; Riddick, 2000; Taylor, Hume & Welsh, 2010). This may reflect greater awareness if dyslexia through advocacy groups and the media, and a recognition that there can be strengths as well as weaknesses in dyslexia.

Taylor, Hume & Welsh (2010) investigated self-esteem levels in three groups of students: with a dyslexia label, with a general special educational needs label, or no label at all. The authors noted ‘being labelled as having a general need negatively affected children’s self-esteem, because unlike the label dyslexia, this label offers very little in the way of an explanation for the child’s academic difficulties, and because targeted interventions are not as available for those with a less specific label’ (p.191). Riddick (2000) also found the dyslexia label was preferred by children, than a general ‘special educational needs’ label. In Norway, Solvang (2007) also found that discovering they had the label ‘dyslexia, many students were relieved that their difficulties were not their fault, removing the status of lacking motivation or having a low IQ’. However it did suggest a greater problem for the parents based on the implication that they had given the child the neurological difficulties through their genes.

Acceptance of labelling

Dyslexics and their parents commonly have issues over labelling, which come from the acceptance of difference. The perception is that a label can confirm a difference so severe that it warrants a label. Early screening and intervention is seen by many educationists to be the key to helping the dyslexic to achieve their potential at school (Johnson, Peer & Lee, 2001; Lyon, Fletcher, Shaywitz, Shaywitz & Torgesen, 2001), as leaving screening/identification until late in primary school or early secondary school will mean negative concepts of difference will be established, with possible secondary emotional manifestations as a consequence.

Riddick (1996) and Zetterqvist-Nelson (2003) discuss the use of labelling and also whether such a label is a suitable definition of a person made up of combinations of strengths and weaknesses. Alexander-Passe (2010) noted a research participant labelled as a young child, who found the label a negative badge or ‘noose around her neck’. It limited her ability to attempt subjects as they were known to be difficult for dyslexics, her curriculum was reduced, and she concluded the label was a negative factor in her life, especially at school. Zetterqvist-Nelson (2003) found similar findings, in that dyslexics
preferred non-labelling as they did not want to stick out amongst their peers. However participants did find the label useful on a personal level as a relief and explanation for their difficulties, along with a moral relief that their difficulties were not their fault; but not on a public level, as it could be a cause of bullying or weakness in the eyes of others (as also found by Singer, 2005). Both Zetterqvist-Nelson and McNulty (2003) agree that the positivity of the labelling comes from individual’s understanding of their diagnosis. This places an onus on diagnosticians, teachers and parents to ensure that dyslexic children and adults understand their profile of abilities and disabilities.

**Stigma and Disability**

Relating to this paper’s topic of Stigma, it is argued that the lack of a single agreed definition of dyslexia, as per the lack of a single identification measurement instrument, has meant that dyslexia is broadly misunderstood. It is this lack of understanding that creates difficult situations for dyslexics at school as children and in the workplace as adults. In the majority of cases the stigma has come from lack of public knowledge and the inability to see that all individuals have skills and abilities to aid society. Stigma has caused problems such as social exclusions and religious persecution, however it is more subtle influences which underlie the problems that stigma causes, being turned down for jobs and treated as unable to mix in society which can have lasting effects on countless generations.

Empirical knowledge in the field of stigma suggests that the experience of stigma (Byrne, 2000) includes the following: shame, blame, secrecy, being the black sheep of the family, isolation, social exclusion, stereotypes and discrimination. He then suggests there is a cycle to stigma which begins with the initial condition (e.g. disability) which leads to stigma, then discrimination, then disadvantage, leading to lower self-esteem and more disability as a result.

This then leads to less resistance and then triggers and reinforces the initial condition. Such a cycle is self-perpetuating and leads to greater stigma as no understanding is added to society. In the workplace Stuart (2004) suggests a cycle starting with the initial condition (e.g. disability) leading to social stigma, then unemployment, then under employment due to feeling too inferior to their peers to work, leading to self-stigma by viewing yourself as less worthy by internalizing the social stereotypes which again leads back to reinforcing the initial condition. Both models suggest that unless intervention is made both cycles are self-perpetuating and society cannot develop.
There are four main definitions of disability (Kaplan, 2008) which is relevant to the discussion of stigma and dyslexia. The first is the ‘moral or religious’ definition of disability, where the individual is regarded as disabled by sinning against God. The second is the ‘medical’ definition where the person is disabled by being born defective or they develop a condition which makes their body ineffective. The third is the ‘rehabilitation’ definition that comes to the fore in that until such a fix is made with medical intervention they are not a complete person without the medical fix.

The last is the social definition, which believes that difference is part of society and that everyone has something to give to society. It celebrates difference compared to the other three definitions which sees difference as something to be feared and to be avoided.

**Dyslexia and Stigma**

Little research has been undertaken to study dyslexia and stigma. The author’s earlier work on ‘Dyslexia and Depression’ (Alexander-Passe, 2010) was the first, looking at adult dyslexics through an investigative qualitative study; this paper is based on this investigation.

Riddick (2000) in an interview study of 27 children and 16 adults, all dyslexic, argued that although labelling can lead to stigmatisation, this is not always the case. It is argued that stigmatisation can take place in the absence of formal labelling, and stigmatisation can precede labelling, thus Riddick sees a greater gain from labelling, than not.

MacDonald (2010a) argued that in a study of dyslexia in prisons, dyslexic inmates felt stigmatised by their literacy inabilities by not having a dyslexia label. In fact the stigma of restricted reading and writing ability had an indirect impact on offenders’ self-confidence. MacDonald concluded (p.95) that *the data in this study suggests it is not the label causing the stigma, but the symptoms. Removing the label only reduced the educational support and prohibits their legal rights*.

Morris and Turnbull (2007) with a sample of 87 trainee nurses during their clinical placements in hospitals, argued that dyslexia continues to attract an unwarranted stigma and can adversely affect the learning experience. The need for disability awareness training in the workplace and improved education/service partnerships to support these students is considered crucial, one noted *‘I overheard heard him (my mentor) tell another nurse that I wouldn’t make it as a nurse because I’m dyslexic’*. Co-workers too, often discriminate and
stigmatise, by only seeing the perceived negative aspects of dyslexia, thus a biased focus on negatives (McLaughlin, Bell & Stringer, 2004).

Rice & Brooks (2004) and Elliott & Place (2004) argue that using the label of dyslexia can be counter-productive as it stigmatise individuals, however Elliott (2005a, b) argues the lack of a label will stigmatise poor readers who lack the dyslexia label – damned if you do, damned if you don’t!

**The Dyslexia Debate**

Recent debate has focused on the effectiveness of using the term ‘dyslexia’ in educational settings. Elliott & Grigorenko (2014) argued in a recent controversial book ‘The Dyslexia Debate’ that the term is not only misleading (as it can cover more than just difficulty with reading and writing), but as intervention for dyslexics is no different to that for poor readers, that dyslexia is not a distinctive learning disorder and as such the term should be discontinued. They also note that using the term dyslexia can ‘reduce the shame and embarrassment that are often the consequence of literacy difficulties. It may help exculpate the child, parents and teachers from any perceived sense of responsibility’.

Bishop (2014) tends to agree that the term is incorrect but concludes that there are other conditions such as depression and schizophrenia which are also ‘massively problematic in terms of validity and reliability’ (Kendell & Jablensky, 2003). However Bishop suggests that for each term whilst being incorrect and misleading, the strongest argument for retention comes not from science but public perception. That ‘some of the most passionate defences of the dyslexia label come from those who have built up a sense of identity around this condition, and who feel they benefit from being part of a community that can offer information and support’.

Also the term ‘poor readers’ leads readers to assume that such difficulties could be fixed through more effort and quality teaching, whereas ‘dyslexia’ suggests something different, long-term, and requiring specialist intervention.

Bishop interestingly concludes that ‘at present we are between a rock and a hard place. The rock is the term ‘dyslexia’, which has inaccurate connotations of a distinct neurobiological syndrome. The hard place is a term like ‘poor readers’ which leads people to think we are dealing with a trivial problem caused by bad teaching’.

The recent OFSTED (2010) review of special educational needs (SEN) and disability in UK schools found that pupils were often incorrectly identified as having SEN when they
were not, and that good or outstanding teaching would remove such a barrier to learning, ‘...as many as half of all pupils identified for School Action would not be identified as having special educational needs if schools focused on improving teaching and learning for all, with individual goals for improvement’ (p.5). However it also noted that identification was generally inconsistent and many SEN pupils were not identified, that children with similar difficulties were treated differently; and lastly that parents views of inconsistency were well-founded. The review also found that parents pushing for a statement of SEN (now replaced with ‘Educational Health Plans’) may not be enough to guarantee the high level of specialist interventions required. They noted that many schools misidentified pupils with SEN to cover up for their poor quality teaching and that by diagnosing them as having SEN they were assisted in removing their GCSE results from school result league table data, and gaining additional government funding.

The Bercow Report (2011) for the UK’s Department for Education supports OFSTED’s view that SEN is inconsistently supported in the UK, and that even having a statement of SEN does not guarantee the specialist support needed, noting ‘the current system is characterised by high variability and a lack of equity. (It) is routinely described by families as a 'postcode lottery' (p.14).

It again stresses the need for early screening and intervention in schools, something that has been noted for several decades in UK schools. This lack of ‘early screening and intervention’ has meant millions of dyslexics in the UK have lacked the specialist intervention they need to reach their potential, and can be argued to lead to many dyslexics ending up in prison.

Hewitt-Mann (2012) suggests that up to 50% of the prison population is dyslexic, a figure not dissimilar to similar studies from the UK, Sweden and the USA (Mottram, 2007; Rack, 2005; Alm & Andersson, 1995; Kirk & Reid, 2001).

Tony Blair, the then UK Prime minister commented that ‘many of those people in the prison population did not have the educational opportunities [that most of the population received] – often because they are dyslexic, had not been diagnosed properly, or did not get the extra help they needed’ (Hansard, 2007).

To conclude, dyslexia is contentious in its definition, diagnosis and intervention. It is generally misunderstood, but as a term it is accepted and those with the identification gain assistance in managing the difficulties they face.
Incorrect public perceptions of dyslexia are misleading, and being an invisible disability many find it hard to accept which can lead to discrimination, stigma and bias in many environments.

However gaining the help required at school is highly problematic (high variability and a lack of equity), not only in schools screening and identifying policies, but once an identification has been made, receiving the specialist support needed. As adults, many dyslexics lack diagnosis so face stigma and discrimination in the workplace, whilst coping with their difficulties, and will tend to use a number of defensive mechanisms to camouflage their difficulties, but these can result in negative mental health manifestations (Alexander-Passe, 2015a).

Methodology

Sample

Participants were recruited in three ways: (1) emails to UK dyslexia newsgroups, (2) adverts on dyslexic web-forums, (3) inclusions on dyslexia associations’ websites. Four dyslexic sample groups were requested (with/without depression, degree/non-degree educated), with dyslexic adults with depression being the largest group recruited.

All participants were required to provide evidence of: (1) formal diagnosis of dyslexia evidence (e.g. educational psychologist reports), (2) depression (e.g. a clinical depression diagnosis or at least one course of physician/GP prescribed anti-depressants). Whilst mild depression is common in society, only severe cases tend to be referred for clinical diagnosis.

See Tables 1-3 for sample details. The mean age of dyslexia diagnosis data indicated that non-depressives tended to be diagnosed earlier, however in both groups they were mainly diagnosed post-school and after leaving university.

Apparatus

An investigative semi-structured interview script was used with 31 main themes (See Figure 1). Interviews lasted between an hour and three hours.
Table 1. Sample data: Size, mean age and standard deviations

<table>
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<th>Standard Deviation</th>
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<td>No depression diagnosis</td>
<td>7</td>
<td>35.14</td>
<td>10.89</td>
</tr>
<tr>
<td>Depressed - females</td>
<td>15</td>
<td>38.8</td>
<td>11.71</td>
</tr>
<tr>
<td>Depressed - males</td>
<td>7</td>
<td>49.86</td>
<td>11.32</td>
</tr>
<tr>
<td>Non-depressed - females</td>
<td>3</td>
<td>18.0</td>
<td>1.63</td>
</tr>
<tr>
<td>Non-depressed - males</td>
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<td>43.5</td>
<td>6.54</td>
</tr>
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<td>Depressed - dyslexia diagnosis</td>
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<td>22.28</td>
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<th>Male or Female</th>
<th>Degree Educated</th>
<th>Non-Degree Educated</th>
<th>Depressed at school</th>
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<td>M</td>
<td>X</td>
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<td>M</td>
<td>X</td>
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<td>45</td>
<td>F</td>
<td>X</td>
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<td>F</td>
<td>X</td>
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<td>F</td>
<td>X</td>
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<td>X</td>
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<tr>
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<td>X</td>
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</tr>
<tr>
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<td>M</td>
<td>X</td>
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<td></td>
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<tr>
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<td>F</td>
<td>X</td>
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<td>F</td>
<td>X</td>
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<td>F</td>
<td>X</td>
<td>X</td>
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<td>F</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
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<td>7</td>
<td>F</td>
<td>X</td>
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<td></td>
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<td>F</td>
<td>X</td>
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<td></td>
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<tr>
<td>Norma</td>
<td>29</td>
<td>23</td>
<td>F</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Phoebe</td>
<td>28</td>
<td>19</td>
<td>F</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>
Table 3. Sample data: Non-depressed participants

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Diagnosed age of Dyslexia</th>
<th>Male or Female</th>
<th>Degree-educated</th>
<th>Non-degree educated</th>
<th>Depressed at school</th>
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<td>8</td>
<td>F</td>
<td>X</td>
<td>X</td>
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<td>Harry</td>
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<td></td>
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<td>X</td>
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<tr>
<td>Malcolm</td>
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<td>M</td>
<td></td>
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<td>Jean</td>
<td>22</td>
<td>21</td>
<td>F</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

1. Please describe how you are feeling today? (Are you taking any depression medication at present?)
2. Please describe your life/yourself? (I need to create a description of you e.g. age, education, job, character, personality etc.)
3. Do you enjoy life?
4. Please describe your childhood? Was it happy? (e.g. with your family)
5. Do you have any siblings? Do you think you were treated fairly/unfairly to your siblings?
6. Please describe your time at school? Was it enjoyable?
7. Did you ever get frustrated from your learning difficulties?
8. What does dyslexia mean to you?
9. Is dyslexia something positive or negative?
10. How does dyslexia affect your daily life?
11. What classic dyslexia symptoms do you have?
12. Do you think your hobbies help you? Giving you self-confidence?
13. Do you ever blame your dyslexia for things?
14. Do you/have you ever resented your teachers at school for not seeing your difficulties?
15. Do you ever feel rejected? Please explain?
16. Have you ever encountered stigma towards your dyslexia?
17. Have you ever tried to hide your dyslexia?
18. Why might people try and hide their dyslexia?
19. Do many people know you are dyslexic? How did they find out?
20. Did you tell them? What was their reaction to your disclosure?
21. How do you feel about disclosing your dyslexia to other? Friends or at work, university?
22. Do you think dyslexics are discriminated against at school, university, at work, socially?
23. How does failing or getting things wrong affect you?
24. Do you ever say why me? Why am I dyslexic?
25. Do/Did you self-harm? Why? What are the triggers?
26. Have you ever thought about or tried to commit suicide? Why? What were the triggers?
27. Do you think dyslexia and depression are correlated (linked)?
28. Did you ever truant/run away from home?
29. How do you feel going into schools now, what triggers any negative emotions?
30. Do you enjoy being you? Please explain dyslexic??
31. Would you call yourself a successful?

Figure 1. Book Interview Script 31 items. (Items in BOLD are included in this paper.)

The Interview Process, Confidentiality, Informed Consent and Personal Disclosure

All participants were sent details of the study before the interview, and all verbally confirmed participation before the start of each recorded interview.

Participants were also advised that they could avoid any questions that were too emotional to answer and to halt the interview and their participation in the study without reason; fortunately, no participants took this option. As avoidance was noted in several interviews, further investigative questions were required.

Confidentiality was assured at several points: (1) in the original study advert; (2) in email confirmation/requests for basic details (name, age, education etc.); (3) at the start of each interview, (4) advising participants that pseudonyms names would be used.

Each participant was also reassured that they would receive a copy of their transcript which they would have the opportunity to check and modify. As the interviews
concerned participants disclosing emotionally painful or frustrating events it was felt best that the interviewer (the author) also disclosed, where required, that he was diagnosed dyslexic at fourteen years old and understood and had experienced many of the difficulties at school that they may have encountered.

**Analysis**

Each interview was recorded on audio tape, transcribed, spell-checked with minimal grammar changes; lastly a check was made for readability. The transcript was then emailed to each volunteer for them to check and amend if required, with the opportunity for them to add additional notes or post interview revelations, as interviews can commonly trigger post-interview thoughts. Interviews were then subjected to IPA analysis.

**Interpretative Phenomenological Analysis (IPA)**

IPA is a relatively recent analysis model but has its historical origins with the phenomenology and Husserl (1970a, b) aiming to return to studying living things.

This refers to “to return to the things themselves is to return to that world which precedes knowledge, of which knowledge always speaks” (Merleau-Ponty, 1962). Husserl was very interested in the life-world, which comprises of the objects around us as we perceive them and our experience of our self, body and relationships.

Whilst there are many forms of phenomenology in use (Idiographic, Eidetic, and Transcendental), IPA using Idiographic ideals is used in this study.

Smith developed Interpretative Phenomenological Analysis (Smith, Harré and Van Langenhove, 1995; Smith and Osburn, 2008) to analyse elements of the reflected personal experience – the subjective experience of the social world. Giorgi (1994) argues that phenomenology avoids the reductionist tendencies of other research methodologies, and uses the researcher’s assumptions/divergent links to inform new insights from the data, rather than forcing data to fit predefined categories. Such intuition in the researcher allows ‘outside the box’ thinking. The researcher is an interpretative element to understand themes and body language, compared to Discourse Analysis (Potter, 1996) which relies on precise analysis of the words used.

IPA has been used in many research studies (Duncan, Hart, Scoular, & Brigg, 2001, Thompson, Kent, & Smith, 2002; Clare, 2003; Biggerstaff, 2003; French, Maissi, Marteau, 2005).
IPA is suitable for this sample due to: (1) Being ‘social model of disability’ and inclusion friendly, aiding understanding in special need samples; (2) Allowing flexibility and the ability for themes from initial participants to inform an investigative interview script; and (3) Dyslexic friendly as it does not rely solely on discourse.

**Analysis Methodology Used in this Study**

This study predominately uses IPA methodology for analysis of data; however the results from the transformations (themes) were then used to create quantitative data, thus mixing qualitative and quantitative methodologies. Nineteen main themes were identified from transformations in the third stage of IPA and two-hundred feelings or aspects were identified for these nineteen themes, displayed in quantitative percentages. The quantitative data was then used to create tables along with interview evidence in the form of quotes (from mean units from the second IPA stage) are used to form each argument/topic for the results.

**Results: Profiles**

Profile results from this study are drawn from Table 4.

Overall the sample found dyslexia to be positive (57.7%) and to give individual unique skills (76.9%), but dyslexia makes them feel different (76.9%). Most (61.5%) agreed that not only does dyslexia affect their daily lives but they feel the world is unfair to dyslexics. Many agree that they must work harder in life (38.5%) but only a small percentage would want to take a magic pill to rid themselves of their dyslexia (11.5%).

Males seemed unsure if dyslexia was something positive or negative (both 36.4%) but most agreed that it gave unique skills, made them feel different, but the world was unfair to dyslexics (all 72.7%). Most felt dyslexia affected their daily lives (54.5%) but only a fraction would want to get rid of their dyslexia (9.1%). Interestingly females saw dyslexia as more positive (61.1%) and like the males, felt it gave them unique skills and made them feel different (66.7%).

Unsurprisingly, the depressed sample found dyslexia to be mainly negative (72.7%) but most agree that dyslexia is a social construct (55.6%), gave unique skills (63.6%), made them feel different (68.2%), affected their daily lives (59.1%), however few would want to
be cured (9.1%). Compared to this the non-depressed sample, who felt dyslexia was more positive (42.9%) than negative (14.3%). However agree that dyslexia gave unique skills (85.7%), made them feel different, but the world was unfair to dyslexics (71.4%). Many agreed it was socially constructed, affecting their daily lives and that they needed to work harder because of their dyslexia (42.9%).

Interestingly more non-depressed individuals wanted a cure than depressed (14.3% to 9.1%), however both are minority views.

Looking at the largest sample, depressed individuals. Those without a degree felt dyslexia was less positive (45.5% to 63.6%) with both group agreeing to the same level of it being negative (27.3%). Interrogating the interview data, degree-educated depressive dyslexics noted that by going to university they truly understood the barriers involved, whereas before such education they had an insular impression of their learning difference.

This was confirmed by them understanding that dyslexia was socially constructed and compared to non-degree educated individuals; they would take a cure pill (18.2% to 0%).

Results and Discussion: Interview Evidence

Stigma or Lack of Knowledge?

Have you encountered any stigma towards dyslexia? Not really, I think I have encountered more that people do not know what it is, especially at work, that people misunderstand it, but I have never really encountered any stigma about it, but I’m working with people who know what the problems are. (Anita)

Have you ever tried hiding dyslexia? Yes. Why do you think you tried to hide it? Because sometimes I don’t want to answer questions on it, I don’t want to have to explain why I do things and how I feel about it, and then when I kind...if I do answer questions I want to do so eloquently or properly or so that people understand or in a way that people understand, so that they are accepting of it. I know I try and hide it when I know I can’t answer the questions. (Emma)
How were your parents concerning your learning difficulties? The problem with me was they knew there was a problem but they thought the solution was me putting in more effort and more hard work, without admitting it was there. If they admitted there was a problem then they have to talk about it, about it, they thought if I worked harder, all of this will go away. Did that cause friction with you? I was talking about dyslexia years later to my mum and she would not discuss it, it was still a stigma thing then. (George).

Table 4. Perceptions of Dyslexia

<table>
<thead>
<tr>
<th>What is Dyslexia?</th>
<th>All Participants</th>
<th>Non-Depressed</th>
<th>Depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
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<td>N=19</td>
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<td>Its positive</td>
<td>57.70%</td>
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<td>Its negative</td>
<td>26.70%</td>
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<tr>
<td>Dyslexia is a social construct</td>
<td>50.00%</td>
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<tr>
<td>Dyslexia gives me unique skills</td>
<td>74.90%</td>
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<td>Dyslexia makes my life different</td>
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<td>I must work harder because I'm dyslexic</td>
<td>11.10%</td>
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<td>I blame myself for dyslexia</td>
<td>30.80%</td>
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<td>I blame my teacher for dyslexia</td>
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<td>I blame my school for dyslexia</td>
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<td>I blame the world for dyslexia</td>
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How were your parents concerning your learning difficulties? The problem with me was they knew there was a problem but they thought the solution was me putting in more effort and more hard work, without admitting it was there. If they admitted there was a problem then they have to talk about it, about it, they thought if I worked harder, all of this will go away. Did that cause friction with you? I was talking about dyslexia years later to my mum and she would not discuss it, it was still a stigma thing then. (George).
The interview evidence suggests that there has been a void of information in the public forum that truly describes the dyslexia experience, thus disinformation creates situations where dyslexics choose to hide their differences, as they themselves cannot fully explain how and why they do things. As each dyslexic has a different combination of difficulties, one single profile would be misleading.

Work Discrimination

Do they know you are dyslexic at work? Yes. I kind of decided when I changed my job, because of the role it was, I was going to be very clear all the way through the recruitment process and when I got into the team. To be very explicit to what the problems were and to get support there. I felt a bit coerced into telling people, like the manager saying ‘you will tell everybody, won’t you?’, so that began with, then ‘when will you tell them, what are you going to tell them, you need to tell them soon’, so I think in the end I found the most comprehensive description of the problems a dyslexic might have and emailed everybody that. I think they thought I had all of the problems I wrote about, all I really wanted them to know was I was dyslexic and dyspraxia and I might need some adjustments made for me and to be understood. I felt I was pushed a bit to send out that general email, having done that I felt exposed, as I wasn’t given the support by my employer, so I had to fight for it and get the union involved. It got messy and fraught. So I got stress from their lack of adjustment (Norman).

It sounds surprising for a social work job; you got no support and needed to be protected from the people who were not only paid to know better but to help others. So you needed your own social worker really? The irony for me was I was working for an NHS [National Health Service] mental health team in the UK as a social worker, but they didn’t identify that I was getting unwell there, getting extremely stressed and losing the plot. So that’s when I talked to the union person and she was the one that told me to see a doctor, she said ‘you look like you’re at the end of your tether’, but no one at work had picked it up. Which is worrying. (Norman).

Whilst some dyslexics are open about their differences, most are not (Alexander-Passe, 2010, 2012) as they feel they would be treated poorly in the recruitment process. In the UK there is ‘Access to Work’ a government funded program to put in place reasonable adjustments (training and software etc.) so that anyone with a disability can be assisted to reach their potential as per their peers. However many argue that this only comes after the
recruitment process and as many dyslexics attain poorly academically they can be seen as under-qualified for the post and are not even interviewed. As Norman notes there is little support for those who need to educate colleagues to their learning difference and this can cause emotional trauma.

**Social Construct: Is it Only a Disability at School?**

Do you ever get frustrated/annoyed by your learning difficulties? Reading and spelling did annoy me at school; I think that it only annoyed me at school.

Therefore, you think dyslexia is mainly about school, a disability at school, not as an adult? It depends on what line of work you go into, it is not a disability in my area. I mean I am really good at what I do, but I am not in an area of work where you have to write things down and to be organised, but why would you go into a job like that, if you were not going to be good at it. (Izzy)

Do you think the problem is us (dyslexics) or the world around us? No, I do not believe there is a problem. To hear some people say [things, or] to receive certain reactions, if it can be agreed that we have difficulties in learning, which doesn’t make us inferior or worse than others, then why can’t it be agreed that in a situation where people don’t have a condition, that won’t act or respond, not as relative to our class as the norm (as average). I do not think it is a problem, I do not see it as a problem with them or us, and it is just a lack of understanding. If they understood dyslexia and the implications of dyslexia there would be less problems encountered. You were talking about ‘normal’, do you feel normal? What is normal? Do you feel normal? Well, what is normal? (Jordan)

I don’t regard myself as disabled by it, I regard myself as disabled by how other people see it and whenever I meet dyslexics I sort of tell them that, especially kids who are feeling...don’t know how to feel about it and I can kind of see something switching in their face when I put it to them like that, it is quite a state of mind – another coping strategy. (Milly).

As Milly notes ‘I don’t regard myself as disabled by it, I regard myself as disabled by how other people see it’. Many dyslexics believe dyslexia is socially constructed and until the social model of disability is used in the workplace, difference will be perceived as negative. Whilst few professions openly recruit dyslexics (e.g. computer graphics), most see it negatively which will affect productivity. Normality is noted by Jordan, to explain how dyslexia is perceived in the workplace.
Is it a Taboo Subject?

But probably taking to you is the most honest I’ve felt or at ease talking about my problems for a long time. I don’t think people really talk about how they feel about their difficulties; it’s like a taboo subject. Yes, the same as the homosexual was 20yrs ago. It’s similar to how I feel; it astounded me thinking back about it. You are right there are similar themes to it. Yes. I guess coming out is similar to coming out that you are gay? Yes. It’s a fascinating link, fascinating. I’ll wait for the how dyslexics are homosexual link next. I used to work out that it is the same occurrence. They said that it was one in five is gay and also they say that one in five could be dyslexic. I should put a patent on that. (Ronnie).

Ronnie makes parallels to homosexuality which he perceives as a similar difference to be self-conscious about in the workplace and with friends. The notion of coming out as a dyslexic was fearful to many in the study, with most avoiding telling their employer for fear of being made redundant or passed over for promotion.

Disclosure of your Dyslexia

So you feel you are very open about it so they blamed the dyslexia not you?

It’s one of the first thing I say, but I suppose I use it as an excuse. I do not mind telling people I am dyslexic, as it is who you are. I would be lying if I said I do not use it as an excuse. I guess it is because I have been told I am stupid a lot growing up, you are quite eager to tell people the reason why you cannot do things. How do people normally react to you telling them you are dyslexic? Most people say ‘really, you don’t look dyslexic’, because I think a lot of people have this perception of dyslexia and disability, they have this idea about people with a disability, and because I’m quite well-spoken I can get through day-to-day life quite well, I’m quite good at hiding all the little things I do to get me through it. (Kirsty).

Kirsty comments on the dilemma that most dyslexics face. Do they disclose and face unhelpful and negative comments, or do they stay silent and use coping strategies to get by.

Labelling

You were talking about not telling people you were dyslexic, being ‘in the closet’. You see the thing about it was, I had not been formally assessed, although I screened
positive when I was 15 years old, and they turned round and said that I had poor visual and hearing memory, but refused to label me because it was deemed to be inappropriate, it was in 1976, labelling wasn’t the done thing. So although it was a brief thirty minute chat with a psychologist, nothing really happened from it. It was not a formal assessment and I was not aware of how much help was available then and what I could have been getting. It was only when I was struggling with assignments at Oxford University that I finally thought I would do something about it and it could make a difference. (Anita).

I guess you are the first person I know who was diagnosed at five year old stage. It is fairly interesting how you view the situation. Do you know what it is, I can’t remember a single time in my life when I haven’t been told that I’m dyslexic. It has been a constant word in my life. I can only vaguely remember the test, at the time I wasn’t sure why I was being tested, being taken out of class for it...It has always been this word, I’m angry that in my whole life I have been labelled, just because the educational system didn’t fit into my strengths, that I didn’t fit into a mould, my brain isn’t like yours, we are all different, you know. I guess if you test my whole class, most would have a similar IQ, a few would have a high IQ, and others might have an IQ a bit lower. We all have our strengths and weaknesses, it’s a spectrum. If you don’t fit into the mould with creativity, artist ability and original thought, maybe they should be labelled creative or something. Now I’m in the real world, and in what I’m doing I’m brilliant at it. I’m starting my own business, I know what my strengths are, and I have proven I’m good at things. (Izzy)

Anita and Izzy see labelling from different perspectives. Anita sees labelling in a positive way, as a means to explain what is going on. Izzy on the other hand has found it a heavy weight around her shoulders, as other quotes from Izzy suggested that it had a negative impact on her education as it prevented her doing things, as teachers had a stereotypical perception of what dyslexics could and couldn’t do, which prevented her from creating her own dyslexic profile (of strengths and weaknesses).

**Conclusion**

The quantitative data in this study painted a picture of different perceptions amongst depressive and non-depressive adult dyslexics, along with sub groups of degree and non-degree educated, and gender splits.
There were high frequencies that perceived dyslexia as positive and gave them not only unique skills but made them feel different. This difference was seen to come from having to unfairly work harder to achieve in life, with dyslexia affecting their daily life.

Interestingly most would not seek a cure if it was offered, which suggests they see dyslexia as integral to who they were, and losing their dyslexia would be as great as losing a limb.

The interview evidence in this study suggests that dyslexics experience discrimination due to their disability, whether they perceive it as a disability or not. There seems to be too little information about dyslexia and what it affects in the public domain, thus many perceived dyslexia as something negative and not something they feel able to help with. It is hoped that recent legislation in both the US and the UK will protect dyslexics in the workplace, however as noted earlier, to gain protection by such legislation they will need to disclose their hidden disability to the world. However many dyslexics have survived the last twenty, thirty or more years in the workplace and school without their difficulties being highlighted. Other extracts of Alexander-Passe (2010) asked ‘Do you feel successful’, with one participant that they had felt successful in hiding for so long, with many feeling unhappy about disclosing their difficulties as they may fear this would firstly go on their record and secondly that it could have a negative effect on promotion and career prospects.

Many in this study perceived that they only felt dyslexia was a disability when they were at school, as it was an inflexible environment with no escape from reading and writing along with unfair comparison with age appropriate peers. As one participant in this study noted ‘I’m only disabled by my dyslexia when you put me into a classroom’ (Natasha). There is much more flexibility as an adult to choose professions that play to a dyslexic’s strength and one that limits the need for reading and writing, with greater use of technology (e.g. computers and spellcheckers).

Whilst a minority, it should be noted that some dyslexics may withdraw from a society which they feel ill-skilled to participate in (Scott, 2004).

The author in this study who is dyslexic, has at time chosen to hide his difficulties, creating situations where his sometimes strange range of skills was attributed to quirkiness (positive), rather than being disabled (negative). This camouflaging was a common feature in his research with other dyslexics.

Until the social model of disability is used more widely in the workplace, there will always be instances of discrimination against those who do not fit into the perceived ‘norm’
model. Thus, further research is needed to understand dyslexia, stigma and discrimination in the workplace.

Labelling was lastly discussed. This is a contentious issue as many parents incorrectly feel a label is negative with life-long longevity (post school and into the workplace). However in education the lack of labels may prevent teachers from making sense of their child’s strengths and weaknesses, and denying their child can prevent access to suitable interventions. Whilst the author agrees that a label is only as good as the diagnosis given with it, it relies on starting educational intervention discussions rather than ending them; as non-SEN teachers commonly rely on incorrect stereotypical views on the strengths and weaknesses of individuals with dyslexia, and these need to be challenged.

**Limitations**

Whilst 29 participants took part in the study, 22 were diagnosed as depression and only seven had no depression diagnosis. The author took the viewpoint that the vast majority of the participants suffered one or more depressive symptoms, and that the study would not label any quotes as from a depressive and others from a non-depressive, as this might be misleading and lead the reader to make assumptions. However, a slightly different pattern of responses might be found from a group of participants who were not suffering from depression.

Finally, it should be noted that the material here is drawn from adults who received their education when less awareness of dyslexia and the pattern of strengths and weaknesses was available. It could be argued that within the Western world, the situation for children going through the educational system will be vastly different in 2015.

This study has particularly strong implications for some Asian-Pacific countries, where public awareness of dyslexia may still be in its infancy. The onus is on those with expertise in the area, dyslexia associations and trained teachers, to ensure that this knowledge is shared and the strengths in dyslexia are recognised, in order to ensure that up to 10% of the population can no longer be stigmatised. With greater recognition and early structured support, dyslexic children and adults will have every opportunity to overcome their weaknesses and express their strengths fully.
5.0 Dyslexia: Investigating Self-Harm and Suicidal Thoughts/Attempts as a Coping Strategy


Abstract

**Purpose:** This study aims to investigate the emotional perspective of having Dyslexia, a specific learning difficulty that not only affects literacy but many aspects of an individual’s life, from childhood into adulthood. This paper investigates negative emotional coping which took place, which included self-harming with: alcohol, food, body injury, suicide thoughts and suicidal attempts.

**Method:** The sample of N=29 diagnosed developmental dyslexics (N=22 with prior diagnosis of depression) were interviewed with a semi-structured script with a wide ranging script spanning childhood and adulthood experience. Interpretative Phenomenological Analysis (IPA) was used to analyse the data into themes.

**Results:** Self-harm was greater in the depressive to non-depressive sample; however, the type of self-harm varied. Males and non-depressives tended to predominantly self-harm with alcohol, followed by food and then rarely with bodily harm, whereas females in general, tended to predominantly self-harm with food, then bodily harm and lastly alcohol. Overall depressives self-harmed predominantly with food and then equally between alcohol and bodily-harm.

**Conclusion:** Each group had their own profile and suggests that self-harm is a complex issue, with self-harm activities happening both in child and adulthood.

**Keywords:** Dyslexia, Self-harm; Depression; Suicide; Coping
Introduction

Dyslexia

‘Dyslexia’ was first coined by Berlin (in Wagner, 1973) described word blindness, defined through Greek roots: ‘Dys’ difficulty and ‘Lexia’ with words. Morgan in 1886 first documented the term and condition in the British Medical Journal (in Snowling, 1996). Since then numerous medical and educational professionals have sought to understand the condition, its origins, its cause or causes, and its treatment.

Whilst the origins of the condition concerns difficulty with words, modern definitions are broader however disagreements in the field exist regarding probable causes. Symptoms include difficulties in: reading/ use of phonetics, writing, spelling, short-term memory, rapid naming, balance, motor skills, and organisation.

Such disagreement are reflected in the drafting revisions to the 5th version of the American Psychiatric Association’s ‘Diagnostic and Statistical Manual (DSM-5)’ suggesting the term ‘learning disorder’ to be replaced with ‘dyslexia’ to ‘render APA terminology consistent with international use’, describing ‘difficulties in reading accuracy or fluency that are not consistent with the person’s chronological age, educational opportunities, or intellectual abilities’ (Cowen & Dakin, 2013). However its final published version (American Psychiatric Association, 2013) uses ‘Specific Learning Disorder’ based on reasoning that the international conceptions and understandings of dyslexia (and other conditions) exist but disagree on its definition (Elliot and Grigorenko, 2014).

Elliot and Grigorenko argue that attempts to find a single definition have been hampered by factors of inclusivity, some criticised as being too inclusive and others too exclusive. Rice and Brooks (2004) and Fitzgibbon and O’Connor (2002) agree that a universally agreed definition and explanation remains elusive, and that definition to date have been subjective and too broad, and serve self-obsessive purposes.

Rose’s (2009) review for the UK government, defines Dyslexia (specific reading disability) as a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. Occurring across the range of intellectual abilities, it is best thought of as a continuum, not a distinct category, and there are no clear cut-off points. Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal
organisation. It is argued that a good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to well-founded intervention.

It is argued that the lack of a single agreed definition and assessment route has meant that dyslexia is generally misunderstood, leading to low identification rates, with many only being diagnosed in adulthood. It is argued that the majority of dyslexics leave school without diagnosis, and suffer at school through unsuitable and discriminatory teaching methods by teachers lacking special educational needs (SEN) training to identify children with learning difficulties (Rose, 2009; Hartley, 2010, OFSTED, 2010). Whilst current UK education policy states that all classroom teachers are ‘teacher of all pupils including SEN’, the lack of SEN training of teachers remains a concern to how they can deliver such a pledge (OFSTED, 2010; Driver Youth Trust, 2013).

**Emotional coping in dyslexics**

Whilst dyslexia affects both children and adults, children are seen to be less able to hide their difficulties or differences (e.g.; being made to reading aloud, and having their writing regularly critically assessed, etc.), compared to adulthood where assisted adults or technology can be utilized. Scott (2004) and Riddick (1996), Alexander-Passe (2006, 2015a) and Willcutt and Pennington (2000) note the frustration and anger that can build up inside dyslexics when faced with tasks that highlight their inabilities, causing stress and anxiety (the fear of an already experienced negative event or task). Figure 1 for Alexander-Passe (2010) details a hypothesized ‘Dyslexia Defence Mechanisms’ to understand the manifestations from the dyslexia experience.

Scott (2004), McNutty (2003), and Alexander-Passe (2015a) agree that dyslexics generally camouflage their difficulties, with advanced coping strategies, so a sense of normality can be projected. Dyslexics are very conscious of their differences, so create a secondary persona to operate in the wider community (Scott, 2004). However when cracks occur in this persona, it can be highly embarrassing, demonstrating how vulnerable they can be, and confirming their otherness compared to their peers. Alexander-Passe (2015c) has investigated disclosure, labelling, discrimination, and stigma resulting in the sense of difference that adult dyslexics experience due to their dyslexia in the workplace and wider society. This highlights the depth that having dyslexia can affect individuals in our wider society and community.
Leonova (2012) in her review of dyslexia and depression notes that different measure and samples are commonly used and many ignore the importance of gender and educational establishment factors. Three studies were seen as robust (Alexander-Passe, 2006; Wilcutt & Pennington, 2000; Miller, Hynd & Miller, 2005). Alexander-Passe found raised levels compared to norm teenage data, with females showing moderate depression, a view supported by Wilcutt and Pennington. But Miller et al found no raised depression levels, however the sample ranged from 6-16 yrs. old and used non-standardised measures.

Scott (2004) and Alexander-Passe (2015b) argue that dyslexics commonly experience school-based trauma and this can lead to Post-Traumatic Stress Disorder as adults, when they return to school for their own children, and begin to relive their own negative and traumatic childhood school experience. This can be triggered through smelling industrial cleaners, seeing and being made to sit on small chairs, seeing drawings and words displayed on walls, being frustrated at the lack of support for their own children, and being made to wait outside head teacher’s office.

There is a shortage of research concerning dyslexia and self-harm, especially with adults, and this paper aims to shed light on this rarely investigated subject.

**Self-harming and depression**

Greydanus and Apple (2011) argue that deliberate self-harm (DSH) is a common though often hidden condition in children and adolescents that may result in suicide. Deliberate self-harm (DSH) refers to an act of purposefully harming oneself physically that may or may not reflect a real suicidal intent (Greydanus & Shek, 2009). DSH is commonly seemed in: overdosing, self-poisoning, and self-cutting. Greydanus and Apple conclude that:

1. DSH is a common and yet often clandestine phenomenon in children and adolescents that may become a repetitive pattern and may tragically lead to overt suicide.
2. Whilst most children and adolescents with DSH are not at high risk for completion of suicide, it is usually not possible to predict who will eventually kill themselves (Walsh, 2007).
**Figure 1: Hypothetical model of ‘dyslexia defence mechanisms’.**

**Self-harm**

Non-suicidal self-injury (NSSI) refers to any premeditated, self-directed actions that lead to direct damage of body tissues. This often manifests in hitting or punching an object to inflict injury to self, cutting, extreme scratching, skin carving, and interference with wound healing and burning. It is frequently correlated with physical and psychiatric, and may result in severe medical complications.
Kerr, Muehlenkamp, and Turner argue that NSSI is normally used by individuals to handle worrying negative affective emotional states, in particular anger and depression, as well as mixed forms. It is argued to have a lifetime prevalence rates of 13.9 to 21.4% (Nock & Favazza, 2009; Jacobson & Gould, 2007), and have an average of 13 incidents of NSSI occurring in the same 12-months (Lloyd-Richardson, Perrine, Dieker & Kelley, 2007).

The DSM-5 (APA, 2013) uses the following diagnostic criteria for NSSI:

- Over the past year, the person has for at least 5 days engaged in self-injury, with the anticipation that the injury will result in some bodily harm. No suicidal intent.
- The act is not socially acceptable.
- The act or its consequence can cause significant distress to the individual’s daily life.
- The act is not taking place during psychotic episodes, delirium, substance intoxication, or substance withdrawal. It also cannot be explained by another medical condition.

The individual engages in self-injury expecting to (APA, 2013):

- Get relief from a negative emotion
- To deal with a personal issue
- To create a positive feeling
- The self-injury is associated with one of the following:
  - The individual experienced negative feelings right before committing the act.
  - Right before self-injury, the individual was preoccupied with the planned act
  - The individual thinks a lot about self-injury even if act does not take place.

Evidence indicates a strong association that exists between suicidality and self-injury. Research states that as high as 40 percent of those NSSI patients have dealt with suicidal thoughts while inflicting the injury. Additionally as high as about 50 to 85 percent of NSSI patients have a previous history of at least one suicidal attempt. The association also indicates that as the type of self-injury increases, the severity of suicide also increases (Figure 2).
According to Kerr, Muehlenkamp, and Turner (2010) most any NSSI patients use at least 2 different ways to perform self-injury, as high as 69 percent. One should also pay close attention regarding when NSSI greatly increases the risk for suicide. While much concrete research has not been conducted in this area, it is argued to be important to gauge how the patient perceives suicide, and life, since this can indicate when self-injury increases the risk for suicidality. Mind (2015) the UK’s leading mental health charity defines self-harm as including:

- cutting yourself,
- poisoning yourself,
- over-eating or under-eating,
- burning your skin,
- inserting objects into your body,
- hitting yourself or walls,
- drug overdosing,
- exercising excessively, and
- scratching and hair pulling.

It is postulated that Paracetamol overdosing and cutting are the two most common forms of self-harm reported for children and young people, and self-harm is often not a singular occurrence, is commonly repeated, and can go on for many years (Poutie & Neville, 2004; Harrington, Fudge, Rutter, Pickles & Hill, 1990). Whilst eating disorders have been correlated with psychiatric disorders, self-harm and suicide correlations are a relatively new area of investigation and has been included in this study (Kostro, Leman & Attia, 2014).

Bywater and Rolfe (2002) argues that although some young people want help to find alternative means of coping with emotional pain and distress, the use of self-harm is used as a means of communicating the severity of their anguish, trauma and pain to others. They add that children and adolescents who self-harmed may not see their actions as a problem - due in part to perceptions that their actions were non-fatal and affected no-one but themselves.
With a UK community sample, Hawton, Rodham, Evans and Weatherall (2002) found 6.9% of a school N=4000 population (15-16 year olds) had engaged in acts of deliberate self-harm in the previous year, with only 12.6% such episodes leading to a hospital visitation. Concurring with the Centres for Disease Control (2007) a US sample into attempted suicide among high school students.

Whilst there is little dyslexia data to use to investigate self-harming in children and young people. Edwards (1994) noted children who got into fights to avoid going to school, as a few days off with a hurt/broken arm was worth it to avoid having to take tests, complete writing tasks or submit homework. The need to avoid reading aloud in class meant they took extreme means of avoidance. Scott (2004) based on her experiences as a counsellor to dyslexics, noted that dyslexics (young and old) use self-harming strategies to cope with the emotional effects of constant failure in educational settings, and the direct and indirect bullying they experienced from both teachers and their peers.

It is argued that alcohol abuse is the commonest type of substance dependence worldwide (Pompili, Serafini, Innamorati, Dominici, Ferracuti et al., 2010) and is known to commonly lead to self-harming activities, as a state of intoxication may trigger self-inflicted injuries, increasing impulsivity, promoting depressive thoughts and feelings of hopelessness, and simultaneously removing inhibiting barriers to hurting one. Although
indirect mechanisms, including alcohol consumption, may form of self-medication for depression, and it is also seen that alcohol is also a marker for other high-risk behaviours (Hufford, 2001; Magne, Ojehagen, Tracskman Bendz, 1997).

Whilst there is very little empirical evidence investigating drug abuse amongst dyslexics. Scott (2004) suggests that in general 60% of dyslexic alcoholics, mainly men, start drinking due to anxiety. Scott, a counsellor, found high frequencies of drug and alcohol-related anxieties amongst dyslexic child and adult clients. Postulating that dyslexics are more likely than non-dyslexics to use drink and drugs to cope with anxiety, with a significant proportion of dyslexic children, as young as 13 years wishing to beat their addiction to tobacco, cocaine, marijuana, ecstasy, drink and anti-depressants. Drug, alcohol and food abuse is argued to be a means to reduce anxiety amongst children and adolescents with dyslexia. In girls, anorexia and bulimia were common, representing a need to exert personal control for the sufferer, in a world where they are unable to control other segments (e.g.; school and home life). This may also be used as a cry for help, as having such disorders gain the attention of parents and health officials, but in similar ways to truancy and behaviour manifestations, health and educational professionals will commonly treat the manifestation without looking for the root cause. It was argued by Scott that dyslexics who use drugs as an emotional defence mechanism look to escape their feelings of being abnormal, but their drug use sabotages their means to gain help.

Alcohol like food is a legal substance. Haw, Hawton, Houston and Townsend (2001) argue that food self-harm has many dimensions:

(1) Used as comfort eating as a result of a stressful situation, e.g.; a poor mark in an examination or getting things wrong;

(2) Taken to extreme, binge eating can be related to comfort eating - a means to reduce stress as food is commonly seen as a reward for children;

(3) Sweet foods like chocolate can raise body blood sugar and trigger chemical reactions to calm the body. Binge eating is a faulty and uncontrollable means to rebalance self-esteem and treats the symptoms rather than cause. Sugar (methylanthines) cravings can be as powerful as drug addiction cravings, with sugar being more easily available and legal. A secondary side of binge eating is a conscious attempt to change body size, to put off people from getting close to them, along with a conscious attempt to reject society and society’s values.

Lastly, (4) Food acts as a means of control, in the form of anorexia.
Swales (2010) argues that the intense pain from cutting can lead to the release of endorphins and so deliberate self-harm may become a means of pleasure seeking, although in many cases self-injury abuse becomes a means to manage pain experienced in everyday living.

**Why is self-harm attractive to dyslexics?**

To understand why self-harm is attractive to dyslexics; one must first understand the benefits of self-harm. SANE (2004) a leading UK mental health charity, and Gilbert, McEwan, Irons, Bhundia, Christie et al., 2010) describes self-harm as being often:

- secretive form of behaviour, with motivating factors for those who use it as a means to deal with feelings and emotions
- those who use it are anxious about others knowing about it allowing them to keep their real feelings under wraps, to stop their anger or sadness spilling out
- a ‘secret-self ’, that was separate from their externa; ‘social-self’ used mostly by those who felt their inner self was most unacceptable
- a means to give their distress a physical form, and for self-loathing to be punished (displaced anger)
- a means to expressing and repressing feelings at the same time having feelings of guilt, shame, embarrassment and frustration (25% of the SANE N=946 sample)
- a means to releasing anger, lifting depression, and alleviating anxiety for some
- a mean to regain control of their lives (33% of the SANE N=946 sample), ‘it helps me to regain a sense of control and so enables me to get on with everyday things again’ (p.4)
- a means to prevent suicide (10% of the SANE N=946 sample)
- a release of tension

In summary self-harm offers a secretive way of coping with emotions, especially where individuals believe themselves to be abnormal, a view shared by Hawton & James (2005). In the case of dyslexia, a learning difficulty that is hidden and camouflaged until individuals begin to write to use most forms of communications. As noted earlier, Scott
(2004), McNutty (2003), and Alexander-Passe (2015a) have indicated that dyslexics camouflage their difficulties to promote a sense of normality to those around them.

Alexander-Passe (2015c) indicated high levels of shame and stigma attached to having dyslexia, especially in the workplace, with many believing they are unable to show their true-self to their family, friends and colleagues for fear of ridicule. Adults with dyslexia would prefer to not claim welfare benefits as it would require competing a form, they would find every strategy to avoid reading and writing (e.g.; saying they had forgotten their glasses, or getting others to even break their writing arms so not to have to write/take school tests (Edwards, 1994). Easton, Entwistle and Williams (2013) notes that those with low literacy have poorer health as they are less likely to access health services as these might highlight their literacy inabilities, they note ‘a significant negative impact’ (p.1) due to their inabilities to read prescription information, complete claim forms, avoid reading appointment letters, and their various strategies to cover up their literacy mislead health professional to health concerns.

The author argues that both self-harm and dyslexia describe ‘secret-selves’, ones that they do not share with others, not even partners and family. Each condition causes stigma and emotional trauma.

**Suicidal behaviour**

Suicidal Behaviour Disorder is newly introduced in the DSM-5 (APA, 2013); diagnosis is made to individuals who have made a suicide attempt within the past two years. A suicide attempt is defined as a self-destructive act deliberately carried out where there is a clear expectation of death. With the DSM-5 now considering suicidal behaviour as a condition independent of depression or other mental disorders, this marks a paradigm shift, as suicidal ideation, attempts, and successful attempts were previously defined as behaviours associated with mood disorders, and other mental disorders.

Reardon (2013) argues that ‘most people’ (90%) who have depression or another mood disorder do not attempt suicide, however this view is challenged by many, as it could be argued that many individuals are not properly diagnosed, or that a potential mental illness are not self-reported (Courtet, Gottesman, Joliant & Gould, 2011).

Schrijvers, Bollen and Sabbe (2011) argue that men tend to commit suicide at a higher rate than women, as it has long been established that men are likely to use more lethal and reliable means, such as a firearm or jumping for a height, while women are more
likely to use unreliable, less lethal means such as cutting or taking an overdose of medication.

Hawton and James (2005) report that 25-50% of adolescents committing suicide have previously either engaged in self-harm or attempted suicide, and Zahl and Hawton [49] indicate there is an increased suicide risk has for those who self-harm repeatedly.

**Suicidal thoughts and attempts**

It is argued that correlations between bullying, school failure, pressure to achieve academically, peer rejection, feelings of frustration, depression, guilt and hostility have been made to childhood suicide (Thompson & Rudolph, 1996; Harrington, Bredenkamp, Groothues, Rutter, Fudge et al., 1994). Thompson and Rudolph (1996) noted that children with ‘learning disabilities or other learning difficulties that cause constant frustration are more likely to attempt suicide...gifted children may attempt suicide because their advanced intellectual ability makes relating to children their own age difficult’. Winkley (1996) argues that attempts of suicide increasing during school term and decreasing during school holiday and that the attempts also increase in May and June to correspond with GCSE examinations.

Peer (2002) found that in six cases researched, the children were fragile, vulnerable and felt the ramifications for failure were enormous. Riddick (1996) describes how the problems encountered because of dyslexia were enough for dyslexic children to want to kill themselves, noting one mother comment ‘he wanted to be dead, there was nothing for him. He wanted his tie so that he could hang himself’. Scott (2004) notes that many cases of dyslexia-led suicide are not recorded as such children are unable to write suicide notes (Scottish Daily Record, 2002; Fox, 2010; Spencer-Thomas, 2013).

**Aims of his study**

The empirical study has identified that whilst many dyslexics cope with negative emotional coping strategies, there is little direct evidence to indicate if such coping leads to self-harming activities. This paper aims to fill part of this void, by investigating with an interview study a sample of dyslexic adults, looking at their childhood and adult experiences, for evidence of self-harming, and specifically what type of self-harming is used, and does this differ according to gender.
Adults were chosen as being better able to reflect of their lives, and being more able to articulate their emotions through a data rich investigative methodology.

Why is this investigation important? (1) It aims to highlight the longevity of school-based trauma, and how some dyslexics cope with such long-term trauma that can lead to Post-Traumatic Stress Disorder from school-based trauma, as identified by Alexander-Passe (2010, 2015b).

Self-harm has been argued to be a cry for help in individuals that lack support system (parents, teachers, local services) and is gives a voice through actions to their anxiety and despair. (2) There is a void in research into how adults with dyslexia cope, as the manifestations of dyslexia do not subside in adulthood; and adults may develop coping strategies to overcome/camouflage their difficulties. This study aims to uncover such coping strategies to understand the adult dyslexia experience better.

Methodology

Sample

The participants of the study were recruited three ways:

(1) Emails to UK dyslexia newsgroups,
(2) Adverts on dyslexia web-forums,
(3) Adverts on dyslexia associations’ websites. Four dyslexic sample groups were sought (with/without depression, degree/non-degree educated).

Dyslexic adults with depression were the largest group replying. Both male and female adults were recruited to investigate gender coping differences (Tables 1 and 2).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean age (years)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
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<td>40.56</td>
<td>12.67</td>
</tr>
<tr>
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<td>13.9</td>
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<tr>
<td>No depression diagnosis</td>
<td>7</td>
<td>35.14</td>
<td>10.86</td>
</tr>
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<td>15</td>
<td>38.8</td>
<td>11.71</td>
</tr>
<tr>
<td>Depressed - males</td>
<td>7</td>
<td>49.98</td>
<td>11.32</td>
</tr>
<tr>
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<td>3</td>
<td>18.0</td>
<td>1.03</td>
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<td>Depressed - dyslexia</td>
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<td>29.09</td>
<td>11.63</td>
</tr>
<tr>
<td>Non-depressed - dyslexia</td>
<td>7</td>
<td>22.28</td>
<td>14.77</td>
</tr>
</tbody>
</table>

Table 1: Sample data: size, mean age and standard deviations.

All participants provided evidence of:

(1) Formal diagnosis of dyslexia evidence (e.g.; educational psychologist reports),
(2) Depression (e.g.; a clinical depression diagnosis or at least one course of physician/GP prescribed anti-depressants). Whilst mild depression is common in society, only severe cases tend to be referred for clinical diagnosis.

The mean age of dyslexia diagnosis indicating that the non-depressives tended to be diagnosed earlier, however in both groups they were mainly diagnosed post-school and after leaving university (Table 1).

**Apparatus**

An investigative semi-structured interview script was used with N=24 items (Table 3). Interviews lasted between one hour and three hours.

**The interview process, confidentiality, informed consent and personal disclosure**

Participants were sent details of the study before the interview, and all verbally confirmed participation before the start of each recorded interview. Participants were advised that they could avoid any questions that were emotional difficult to answer, and to halt the interview/their participation in the study without reason; fortunately, no participants took this option. As avoidance was noted in several interviews, further investigative questions were required.

Confidentiality was assured at several points:

(1) The original study advert;
(2) Email confirmation/requests for basic details (name, age, education etc.);
(3) The start of each interview,
(4) Advising participants that pseudonyms names could be used if so wished;
(5) Records to be kept in a secure, locked location.

As the interviews concerned participants disclosing emotionally painful or frustrating events it was felt best that the interviewer (the author) disclosed, where required, that he was diagnosed dyslexic and understood/had experienced many of the difficulties at school that they may have encountered.

Each interview was recorded, transcribed, and spell-checked with minimal grammar changes; lastly a readability check was made.

Transcripts were then emailed to each volunteer for them to check and amend if required, with opportunities for them to add additional notes or post interview revelations,
as interviews can commonly trigger post-interview thoughts. Interviews were then subjected to IPA analysis.

![Table 2a: Sample data: Depressed participants.](image)

![Table 2b: Sample data: Non-depressed participants.](image)

**Analysis - interpretative phenomenological analysis (IPA)**

Whilst IPA is a relatively recent analysis model, its historical origins are with phenomenology Husserl (Husserl, 1931, 1970), aiming to return to studying living things. Husserl was very interested in the life-world, comprises of the objects around us as we perceive them, and our experience of our self, body and relationships.

Whilst there are many forms of phenomenology (*Idiographic, Eidetic, and Transcendental*), IPA uses Idiographic ideals which are ideal for this study. Smith developed Interpretative Phenomenological Analysis (Smith, Hare & Van Langenhove, 1995; Smith, 2004, 2007) to analyse elements of the reflected personal experience –the subjective experience of the social world. Giorgi (1994) argued that phenomenology avoids the reductionist tendencies of other research methodologies, and uses the researcher’s assumptions/divergent previous experiences to inform new insights from the data (in this
case the researcher is also dyslexic), rather than forcing data to fit pre-defined categories. Such intuition in the researcher is perceived to allow ‘outside the box’ thinking. The researcher is an interpretative element in understanding the resulting themes and body language, compared to Discourse Analysis (Potter, 1996) which relies on precise analysis of the words used.

IPA has been used in become more popular with researchers (Duncan, Hart, Scoular & Brigg, 2001; Thompson, Kent & Smith, 2002; Biggerstaff, 2003; French, Maissi & Marteau, 2005).

It is argued that IPA is suitable for this sample due to:

(1) Based upon the ‘social model of disability’ and inclusion friendly, aiding understanding in special need samples;

(2) Flexibility and the ability for themes from initial participants to inform an investigative interview script; and lastly

(3) Being Dyslexic friendly as it does not rely solely on written discourse?

IPA methodology was used in this study in the analysis of data; however the results from the transformations (themes) were then used to create quantitative data, thus mixing qualitative and quantitative methodologies. Nineteen main themes were identified from transformations from the third stage of IPA and two-hundred feelings or aspects were identified for these nineteen themes, and are displayed as quantitative percentages. The quantitative data then created tables along with interview evidence in the form of quotes (from mean units from the second IPA stage) are used to form each argument/topic for the results.

Results

Profiles

See Table 4 for supporting quantitative data. Overall the vast majority (85%) of this group (N=29) self-harmed to cope with their difficulties, with more than half feeling worthless (65%) and helpless at times (61.5%). Whilst 30.8% used alcohol to self-harm/cope with stress, coping with food was the highest strategy (34.6%), followed by bodily harm. 50% of this group had thought about suicide with 42.3% having attempted such a strategy.
Breaking down the data by gender, more females (N=18) than males (N=11) self-harmed (83.3 to 63.6%). Females had significantly higher scores for feeling unworthy (72.7%) and helpless (66.7%) Whilst males predominately self-harmed with alcohol (45.5%), females used food (38.9%). Interestingly whilst 36.4% of the men thought about suicide only 9.1% had attempted it. Compared to the females where 50% had thought about it and 55.6% had actually attempted it.

Of the depressed male sample (N=7), 71.4% self-harmed and this was highest with alcohol (42.9%). Unworthiness was higher than feeling helpless (42.9% to 28.6%). Whilst 42.9% of the males thought about suicide only 14.30% had actually attempted it.

- Please describe how you are feeling today? (Are you taking any depression medication at present?)
- Please describe your life/yourself? (I need to create a description of you, e.g.; age, education, job, character, personality, etc.)
- Do you enjoy life?
- Please describe your childhood? Was it happy? (e.g.; with your family)
- Do you have any siblings? Do you think you were treated fairly/unfairly compared to your siblings?
- Please describe your time at school? Was it enjoyable?
- Did you ever get frustrated from your learning difficulties?
- What does dyslexia mean to you?
- Is dyslexia something positive or negative?
- How does dyslexia affect your daily life?
- What classic dyslexia symptoms to you have?
- Do you think your hobbies help you? Giving you self-confidence?
- Do you ever blame your dyslexia for things?
- Do you/have you ever resented your teachers at school for not seeing your difficulties?
- Do you ever feel rejected? Please explain?
- How does failing or getting things wrong affect you?
- Do you ever say why me? Why am I dyslexic?
- Do/Did you self-harm? Why? What are the triggers?
- Have you ever thought about or tried to commit suicide? Why? What were the triggers?
- Do you think dyslexia and depression are correlated (linked)?
- Did you ever truant/run away from home?
- How do you feel going into schools now, what triggers any negative emotions?
- Do you enjoy being you? Please explain?
- Would you call yourself a successful dyslexic?

Table 3: Book interview script N=24 items.

Table 4: Self-harm amongst depressive dyslexics.

In the larger depressed female sample (N=15) the vast majority (86.7%) self-harmed, with food and bodily harm being the main forms.

A large 66.7% felt worthless and 60% felt helpless. 53.7% thought about suicide and 60% had attempted it at some point.

Interestingly looking at degree and non-degree educated data, those with a degree self-harmed more than those without (90.9% to 72.7%). Whilst a higher frequency with a degree felt worthless (63.6%), a higher frequency without a degree felt helpless (63.6%). Participants with a degree tended to self-harm with food, those without a degree self-harmed with bodily harm and then alcohol.

The profiles aid the reader in understanding how this sample group of adult dyslexics coped with life, which includes social stigma from their difficulties and feeling abnormal compared to their peers.
Interview evidence

Due to space, only a few quotes from interview evidence are provided for each theme (more evidence can be found in Alexander-Passe, 2010, 2015a).

Alcohol

Have you ever self-harmed due to the frustrations that dyslexia brings? I do drink too much. Is it to drown out the pain? Yes, it gets me out of, out of it all really. It is like...it helps you sleep so you are not up all night worrying, going over things sixty times. Slowing down or numbing your brain, allowing you to sleep? Yes. (Rachel).

Have you ever self-harmed due to the frustrations that dyslexia brings? Yes. It certainly seems like that way in the last 6 months. I left myself to die when I was 25 yrs. old. Did you drink then? Yes. Was it serious drinking then? Yes. Do you know why? No. I just didn’t want to exist. So it was a form of self-harm then? Yes. As you felt you didn’t fit in and didn’t want to exist, to use your words? Yes. (Ronnie).

Like cigarettes, alcohol is a legal drug for anyone over the age of 16 year old. Interview evidence suggests that alcohol begins as a social activity, but can turn into a coping strategy to deal with work stress and in excess can form a vehicle for attempting suicide. Rachel notes that it can slow down her brain and Ronnie noted that when he drinks he doesn’t feel dyslexic anymore. Are the two things related? Participants commonly mentioned that they thought much faster than their ability to communicate and write down. Does alcohol slow down the brain or relax the individual to such a degree that they lose their inhibitions or cares about the world around them? Alcohol serves as a central nervous system depressant which can cause relaxation and cheerfulness effects. Gorenstein (in Carrion-Castillo, Franke & Fisher, 2013) suggests that alcohol affects the frontal lobes, which is where dyslexics are known to have unique neuron architecture thus the ability of alcohol to numb the effects of dyslexia cannot be ruled out, however no research has been conducted in this area.

Food

How about with food, self-harm can be comfort eating? Yes, I over-eat [laugh]. Was this also used when you were a child? Yes, I always have. As a form of control? [Pause] Yes, I think I have put on quite a lot of weight as I did not want to get into another relationship. It was my control that way. So it was a protection by putting people off you? Yes. (Rachel).
Have you ever self-harmed from your frustrations? Yes, if you feel crap you might want to go for the chocolate. I’m unsure if that is a dyslexic thing or a stress thing. (Phoebe).

According to the evidence in this study, food can be a means to control their body shape/appearance. Was this to punish their body, as many dyslexics view their brains as having faulty wiring? One participant used to bang his head against walls, and another participant with anorexia said it was not to get attention as she would wear layers to disguise her weight loss, so was it therefore self-punishment and bodily control? She admitted that she avoided being noticed in class to avoid reading out aloud, to be invisible, so an alternative hypothesis could be that she was trying to reduce her size to be even more invisible or wither away? Lastly food can be used as an excuse to avoid sport and social interactions.

Jordan began with food as a comfort but later it became an excuse to not interact with others. Being large was also a reason to cover up his lack of co-ordination and ability on the playing field, as he had very active and sporty siblings. His continued use of food as a means to avoid can be translated into self-harming strategy.

Bodily harm (Cutting)

Have you ever self-harmed yourself because of your difficulties? Yes. I used to self-harm, I slashed my wrists open and stuff. I used to eat loads of food and [do] all sorts [of things] really. Did you ever attempt suicide?

Not as such. So when you slashed your wrists, how old were you? About 13yrs old. Do you know what triggered that episode? It was depression. Could it be linked to anything from school, like tests? No. School bullying? I suppose you could link it with the bullying. Do you still have those thoughts? Yes. What triggers these thoughts? Just a lot of stress, which is pretty much my big trigger. (Jean).

Do/Did you self-harm? Yes. I do still self-harm and have done since about the age of four. What are the triggers? My triggers are anger and frustration. I cut my arms and belly. As a kid I would scratch my hands or bang parts of my body like my head. I am currently having therapy which is addressing this issue. Have you ever thought about or tried to commit suicide? Yes. What were the triggers? I get very low sometimes and this is what triggers my negative thoughts. (Susan).

I used to slap my head if I got really frustrated with life, I would hit my head very hard, and I would hit my head against a wall. (Trixie).
Interview evidence suggests bodily harm can include hitting oneself in frustration (e.g.; fists), banging oneself (e.g.; hitting your head against walls) and cutting oneself. Whereas the hitting and banging oneself could be related to self-perception of one’s body being faulty and the hitting and banging is in frustration, the cutting is a different factor. Cutting comes from damaging one’s own body as revenge for it causing pain and aggression, and is likely to come from the need to control. Cutting can also be called self-mutilation based on hyper-stress or dissociation.

Interview evidence suggests that causing self-bodily harm is related to depression and forms part of feeling helpless and frustration with their inability to control their situation. Bodily-harm or self-mutilation came as a means to regain control, in a world they felt they had no control in; and to bleed themselves was a release of hyper-stress from their daily life, especially from school. Evidence also points to alternative forms of self-harm; this can include taking drugs to taking illogical risks, e.g.; looking for fights in the playground.

In a world where dyslexics are unable to control many aspects of their lives (more so in young dyslexics), self-harm through anorexia, bulimia or cutting oneself is a common means to gain control over their bodies, as noted in Alexander-Passe (2010, 2015b) and Scott (2004).

**Suicidal thoughts**

Have you ever thought about or tried to commit suicide? Yes, but I don’t like blood. I am really, really, really not brave...so I do not know if I could have gone through with it. There are loads of times when you think about it, when you plan it, but I do not know if I could go through with it. How young do you think you were when these thoughts first came into your mind? Probably quite young, although I wouldn’t see death as a way out, because I didn’t have that concept, I just wanted this to stop, the inability to do everyday things and you just think ‘I want to be like everybody else, I want to be normal and I’m not allowed to be normal’, so you want it to stop, to fall into a hole and not be there anymore. (Kirsty).

During my school years, I would quite often wish I had never been born, but actually I do remember as an early teenager kind of not waiting to wait until I could drive, because I couldn’t wait to get into a car and just drive it into a brick wall. Why the car? Unsure but I wanted to do that so it would all be over, not dealing with it all. (Emma).
Have you ever thought about or tried to commit suicide? Yes. How early was that, the first time? When I was about fourteen or fifteen years old, I was going through depression and things. (Rachel).

The interview evidence includes different suicide concepts. Some thought ‘wouldn’t it have been easier if I had not have been born’, to ‘I wish I could fall into a black hole’. Many school-aged dyslexics are naive to all the implications of suicide, but just want all their pain and suffering to end. Thoughts of unworthiness surface with Alexander-Passe (2015b) noting several dyslexics thought they were adopted or tried to run away from home, which is similar to thinking about suicide in childhood, with intense feelings of exclusion trauma/emotional distress.

Suicidal attempts

Please describe your time at school? Was it enjoyable? I quite enjoyed school until I went to secondary school, then I found it really difficult, I wasn’t diagnosed dyslexic till I was 17yrs old. I used to hate school because I couldn’t understand why I couldn’t do things that others could do. My primary school was fine, it was just secondary school that things weren’t good; I took an overdose when I was 14yrs as I just couldn’t cope with the school work. It was an academic school I was made to take 13 GCSEs which was far too much work. A lot of coursework.

I just felt there was too much pressure, I just can’t work under so much pressure, sometimes I can, and yes I can work under deadlines now, but I can’t do it if I have too many things on and doing 13 GCSEs, well I just couldn’t do it back then. There was always too much to do and it takes me so much longer to do things [due to my unidentified dyslexia]. The school expected me to go in during my holiday to catch-up! My overdose was due to school, I didn’t know what to do, and I couldn’t tell anyone I couldn’t cope with the workload. (Kirsty).

How early do you think you did those sorts of things? I think quite young. Not smoking or drinking, but hitting myself, yes. Have you ever attempted suicide? Yes. How young were you? I was, I’m just trying to remember when the first time was, I thought about it when I was at school, the first time I sort of got the equipment out to do it, was when I was at university. Do you know what the triggers were for that? I was very suddenly depressed. Did you feel abnormal there, struggling, problems learning? Yes, it was
frustrations at university, when I first started my course and felt out of my depth with the workload. (Trixie).

It is interesting the frequency of non-depressives who had attempted suicide, which suggests that they might have been depressive after all, just without the label. Attempting suicide is not only a cry for help, but an admission that they are unable to cope and that suicide is the only option they see open to them. Suicide is not only seen by some as a means to rid them from this earth, but to stop their burden on others. They see suicide as the ultimate sacrifice as they feel shame, guilt, helpless, desperation, pain, anxiety. Interview evidence points to attempted suicide as a way of coping due to not fitting in, it come as a result of frustration and anxiety about their difficulties (Alexander-Passe, 2009b).

When a dyslexic attempts suicide, they are saying ‘enough is enough, I can’t take it anymore’. Whilst other indirect factors are involved, it should not be underestimated how dyslexia affects relationships and the pressure that dyslexics feel as an outsider to even their own family.

Many do not fit into their own family and unless a dyslexic finds a sympathetic life partner, their suffering continues in trying to fit into a world that many dyslexics find inhospitable. When children begin to withdraw, they are extremely quiet, or highly active and agitated.

Suicide may be seen as an option as a result of excessive bullying and rejection (Winkley, 1996). Scott (2004) suggests that problems related to dyslexia may cause suicide, whilst real numbers are unknown, numerous newspaper reports and anecdotes are the only current data (Fox, 2010; Kosman, 2010; Birmingham News, 2010).

Conclusion

The paper started with an empirical review of available studies, starting with: Dyslexia, Emotional Coping in Dyslexics, Self-Harming and Depression, Self-Harming, Suicidal Behaviour, and lastly Suicidal Thoughts and Attempts.

The review indicates that whilst dyslexia’s literacy deficits are recognised, but is still a matter of discussion about its actual causes, educational manifestations, labelling, and how it should be diagnosed.

There is still a bias towards investigating it as a purely educational issue rather than one that affects individuals with a lifelong learning difference, resulting in possible psychological manifestations due to long-term educational failure. It is this long-term effect
of educational failure over the course of a child’s ten years in mandatory education that is the basis for this paper, and investigations were made to see if such coping had gender differentials.

The true nature of the emotional suffering comes from words not numbers. Qualitative methodologies bring a richness that quantitative data cannot touch. The interview data included in this paper makes the suffering real and places it within our life world.

The main focus of this paper was to investigate self-harming as a reaction to long-term educational difficulties and as a by-product of depression, based on the data from Alexander-Passe (2010, 2012, 2015b). Overall self-harm in many forms was used by the majority of the sample, with food and alcohol more commonly than bodily harm. Self-harm was used by individuals for regaining control in their life - where they felt they had no or little control in other aspects (e.g.; school, relationships).

Food was an interesting form of self-harm; as it extended to binge eating as a comfort food, leading to obesity as another means to distance them from society (there is an illogical perception in society that fat people are abnormal and off-putting). Many self-harmers mentioned feeling unworthy, to explain why they resorted to punishing their bodies for causing them emotional pain due to humiliation.

With bodily harm, it was interesting to note that for those who hit their heads in frustration – it was to hurt themselves to gain a stimulus from feeling pain (a natural high), rather than for anger. As many in the study perceived dyslexia caused them to have a faulty brain, the idea of hitting something broken to get it to work cannot be discounted. In the case of cutting, again there was a chemical and psychological release from spilling blood in a way of regaining control.

Not surprisingly self-harm was greater in the depressive to non-depressive sample; however, the type of self-harm varied. Males and non-depressives tended to predominantly self-harm with alcohol, followed by food and then rarely with bodily harm, whereas females in general, tended to predominantly self-harm with food, then bodily harm and lastly alcohol. Overall depressives self-harmed predominantly with food and then equally between alcohol and bodily-harm. Each group had their own profile and suggests that self-harm is a complex issue, with self-harm activities happening both in child and adulthood. In this study, children self-harmed as young as 5-10 years old in reaction to primary school work pressures, as well as feeling different to their peers.
Half the sample thought about suicide and less than half went on to actually attempt suicide. These thoughts, along with the high frequency of helplessness in the sample, suggest that suicide was viewed by many as an option to end their helplessness. Cases of suicide attempts as children were common in this study, as many felt there was no other option open to them to deal with the pressures from schoolwork and they perceived their parents misunderstood what they were going through. This suggests that parents and schools need to look out for children at risk and put policies in place to help them manage their workload. Drug overdoses, cutting wrists and alcohol poisoning (on purpose) were found in this study by both depressive and non-depressives, due to helplessness not just relating to literacy.

The long-term emotional effects of feeling alienated by your peers and frustrated by your difficulties, even for simple basic tasks, should not be underestimated. Such long-term effects come from:

1. Feelings of anger and resentment towards teachers from their childhood;
2. The humiliation and alienation as experienced by dyslexic adults comes from their own school days, being made to feel abnormal as children.

From the sample the vast majority still resented their childhood teachers and a large percentage also felt anger towards these teachers, with many asking ‘what could I have been?’ and questioning lost opportunities in life. Resentment and anger was greatest amongst non-depressed females, followed by non-degree educated depressives. Both groups one could hypothesise had not attained as per their childhood dreams.

In summary, the study looked at how dyslexic adults are still affected by their difficulties and how they are still affected by their childhood experiences of school. The longevity of school trauma and its effect on adult happiness and career progression means that school is an important period in a dyslexic’s life and educators need to focus on preventing further generations from experiencing negative and emotionally damaging school experiences, which can trigger lifelong mental illness.

**Limitations**

N=29 participants took part in the study (N=22 were diagnosed as depression and N=7 had no depression diagnosis). The author took the viewpoint that the vast majority of the participants (N=29) suffered one or more depressive symptoms, and that the study
wouldn’t label any quotes as specifically coming from a depressive and others from a non-depressive, as this would be misleading and lead the reader to make assumptions.
6.0 Investigating Post-Traumatic Stress Disorder (PTSD) Triggered by the Experience of Dyslexia in Mainstream School Education?


Abstract

Purpose: This paper details a study of adult dyslexics, investigating their childhoods and whether emotional trauma took place, and if this resulted in Post-Traumatic Stress manifestations.

Methods: This paper reports on a reflective qualitative/quantitative adult developmental dyslexia study of N=22 who presently or have in the past suffered from depressive disorders, and N=7 control dyslexic adults. All who replied to the recruitment adverts with a valid diagnosis were interviewed. The study compared depressive to non-depressive dyslexics, with gender and academic success variables. Interpretive Phenomenology Analysis was used to investigate dyslexia and Post-Traumatic Stress Disorder (PTSD) from a qualitative perspective.

Results: The study found support for previous empirical studies noting childhood trauma amongst this population, however this study went one stage further and investigated PTSD as a main topic (manifested as adults and parents). Anger and resentment towards their childhood teacher still registered as adults, along with memories of injustice at the hands of childhood educationalists. Much of this anger was at their lack of diagnosis which meant they suffered for many years as having an undiagnosed learning difficulty.

Interestingly the triggers that affected them at present were smell (school cleaning materials), small pictures and small chairs; these produced high levels of anxiety, inferiority and flash-backs which made visiting school for their own children problematic, with some avoiding such situations.

Conclusion: This study identified that emotional trauma took place in all participants, and this resulted in many having Post-Traumatic Stress Disorder
manifestations as a result of returning to school for their own children. Participants still noted anger and resentment as adults towards their childhood teachers.

**Keywords:** Dyslexia; School; Trauma; Post-Traumatic Stress Disorder; PTSD

**Introduction**

The aim of this wider reflective study was to investigate the various aspects of depression amongst adult dyslexics. In this paper we will investigate the effects of childhood school-based trauma and how it can manifest into symptoms of Post-Traumatic Stress Disorder (PTSD). This aims to understand the high levels of anxiety and trauma experienced by school-aged dyslexics and how it now manifests as adults when returning to school for their own children.

**Empirical Review**

**What is dyslexia?**

According to Rose (2009) Dyslexia (specific reading disability) is defined as a specific learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Whilst there are many characteristic features of dyslexia, as will be discussed, these focus on difficulties with phonological awareness, verbal memory and verbal processing speed. Dyslexia occurs across the range of intellectual abilities. It is best thought of as a continuum, not a distinct category, and there are no clear cut-off points. Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia. A good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to well-founded intervention.

Whilst there are many theories to the cause of developmental dyslexia, many believe phonological deficits are a core function (Snowling, 2000; Thomson, 1996). Whilst research has looked at a medical-based identification, with DNA being the most likely [4, 5], to date identification has relied upon educational psychologists to diagnose ‘dyslexic-type deficits’ through a number of sub skill assessments.
Whilst the origins of the condition concerns difficulty with words, modern definitions are broader and this forms disagreements in the field. Symptoms include difficulties in: short-term memory, phonology, rapid naming, balance, motor skills, and organisation.

Current debate on using the term ‘dyslexia’ is found by the authoritative and influential work by Professors Elliott and Grigorenko (2014) which questions whether the interventions used for dyslexics is any different to those for ‘reading delayed’ children, however they do not refute that many children are leaving primary school without the skills for learning in secondary schools and beyond.

Based on the disparity between the original definition and modern symptom lists, a number of alternative names have been proposed to describe the condition better: Specific reading retardation, reading difficulties, specific reading difficulties, reading disability, learning disability, unexpected reading difficulty, and Specific learning difficulties. 75% tend to agree the difficulty is with words, with the remainder noting a broader difficulty with learning.

Reflecting this disagreement, the draft revision to the 5th version of the American Psychiatric Association’s ‘Diagnostic and Statistical Manual (DSM-5)’ originally suggested the term ‘learning disorder’ to be replaced with ‘dyslexia’ to ‘render APA terminology consistent with international use’, describing ‘difficulties in reading accuracy or fluency that are not consistent with the person’s chronological age, educational opportunities, or intellectual abilities’ (Cowen and Dakin, 2013). However its final version (American Psychiatric Association, 2013) now uses ‘Specific Learning Disorder’, based on a reasoning that the international conceptions and understandings of dyslexia (and other conditions) exist but disagree on its definition, Elliot and Grigorenko (2014) argue that attempts to find a single definition have been hampered by factors of inclusivity, some criticised as being too inclusive and others too exclusive. Rice and Brooks (2004) and Fitzgibbon and O’Connor (2002) agree that a universally agreed definition and explanation remains elusive, and that definitions to date have been subjective and too broad, and serve self-obsessive purposes.

Whilst dyslexia is widely understood to affect reading, writing, short-term memory and associated traits (Thomson, 1996; Riddick, 1996; Miles, 1994) there is less information available about how dyslexics interact with society and their environment at large (Scott, 2004; Alexander-Passe, 2006, 2010) Many ignore dyslexia as a life-long condition that affects individuals from cradle to grave and emotional/ psychological manifestations from such a condition.
Alexander-Passe (2010), Scott (2004) McNutty (2003) agree that dyslexia is camouflaged in adulthood, due to advanced coping strategies allowing a sense of normality to be projected. Dyslexics are very conscious of their differences, so create a secondary persona to operate in the wider community (Scott, 2004; Alexander-Passe, 2010, 2015a). This persona works the majority of the time; however when it cracks can be highly embarrassing, demonstrates how vulnerable they can be, and confirms their otherness compared to their peers. There is however a shortage of research concerning dyslexia and Post-Traumatic Stress Disorder (PTSD) and this paper aims to shed light on this subject.

**Dyslexia and self-esteem**

There is strong evidence to suggest that dyslexics suffer from low self-esteem when they fail consistently at school and that deviant behaviour is a common bi-product (Riddick, 1996; Scott, 2004; Alexander-Passe, 2008, 2010, 2015a; Morgan, 1997; Kirk & Reid, 2001; Hales, 1994; Humphrey, 2002). Riddick, Sterling, Farmer and Morgan (1999) and Peer and Reid (2001) agrees that ‘frustration leads very often to antisocial or deviant behaviour’ amongst dyslexics, especially those with low self-esteem.

Molnar and Lindquist (1989) suggests that some pupils may disrupt a class because they interpret the class work as threatening, and use attention seeking to protect self-esteem. That if the teacher, in class with pupils, can re-interpret the nature and purpose of class work (keeping the child’s self-esteem), the child’s long-term behaviour will change.

However most teachers, as Molnar and Lindquist found, hand out reprimands, as the only skill they know that quickly influences a child’s present behaviour – a fire-fighting technique.

Riddick (1996) argues that self-esteem will also mean the development of a poor or negative self-image. Such beliefs become self-fulfilling prophecies due to the expectation to fail, with Morgan and Klein (2003) noting that childhood experiences of being labelled ‘thick’ and public humiliation caused by failing often results in choices which reinforce low self-esteem.

Whilst specialist schools for dyslexics have been found to improve self-esteem, especially social and academic self-esteem (Thomson & Hartley, 1980) and Scott (2004) also suggests the best improvements in self-esteem comes from literacy, and the improvement of literacy breaks the difference between dyslexics and their peers, as ‘difference’ is the core problem, no matter if pupils are in specialist or mainstream schools.
Empirical studies note correlations between low self-esteem/anxiety and academic failure (Burns, 1979, 1982) - more so with dyslexics, as Humphrey and Mullins (2002) note ‘the experience of dyslexics at school has clear and demonstrable negative effects on the self-concept and self-esteem of children’. Riddick et al. (1999) indicated ‘the powerful meditating effect of literacy performance on how individuals perceive themselves and are perceived by others’, suggesting literacy failure can distort the dyslexic’s self-perception.

Brinckerhoff, Shaw and McGuire (1993) identified the lack of positive self-concept as being a main and consistent counselling issue that presents itself in people with learning difficulties, with Morgan & Klein (2003) noting this is the case in dyslexics. Battle (1992) claims that once an individual’s level of self-esteem is well established, it becomes difficult to alter and remains relatively stable over time.

**Dyslexia and school-based trauma**

Edward’s (1994) study of eight case studies of children attending a specialist private dyslexia school investigated not only how these children felt, but their experiences attending mainstream state schools. The investigation found that the participant’s experiences in mainstream education caused them scars, due to the high level of abuse they encountered. Negative experiences at school included wide scale: violence from teachers, unfair treatment/discrimination, inadequate help/neglect, humiliation and teasing/persecution.

These produced various negative reactions, including: truancy/school refusal, psychosomatic pain, and isolation/alienation, lack of confidence, self-doubt/denigration, competitiveness disorders, and sensitivity to criticism and behaviour problems. The study found that whilst they experienced difficulties in the public sector schooling, in the private sector they were able to regain their self-confidence due to teaching methods suitable to their needs, along with opportunities for them to experiment and find their hidden talents. These reinforced their self-belief, that they were able to give positively to society rather than be a burden. The study also noted that other non-academic attributes, such as sensitivity, intensity and loyalty were found in these children which allowed them to deal with their learning difficulties. Humour and stubbornness/ determination was also noted in many, Edwards termed such humour as ‘survival humour’, as a means to cover-up and move on from negative reactions to their dyslexic type of errors (e.g. getting on the wrong bus or saying something inappropriate). Stubbornness and determination were also
featured in many participants in Edwards study, suggesting that they had developed survival strategies to also recover from difficulties doing tasks, rather than using helplessness to give up on tasks which were difficult.

The failing reader must deal with self-doubt which becomes far from being a secret shame, and often becomes a public failure (Gaines, 1989)

Osmond (1994) found one boy saying ‘I know inside I’m not stupid, but I look stupid to everyone else because all the things that I can’t do are the things that you have to do at school’. Another young adult dyslexic noted ‘the last person to be convinced I was dyslexic was me. I just thought I was thick at school and that it was my fault. I can remember the anger and frustration I felt, especially earlier on, and I still do I suppose, though not as much. I just felt uptight all the time’. This person had grown up thinking he was thick and stupid!

Riddick (1996) notes one mother speaking about her dyslexic son ‘it was traumatic for him, incredibly traumatic’, every morning I had to wake him up and faced him screaming ‘I don’t want to go to school’, and then I had to pull him all the way down to school’. Riddick (1996) indicates there is general empirical consensus that children with reading difficulties are more likely to have behavioural and emotional difficulties (Tansley & Panckhurst, 1981; Gentile & Macmillian, 1987)

**Post-Traumatic Stress Disorder (PTSD)**

According to The American Psychiatric Association (2013) the Diagnostic criteria for Post-Traumatic Stress Disorder (PTSD) includes: a history of exposure to a traumatic event that meets specific stipulations and symptoms from each of four symptom clusters: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. The sixth criterion concerns duration of symptoms; the seventh assesses functioning; and, the eighth criterion clarifies symptoms as attributable to a substance or co-occurring medical condition. The DSM-V diagnostic criteria are indicated in Table 1.

Two specifications are noted including ‘delayed expression’ and a ‘dissociative’ subtype of PTSD, the latter of which is new to DSM-5. In both specifications, the full diagnostic criteria for PTSD must be met for application to be warranted.

The ‘stressor’ from the traumatic event consists of two parts, both of which must apply for a diagnosis of PTSD. The first requires that ‘the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious
injury, or a threat to the physical integrity of self or others’. The second requires that ‘the person’s response involved intense fear, helplessness, or horror.’

According to The UK’s Royal College of Psychiatrists (2005) many with PTSD feel grief-stricken, depressed, anxious, guilty and angry after a traumatic experience. As well as these understandable emotional reactions, there are three main types of symptoms or manifestations produced by such an experience as indicated in Table 2.

**Dyslexia and PTSD**

Alexander-Passe (2009a, b, 2010, and 2015a) suggests that ‘Post-Traumatic Stress Disorder’ (PTSD) in dyslexics can come from various factors, these include: the sudden exclusion from their peer group; intense anger from a teacher or parent, physical bullying at school; realisation that something unrecognisable is wrong (maybe realising that they are not normal or do not learn normally, being called stupid, lazy etc.). There are two forms of PTSD, which Scott (2004) suggest dyslexics suffer. The first is Type 1 (an acute, single-impact traumatic event) and Type 2 or complex PTSD (a series of traumatic events or prolonged exposure to a stress or stressor), both are listed in the DSM-IV (American Psychiatric Association, 1994).
Criterion A: stressor

The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, as follows: (one required)

- Direct exposure.
- Witnessing, in person.
- Indirectly, by learning that a close relative or close friend was exposed to trauma. If the event involved actual or threatened death, it must have been violent or accidental.
- Repeated or extreme indirect exposure to aversive details of the event(s), usually in the course of professional duties (e.g.; first responders, collecting body parts; professionals repeatedly exposed to details of child abuse). This does not include indirect non-professional exposure through electronic media, television, movies, or pictures.

Criterion B: intrusion symptoms

The traumatic event is persistently re-experienced in the following way(s): (one required)

- Recurrent, involuntary, and intrusive memories. Note: Children older than six may express this symptom in repetitive play.
- Traumatic nightmares. Note: Children may have frightening dreams without content related to the trauma(s).
- Dissociative reactions (e.g.; flashbacks) which may occur on a continuum from brief episodes to complete loss of consciousness. Note: Children may re-enact the event in play.
- Intense or prolonged distress after exposure to traumatic reminders.
- Marked physiologic reactivity after exposure to trauma-related stimuli.

Criterion C: avoidance

Persistent effortful avoidance of distressing trauma-related stimuli after the event: (one required)

- Trauma-related thoughts or feelings.
- Trauma-related external reminders (e.g.; people, places, conversations, activities, objects, or situations).
Criterion D: negative alterations in cognitions and mood

Negative alterations in cognitions and mood that began or worsened after the traumatic event: (two required)

- Inability to recall key features of the traumatic event (usually dissociative amnesia; not due to head injury, alcohol, or drugs).
- Persistent (and often distorted) negative beliefs and expectations about oneself or the world (e.g.; “I am bad,” “The world is completely dangerous”).
- Persistent distorted blame of self or others for causing the traumatic event or for resulting consequences.
- Persistent negative trauma-related emotions (e.g.; fear, horror, anger, guilt, or shame).
- Markedly diminished interest in (pre-traumatic) significant activities.
- Feeling alienated from others (e.g.; detachment or estrangement).
- Constricted affect: persistent inability to experience positive emotions.

Criterion E: alterations in arousal and reactivity

Trauma-related alterations in arousal and reactivity that began or worsened after the traumatic event: (two required)

- Irritable or aggressive behaviour
- Self-destructive or reckless behaviour
- Hypervigilance
- Exaggerated startle response
- Problems in concentration
- Sleep disturbance

Table 1: The DSM-V (APA, 2013) the diagnostic criteria for PTSD.

PTSD is a widely researched aspect of psychology (Rose, 2002; Stallard, Valleman & Baldwin, 1999) and is categorised as the sudden and irrevocable perceptive change of the world from one that is safe and predictable to one that is dangerous and random. Individuals are as traumatised as if they had been in a major car crash. Behavioural effects
of PTSD come from repetitive and intrusive thoughts and can be triggered by vision, sound and smell (Riddick et al. 1999; Miles & Varma, 1995). Yule, Bolton, Udwin, Boyle, O’Ryan and Nurrish (2000) found only 25% of PTSD sufferers had recovered after five years, 33% after eight years and 59% warranted a lifetime diagnosis.

Perrin, Smith and Yule (2000) note correlations between a sufferer with PTSD with concentration, memory and reading problems, it is unclear if the PTSD caused such difficulties or whether they were there before, a ‘chicken and egg scenario’. Tsui (1990) suggests that PTSD is related to academic performance and that the PTSD was the cause.

Scott (2004) argues it is not clear cut and that PTSD might be caused by the secondary effects of having dyslexia, a view Alexander-Passe supports. Scott offers a second theory, that of ‘daily hassles’, an opposite concept of PTSD, in that the stress of daily inconveniences are ‘even more perilous in the stress lexicon than major life events’. As noted by Lu (1991), Lazaraus (1984), Chamberlain and Zika (1990) the risk of persistent hassles that are endlessly present in the sufferers life are a powerful predictor of psychological distress and has been likened to ‘living permanently in a cloud of small, biting mosquitoes’ (Scott, 2004) Morgan and Klein (2003) saw that even adults with minor dyslexic symptoms, are placed under greater stress from the constant effort needed to perform ordinary, daily tasks such as reading instructions to understanding conversations.

To support such a concept, Winkley (1996) asked dyslexics at junior school to rank the most stressful things in their environment? 12 of the 16 stressors mentioned are related to the experience of being dyslexic (getting lost, being left alone, being ridiculed in class, tests and examinations, breaking or losing things, being different, performing in public). Harrison (1995) herself a dyslexic, suffered high levels of stress in her own life, in work with a group of PTSD sufferers noticed ‘the similarities struck me; although I realise they are not as extreme for me. The social dysfunctionality also is, in them exaggerated, but nevertheless comparable to my own experiences and those I have known with other dyslexics’.

Gilroy (1995) notes ‘it is obvious that past experiences [of failure] leave a deep scar (Edwards, 1994) and that many [adult] dyslexic students have a poor self-concept and suffer from low self-esteem’. Gilroy also details an interesting observation that in a spontaneous, undirected, general conversation lasting 20 minutes between five adult dyslexic students, the following words and phrases were observed: hopeless at (seven times); useless at (five times); could never (three times); mess (twice); typical me (twice); never been any good at (twice). She points to ‘typical’ and ‘never’ suggesting deep-rooted poor self-image
stretching back to childhood. Post-observation conversation noted four out of the five students ‘often felt that they were thick’.

Scott (2004) suggests that unrecognised and diagnosed dyslexic parents can find the horrors and trauma of their own childhood and resulting anger/teacher resentment can resurface when facing their child’s teachers, especially when they perceive their child’s difficulties are being ignored and such parents need to be careful as their educational helplessness can affect their children and their child’s perception of school. Such learned helplessness can include the attitude to homework or towards teachers in general (Alexander-Passe, 2010, 2015a, b; Congdon, 1995). Such resurfacing of childhood school-related traumas can lead adult dyslexics to learned helplessness, depression, self-blame and self-Scott, 2004).

**Conclusion**

Whilst the empirical evidence supports the concept that a negative school experience might trigger low self-esteem and that dyslexics experience not only short-term humiliation but medium-term humiliation from peers and teacher leading to trauma. Little is known about the long-term effects of this school-based trauma. Post-Traumatic Stress Disorder was introduced as a mean of understanding any long-term manifestations. This study will seek to locate and understand this possible correlation further (Dyslexia and Post-Traumatic Stress Disorder), and how related anxiety might be triggered in adults with developmental dyslexia.

**Methodology**

**Sample**

Participants were recruited three ways: (1) emails to UK dyslexia newsgroups, (2) adverts on dyslexic web-forums, (3) adverts on dyslexia associations’ websites. Four dyslexic sample groups were requested (with/without depression, degree/non-degree educated), with dyslexic adults with depression being largest group replying.

Participants were required to provide evidence of: (1) a formal diagnosis of developmental dyslexia (e.g. educational psychologist/ specialist teacher reports), (2) depression (e.g. a clinical depression diagnosis or at least one course of physician/GP prescribed antidepressants).
Whilst it should be noted, mild depression is common in society, only severe cases tend to be referred for clinical diagnosis.

The mean age of dyslexia diagnosis data indicated that non-depressives tended to be diagnosed earlier, however in both groups they were mainly diagnosed post-school and after leaving university (Table 3-5):

- **Flashbacks and Nightmares** - You find yourself re-living the event, again and again. This can happen both as a ‘flashback’ in the day, and as nightmares when you are asleep. These can be so realistic that it feels as though you are living through the experience all over again. You see it in your mind, but may also feel the emotions and physical sensations of what happened: fear, sweating, smells, sounds, and pain. Ordinary things can also trigger off flashbacks, such as seeing a child’s drawing.

- **Avoidance and Numbing** - It can be just too upsetting to re-live your experience over and over again. So you distract yourself. You keep your mind busy by losing yourself in a hobby, working very hard, or spending your time absorbed in crossword or jigsaw puzzles. You avoid places and people that remind you of the trauma, and try not to talk about it. You may deal with the pain of your feelings by trying to feel nothing at all - by becoming emotionally numb. You communicate less with other people, who then find it hard to live or work with you.

- **Being ‘On Guard’** - You find that you stay alert all the time, as if you are looking out for danger. You can’t relax. This is called ‘hypervigilance’. You feel anxious and find it hard to sleep. Other people will notice that you are jumpy and irritable.

- **Other symptoms** such as emotional reactions to stress are often accompanied by: muscle aches and pains, diarrhoea, irregular heartbeats, headaches, feelings of panic and fear, depression, drinking too much alcohol, and using drugs (including painkillers).

**Table 2: The three main types of symptom of PTSD (The Royal College of Psychiatrists, 2005).**
All participants who responded to the above recruitment paths were interviewed subject to their ability to provide evidence to their developmental dyslexia diagnosis.

**Apparatus**

An investigative semi-structured interview script was used with N=24 items (Table 6). Interviews lasted between an hour and three hours.

**The Interview process, confidentiality, informed consent and personal disclosure**

All participants were sent details of the study before the interview, and all verbally confirmed participation before the start of each recorded interview. Participants were also advised that they could avoid any questions that were too emotional to answer and to halt the interview and their participation in the study without reason; fortunately, no participants took this option. As avoidance was noted in several interviews, further investigative questions were required.

Confidentiality was assured at several points: (1) in the original study advert; (2) in email confirmation/requests for basic details (name, age, education etc.); (3) at the start of each interview, (4) advising participants that pseudonyms names would be used.

Each participant was also reassured that they would receive a copy of their transcript which they would have the opportunity to check and modify. As the interviews concerned participants disclosing emotionally painful or frustrating events it was felt best that interviewer (Alexander-Passe) also disclosed, where required, that he was diagnosed dyslexic at fourteen years old and understood and had experienced many of the difficulties at school that they may have encountered.

**Analysis**

Each interview was recorded on audio tape, transcribed, spellchecked with minimal grammar changes; lastly a check was made for readability. The transcript was then emailed to each volunteer for them to check and amend if required, with the opportunity for them to add additional notes or post interview revelations, as interviews can commonly trigger post-interview thoughts. Interviews were then subjected to IPA analysis.
Table 3: Sample data: Size, mean age and standard deviations.

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<tr>
<th></th>
<th>N</th>
<th>Mean age (years)</th>
<th>Standard Deviation</th>
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<tr>
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<td>40.56</td>
<td>12.67</td>
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<tr>
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<tr>
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<td>22.28</td>
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Table 4: Sample data: Depressed participants.

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<th>Diagnosed age of Dyslexia</th>
<th>Gender</th>
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<th>Female</th>
<th>Degree educated</th>
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</tr>
</tbody>
</table>

Table 5: Sample data: Non-depressed participants.

<table>
<thead>
<tr>
<th>Non-depressed</th>
<th>Age</th>
<th>Gender</th>
<th>Diagnosed age of Dyslexia</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Degree educated</th>
<th>Non-degree educated</th>
<th>Depressed at school</th>
</tr>
</thead>
<tbody>
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</table>

- Please describe how you are feeling today? (Are you taking any depression medication at present?)
<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please describe your life/yourself? (I need to create a description of you e.g. age, education, job, character, personality etc.)</td>
</tr>
<tr>
<td>Do you enjoy life?</td>
</tr>
<tr>
<td>Please describe your childhood? Was it happy? (E.g. with your family)</td>
</tr>
<tr>
<td>Do you have any siblings? Do you think you were treated fairly/unfairly to your siblings?</td>
</tr>
<tr>
<td>Please describe your time at school? Was it enjoyable?</td>
</tr>
<tr>
<td>Did you ever get frustrated from your learning difficulties?</td>
</tr>
<tr>
<td>What does dyslexia mean to you?</td>
</tr>
<tr>
<td>Is dyslexia something positive or negative?</td>
</tr>
<tr>
<td>How does dyslexia affect your daily life?</td>
</tr>
<tr>
<td>What classic dyslexia symptoms do you have?</td>
</tr>
<tr>
<td>Do you think your hobbies help you? Giving you self-confidence?</td>
</tr>
<tr>
<td>Do you ever blame your dyslexia for things?</td>
</tr>
<tr>
<td>Do you/have you ever resented your teachers at school for not seeing your difficulties?</td>
</tr>
<tr>
<td>Do you ever feel rejected? Please explain?</td>
</tr>
<tr>
<td>How does failing or getting things wrong affect you?</td>
</tr>
<tr>
<td>Do you ever say why me? Why am I dyslexic?</td>
</tr>
<tr>
<td>Do/Did you self-harm? Why? What are the triggers?</td>
</tr>
<tr>
<td>Have you ever thought about or tried to commit suicide? Why? What were the triggers?</td>
</tr>
<tr>
<td>Do you think dyslexia and depression are correlated (linked)?</td>
</tr>
<tr>
<td>Did you ever truant/run away from home?</td>
</tr>
<tr>
<td>How do you feel going into schools now, what triggers any negative emotions?</td>
</tr>
<tr>
<td>Do you enjoy being you? Please explain?</td>
</tr>
<tr>
<td>Would you call yourself a successful dyslexic?</td>
</tr>
</tbody>
</table>

**Table 6: Book interview script N=24 items.**
**Interpretative Phenomenological Analysis (IPA)**

IPA is a relatively recent analysis model but has its historical origins with the phenomenology and Husserl (1970) aiming to return to studying living things. This refers to “to return to the things themselves is to return to that world which precedes knowledge, of which knowledge always speaks” (Merleau-Ponty, 1962). Husserl was very interested in the life-world, comprises of the objects around us as we perceive them and our experience of our self, body and relationships.

Whilst there are many forms of phenomenology in use (Idiographic, Eidetic, and Transcendental), IPA using Idiographic ideals is used in this study. Smith developed Interpretative Phenomenological Analysis (Smith, Harre & Van Langenhove, 1995; Smith & Osburn, 2008) to analyse elements of the reflected personal experience – the subjective experience of the social world. Giorgi (1994) argues that phenomenology avoids the reductionist tendencies of other research methodologies, and uses the researcher’s assumptions/divergent links to inform new insights from the data, rather than forcing data to fit predefined categories. Such intuition in the researcher allows ‘outside the box’ thinking. The researcher is an interpretative element to understand themes and body language, compared to Discourse Analysis (Potter, 1996) which relies on precise analysis of the words used.

IPA has been used in many research studies (Duncan, Hart, Scoular & Brigg, 2001; Thompson, Kent & Smith, 2002; Clare, 2003; Biggerstaff, 2003; French, Maissi & Marteau, 2005) IPA is suitable for this sample due to: (1) Being ‘social model of disability’ and inclusion friendly, aiding understanding in special need samples; (2) Allowing flexibility and the ability for themes from initial participants to inform an investigative interview script; and (3) Dyslexic friendly as it does not rely solely on discourse.

**Analysis methodology used in this study**

This study predominately uses IPA methodology for analysis of data; however the results from the transformations (themes) were then used to create quantitative data, thus mixing qualitative and quantitative methodologies. Nineteen main themes were identified from transformations in the third stage of IPA and two-hundred feelings or aspects were identified for these nineteen themes, displayed in quantitative percentages. The quantitative data was then used to create tables along with interview evidence in the form
of quotes (from mean units from the second IPA stage) are used to form each argument/topic for the results.

**Results: Profiles**

Profile results from this study are drawn from Table 7.

Overall 65.4% of the sample suffered from PTSD (school avoidance) symptoms in relation to re-entering school and 53.8% experienced anxiety with many feeling powerless like a child (46.3%) in this environment. In detail the PTSD (school avoidance) was triggered by smell (23%), small chairs (15.4%) and child drawn pictures on classroom walls (7.7%).

It was found that males experienced higher levels of PTSD (school avoidance) than females (63.6% to 55.6), along with anxiety (54.5% to 44.4%), likewise this was seen in much higher levels of smell triggers (36.4% to 11.1%, small chairs (18.2% to 11.1%) and pictures on walls (18.2% to 0%). However more females felt powerless like a child in schools (50% to 27.3%).

Higher levels of PTSD (school avoidance) were seen in the depressed to the non-depressed group (63.6% to 42.9%), along with higher anxiety (50% to 42.9%) and feeling powerless like a child (45.5% to 28.6%).

Whilst both degree and non-degree educated participants had the same level of PTSD (63.6%), those with a degree felt anxiety was triggered by school (63.6% to 36.4%), but non-degree educated participants felt powerless in school environments (54.5% to 36.4%).

The triggers of smell, small chair and pictures were also higher amongst degree educated dyslexics.

Depressed males were more likely to suffer from PTSD (school avoidance) than females (71.4% to 60%) and likewise school triggered more anxiety in males (57.1% to 46.7%), however interestingly females by far felt powerless in school environments (60% to 14.3%), this may be due to them having to face school as mothers but fathers had more opportunity to avoid such situations.
Results and Discussion: Interview Evidence

Table 7: Post-Traumatic Stress Disorder.

Do adult dyslexics still resent their childhood teachers? Yes. **Do you feel anger towards them?** Yes. (Jean).

Generally I don’t resent my old teachers, and yes it would be so nice to go back to the teacher who said I wouldn’t have a career and show them I now have an HND diploma, but I don’t feel there is a need to do that. I don’t bare grudges against them. (Milly).

At the secondary school, there was a constant emphasis on my weaknesses, so you become very aware of that. **Have you ever resented your teachers for not recognising your problems growing up?** Yes. **Do you feel anger towards them?** I probably do, it was sort of talked about at different stages, but it was not picked up in primary school until I reached secondary school in Scotland, but that came to nothing as it wasn’t followed up [with action]. (Norman).

I have...I felt resentment and hatred towards my teachers for a number of reasons; whether it is for the specific reason of not seeing my difficulties, I do not know. It was the easiest thing to do nothing and that is what they did. (Peter).

Yes. I think possibly, the only negative bit is, if I have achieved so much without the help, what the ‘hell’ could I have achieved with the help. I think that’s sad, the anger, the frustration, the lost opportunity and the unnecessary pain and humiliation I went through, wasn’t actually necessary. (Shelley).

I feel very angry, because of what I had done, I was a senior staff nurse before I even ‘came out of the closet’ officially and told people, but I never had it formally assessed at 15 years old and nobody properly knew what it was. I screened positive when I was 15 years
old, and they turned round and said that I had poor visual and hearing memory, but refused to label me because it was deemed to be inappropriate, it was in 1976, labelling wasn’t the done thing. (Anita).

Yeh, but I kind of understand that at the time it wasn’t known as much, probably I wasn’t severe enough for them to notice and also because I hid them as well. I feel resentful but at the same time, I can’t feel completely resentful because I did hide a lot of stuff. I normally hid in the back of the class room and managed to not hand in any homework, because they thought I was stupid, you know it just wasn’t important for me to hand in homework [to be marked]. Yeh, I did lose books [on purpose as a cover]. (Norma).

The interview evidence above is quite clear that many dyslexics resent their teachers for not seeing their dyslexia, they ask ‘what could I have been with diagnosis and help’ and also resent teachers for lack of professionism. Teachers are viewed as having a lot to answer for. But was it the teachers fault? Wholly their fault? Several dyslexics in the UK have sued their local educational authorities for the failing of their ‘duty of care’ in educating them, and many have been paid out a lot of money. Yes there are incompetent teachers, and are rarely are struck off the teaching register. Normally they are given a shining reference and told to move onto another school.

So are dyslexics right to be angry and resentful towards teachers who missed their diagnosis. Yes and no. Yes their teachers missed it, but each year another set of teachers also missed it, so in total it may be 30 teachers missed their learning difficulties, so one could argue incompetence on a grand scale? What is actually wrong is the teaching system at school and teacher training? The current system could be viewed as a ‘Band-Aid’ approach. Teachers and schools fire-fight SEN as they do not have the budgets to put in place precautionary measures.

The UK government has now reintroduced ‘baseline assessments’ for all pupils entering primary school, so academic progress can be tracked and early interventions introduced (Department of Education, 2015).

**What might trigger PTSD in dyslexics when re-entering school again?**

The smell of the school, I hate it, the small chairs, and the paintings in the corridors. No disrespect to the artists, but it reminds me of being outside the headmaster’s office, in trouble again. (Adrian).
I felt strange going in there, especially when one of my old teachers came up to me and talked to me as he remembered me. I remember thinking ‘you stand there being so nice to me after the traumas that you are participated in’. Did you feel belittled by them? Inferior? I am having an attack now just thinking about it! I did not feel belittled as an adult, but I did as a child. I felt very angry towards them and I am very much of the thought that one should not be two faced. Did the smell or layout trigger things for you? When I walked in there, I felt tense and I sort of panicked as I began to look around for people who would know me. I began to get flashbacks to my time at the school and the traumas, being told off and being belittled. (Anita).

What would trigger things is if I heard a teacher shouting, or ‘balling’ at children. I stand there and my initial reaction is to tense up, freeze and then I kind of want to go into that classroom and hit the teacher and say ‘leave them alone and what do you think you are doing!’ (Emma).

It is just that when you walk through the doors you feel like a different person, you kind of feel like that again [a small child]. You forget that you are twenty-three-years old and have done all these things. You think that you are twelve or thirteen again and you have to face a school where no one likes you. The smell doesn’t trigger things? It can. You get the sense of being there again. Noise of the children? Its everything, you just feel you are back there drowning again. (Kirsty).

I hated working with teachers because I feel that they were judging me and I am stupid, I think because my teaching is so specialist I know more than they do, so they can’t criticise me for something that I’m actually the expert for. I always feel I’m in detention as I need to wait outside the headmasters office and I’ve been doing this for the last 4yrs [teaching in schools] and I’m still scared of the head teacher, in all the schools I work in. (Lara).

Smell. Layout of chair? Anything really. When I go to my daughter’s primary school, it is the smell, the chair layout, chair scraping, and noise from the kids. (Malcolm).

With your child, how do you feel going into schools? I had transferred the fear of dyslexia onto my son, yeh he had also been listening to my mum or dad about stuff. Going back into school, for my son, brings back feelings of my time there. He tells me off for some of things I say, as it does trigger off my anxiety about being at school and the way teachers are, but he, my son, generally gets on with his teachers, he builds up good relationships with them, but I was withdrawn [at school] doing that. (Maureen).
I live next door to a school, so it’s the sound probably, all the kids running about. I think it is funny I live next to something I hate more than anything. When I have been into schools, the smells, the sort of plasticine, chalk smell, that sort of stuff. We had meetings in a small classroom there, the small chairs and especially all the stuff pinned into the wall also evoked things into me. **What did that trigger?** It triggered not particularly pleasant memories. I think things like my work was never pinned to the wall and my stuff was never put up into the corridor and stuff like that. **So feeling that your work was not worthy enough/not good enough for presentation?** Yes. (Norman).

I found it quite difficult [going into my child’s school] it actually reminded me of being back at school as a child, I didn’t do it on many occasions, yeh in their school life it was only twice, with two kids going through school I only went in two or three times, that’s it. I think a lot of it [the triggers to fear/emotion] was the smells, how it was set out. When you go through the doors it just sets off the memories of when I was at school. (Samuel).

**Discussion**

The advantages of using a reflective study such as this one, was the ability to ask adults about their childhoods and any long-term reactions. PTSD (school avoidance as an adult) is one such expression of reactions and denotes emotional responses to once feared stimulus which resulted in a deep trauma. In this study, school and returning to school for ones child’s education is the feared stimulus and suggests that such a fear is the long-term manifestation of trauma from their own time at school; trauma delivered by the bullying of teachers and peers in mainstream education setting.

Smell is one of the main input senses in humans and is a powerful source of data to the human brain, in this study it was a main stimulus.

The smell of school can vary from the strong sickly floor cleaner used, plastercine and to the aroma of lunch that can drift through open-plan schools. Interview evidence suggests this triggered anxiety and caused apprehension.

The second emotive stimulus was seeing small school chair. From the interview data one understands that the vision of a small chair in school triggers not only feelings of being small, but inferiority feelings and being victimised by others especially teachers. Being small, weak and vulnerable, describes how many dyslexics view school, especially primary
school. They were vulnerable to humiliation along with being powerless or helpless to change the factor to advocate for themselves.

The third stimulus was the sight of pictures and paintings on walls. Evidence suggests that pictures on the walls of the classroom and hallways of the school triggers PTSD reactions of inferiority and public comparison with peers. Malcolm noted in his interview that his teachers faked his work and didn’t display the real work as it was rubbish in their eyes and would have reflected badly on the school.

Others like Norman noted that pictures triggered PTSD because their work was never worthy of display.

Evidence suggests that many dyslexics go into child mode whenever they are around teachers, as one noted ‘it was as if the last twenty years had never happened’, they transformed back to a small child even though they were a degree-educated adult. Even Lara who teaches in schools, feels a little girl again, withdrawn and in detention whenever she needs to sit outside the headmaster’s office before meetings. Rachel notes she has these same belittling feelings with doctors and another medical staff, a feeling of not being worthy and that others are more intelligent than she is.

**Conclusion**

This paper began with a literature review looking at: What is Dyslexia, Dyslexia and Self-esteem, Dyslexia and School-based trauma, Post-Traumatic Stress Disorder, Dyslexia and PTSD.

The wide empirical review looked at various aspects of the childhood experiences of dyslexics, which focused on negative school experiences (humiliation and bullying by teachers and peers) resulting in low self-esteem and other emotional manifestations from school-based trauma. Strong empirical evidence supports the concept that developmental dyslexics experience at school creates scars that can have life-long effects, however these life-long effects are rarely investigated.

Post-Traumatic Stress Disorder was introduced as a means to understand the life-long effects of this school-based trauma, relating to 10 years or more in mandatory education, of continual failure and lack of differentiated learning. It was also noted that the scars could affect the adult dyslexic, as they return to the feared stimulus in regard to their role as a parent, resulting in helplessness.
This paper reported on a qualitative study of N=29 adults with developmental dyslexia, N=22 (75.86%) diagnosed depression and N=7 (24.14%) controls. Interpretative Phenomenological Analysis (IPA) was used as a means to understand the data and to locate themes held within.

Overall 65.4% of the sample suffered from PTSD (school avoidance) symptoms in relation to re-entering school as parents, resulting in anxiety with many feeling powerless like a child, triggered by smell, small chairs, and child drawn pictures on classroom walls.

It was found that males experienced higher levels of PTSD (school avoidance) than females (63.6% to 55.6), along with anxiety (54.5% to 44.4%), likewise this was seen in much higher levels of smell triggers (36.4% to 11.1%), small chairs (18.2% to 11.1%) and pictures on walls (18.2% to 0%). However more females felt powerless like a child in schools (50% to 27.3%).

Interestingly, both degree and non-degree educated participants had the same level of PTSD (63.6%), those with a degree felt a greater anxiety was triggered by school (63.6% to 36.4%), but non-degree educated participants felt more powerless in school environments (54.5% to 36.4%). Therefore the triggers of smell, small chairs and pictures were also higher amongst degree educated dyslexics.

Qualitative data were introduced to the paper to exemplify the experiences encountered, looking at: Do adult dyslexics still resent their childhood teachers? What might trigger PTSD in dyslexics when re-entering school again?

The resentment and anger from their childhoods were found to manifest into physical and emotional reactions when re-entering school as an adult, now as a parent. A majority in this study suffered from PTSD (Post-Traumatic Stress Disorder) as they exhibited reactions to their childhood trauma triggered environment.

In many cases this came when re-entering school to meet teachers for their own child’s education. PTSD relies on human senses to trigger anxiety and other reactions, and in this study smell was the strongest stimulus, followed by seeing small classroom chairs, then lastly seeing small pictures, which set off reactions of either anxiety or feelings of being a small helpless child again. PTSD from school should not be underestimated, as the school is where most dyslexics experienced traumas day after day, year after year, being forced to go there by their parents and by law. Normally PTSD is caused from short-term abuse or effects of a battlefield, but in the case of dyslexics, it is the result on 10 years of legally enforced mandatory education. The embarrassment and humiliation in the
classroom by peers and authoritative figures such as teachers are strong experiences, which stay with people for the rest of their lives. Overall, males experienced the highest frequencies of PTSD with smell followed by small chairs and small pictures equally their triggers to their anxiety.

Higher PTSD was also found in depressive males with smell being the main stimuli, compared to non-depressive males. Overall females tended to only have problems with authoritative figures, especially teachers and felt a ‘small and helpless’ child again waiting outside the headmaster’s offices for meetings.

The longevity of such emotions, even after many years of desensitization, can be exemplified by one dyslexic special needs teacher who still has problems waiting outside the headmaster’s office for meetings, after being a teacher for many years in many schools.

*How should dyslexics cope with PTSD relating to their child’s education?*

What should adult dyslexics do to cope with their PTSD regarding school? Malcolm had a terrible time at school and cried when talking to his dyslexic children’s teachers, especially in their primary school where he felt helpless to get the help they so badly needed. However surprisingly in their secondary school he has taken a more pro-active approach. His two eldest sons are at a newly-established secondary school and he volunteers as a parent governor. This way he was able to make changes and feel useful and energised into making the changes required for all SEN students to achieve their potential.

He has been a governor there for many years and now has been promoted to a non-parent governor, as the school themselves value his abilities and contribution. As a dyslexic who has struggled in life, in his career, and was unable to go to college or university, this was a real achievement and he has managed to see his children’s schooling in a positive light - he has dealt with his PTSD in a positive and proactive way.

The moral of this is to combat your PTSD to go back into school and be proactive to make changes, especially when it affects your child’s education. Parents can help out in classrooms, join the PTA (parents/teachers association), or be a governor. Most schools will welcome proactive parents more than ones that continuously moan to them about what they are not doing. So dyslexics should be proactive to affect change in their child’s education, this way they will overcome their own helplessness.
Limitations

Whilst N=29 participants took part in the study, N=22 were diagnosed as depression and N=7 had no depression diagnosis. Alexander-Passe took the viewpoint that the vast majority of the participants (N=29) suffered one or more depressive symptoms, and that the study would not label any quotes as from a depressive and others from a non-depressive, as this would be misleading and lead the reader to make assumptions.
7.0 Perceptions of Success in Dyslexic adults in the UK


Abstract

This paper reports on a reflective qualitative/quantitative study of 29 adult dyslexics and their perceptions of success. It compares depressive (N=22) to non-depressive dyslexics (N=7), with gender, age of diagnosis and academic success variables. Interpretive Phenomenology Analysis was used to investigate dyslexia and perceptions of success. The study uses both quantitative and qualitative data to understand how dyslexic adults perceive any life success, and whilst many were degree educated, this was not seen by many as enough to herald themselves as successful. Many talked about reaching one’s potential, but this was seen as a personal goal-setting exercise, with those who felt themselves as unsuccessful creating unrealistic goals. Whilst many were seen by others as successful, again they dismissed this and denied themselves such attributes.

From the quantitative data, overall the whole sample felt more successful than unsuccessful (65.4% to 30.8%). Males felt more unsuccessful (45.5% to 36.4%), but females felt significantly more successful (72.2% to 16.7%). The secondary questions gave a number of reasons for this: compared to females, males felt rejected by peers, felt inadequate, frustrated and self-blamed, with the strongest differences in terms of feelings of inadequacy in over 50% of both the depressed and non-depressed males.

Introduction

The aim of this paper is to study both dyslexia and the perceptions of success amongst such individuals. Each person’s definition of success is different, and this difference is as unique as their many facets of their dyslexia. Has dyslexia held them back, and if so how? Have they re-defined success with dyslexia as a variable? Do they have the same definition of success as their non-dyslexic peers? Do dyslexics create realistic concepts of potential? Are depressive dyslexics more (or less) successful than non-depressives? Lastly, did their negative experience as an undiagnosed-dyslexic growing up have an impact on their perception of their own success?
Empirical Review

What is Dyslexia?

According to Rose (2009) Dyslexia (specific reading disability) is defined as a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological Whilst dyslexia is widely understood to affect reading, writing, short-term memory and associated traits (Thomson, 1996, Riddick, 1996, Miles 1994) there is less information available about how dyslexics interact with society and their environment at large (Scott, 2004; Alexander-Passe, 2006, 2008, 2010). Many ignore dyslexia as a life-long condition that affects individuals from cradle to grave and the emotional/psychological manifestations from such a condition.

Alexander-Passe (2010), Scott (2004), and McNutty (2003) agree that dyslexia is camouflaged in adulthood, due to advanced coping strategies allowing a sense of normality to be projected. Dyslexics are very conscious of their differences, so create a secondary persona to operate in the wider community (Alexander-Passe, 2010, 2012; Scott, 2004). This persona works the majority of the time; however when it cracks can become highly embarrassing, demonstrates how vulnerable they can be, and confirms their otherness compared to their peers.

There is however a shortage of research concerning dyslexia and personal perceptions of success and this paper aims to shed light on this subject.

Dyslexia and Self-esteem

There is strong evidence to suggest that dyslexics suffer from low self-esteem when they fail consistently at school and that deviant behaviour is a common bi-product (Morgan, 1996; Kirk & Reid, 2001; Scott, 2004; Hales, 1994; Riddick, 1996; Humphrey & Mullins, 2002). Riddick, Sterling, Farmer and Morgan (1999) and Peer and Reid (2001, p. 5) agree that ‘frustration leads very often to antisocial or deviant behaviour’ amongst dyslexics, especially those with low self-esteem.

Some pupils might disrupt a class because they interpret the class work as threatening, and use attention seeking to protect self-esteem, according to Molnar and Lindquist (1989). They suggest that if the teacher, in class with pupils, can re-interpret the nature and purpose of classwork (keeping the child’s self-esteem), the child’s long-term
behaviour will change. But most teachers, as Molnar and Lindquist (1989) found, hand out reprimands, as this is the only skill they know that quickly influences a child’s present behaviour – a fire-fighting technique. Low self-esteem will also mean the development of a poor or negative self-image.

Such beliefs become self-fulfilling prophecies due to the expectation to fail (Riddick, 1996). Morgan and Klein (2003) note that childhood experiences of being labelled ‘thick’ and public humiliation caused by failing often results in choices which reinforce low self-esteem. This results in many dyslexics failing in public examinations and leaving compulsory education without the ability to pursue normal career paths (college-university-careers), due to few or no academic qualifications.

Specialist schools or classes for dyslexics have been found to improve self-esteem, especially social and academic self-esteem (Thomson & Hartley, 1980), and Scott (2004) suggests the best improvements in self-esteem comes from literacy, and the improvement of literacy breaks the difference between dyslexics and their peers, as ‘difference’ is the core problem.

Empirical studies note correlations between low self-esteem/anxiety and academic failure - more so with dyslexics, as, since Humphrey and Mullins (2002, p. 199) note ‘the experience of dyslexics at school has clear and demonstrable negative effects on the self-concept and self-esteem of children’. Riddick et al. (1999, p. 241) indicated ‘the powerful mediating effect of literacy performance on how individuals perceive themselves and are perceived by others’, suggesting literacy failure can distort the dyslexic’s self-perception.

There is significant empirical evidence to suggest that dyslexics leave full-time education damaged by their experience at school, and many leave with little or no qualifications to their name. Thus to achieve any form of success following such trauma manifesting in low self-esteem must be a lot harder in comparison to their peers. This study aims to look at how success can be created out of nothing, in a group of adults who experience depression, in comparison with their non-depressed peers.
What is success?

According to Oxford Dictionaries (2013), success is defined as (1) the accomplishment of an aim or purpose: the president had some success in restoring confidence; (2) the fame, wealth, or social status: the success of his play; (3) a person or thing that achieves desired aims or attains fame, wealth, etc.: to judge from league tables, the school is a success, must make a success of my business.

To summarise the above definition one could conclude that success is accomplishing an aim or goal, and in many ways it is aligned with fame, wealth and social status. This will be the basis of this paper.

Dyslexia and realistic success (theory)

To understand how success and dyslexia align, it would be best to start at school, the place where most young people will experience success. But in the case of dyslexics, and according to literature noted earlier, it commonly is a place of trauma and failure. Thus dyslexics rarely experience as much success as their peers, and commonly fail, on a daily basis, in these early environments. Not only this, all their peers are well aware of their failure in tasks which can cause them embarrassment and bullying, along with the development of low self-esteem.

So could one hypothesise that success for a dyslexic could be: surviving each day at school without getting something wrong, and if they did, that no one seeing it; or accomplishing on par with their peers even though the effort required was much greater than would normally be expected.

As the quote goes, ‘success begets success’, so must ‘failure begets failure’. If dyslexics experience failure on a daily basis, then this could be self-perpetuating (according to the Pygmalion effect by Rosenthal & Jacobsen, 1968; Mitchell & Daniels, 2003; Whiteley, Sy, & Johnson, 2012). Thus one could ask, are dyslexics less likely to experience (achieve) success? And if they do, will this be comparative to non-dyslexics, who would have experienced a higher likelihood of achieving success?

Another perspective could be given by examining ‘Attribution theory’ by Seligman (1991) and Seligman, Abramson, Semmel and von Baeyer (1979) as a means to combat ‘Learned Helplessness’. Seligman discusses how by retuning or reframing an individual’s perception of events from global (e.g. I am rubbish at Maths) to specific (e.g. I only find
fractions hard) will allow the sense of failure to reduce and a sense of success and mastery to increase. This is especially useful for dyslexics who experience high levels of failure in educational setting.

**Dyslexia and success (empirical)**

There is a growing body of research that investigates success amongst dyslexics from many perspectives.

To start with dyslexia organisations in the UK and the USA frequency publicise a long list of dyslexics of note (British Dyslexia Association, 2013; International Dyslexia Association, 2013), these range from billionaire businessmen (Sir Richard Branson, Charles Schwab, Ingvar Kamprad), film stars (Tom Cruise, Whoopi Goldberg), politicians (Winston Churchill, George Patton), inventors (Alexander Graham Bell, Thomas Edison), artists (Leonardo da Vinci, Pablo Picasso), scientists (Steve Jobs, Albert Einstein), sports people (Muhammad Ali, Sir Steven Redgrave), and writers/poets (Agatha Christie, Benjamin Zephaniah).

The most known study is by Logan (2001, 2009, 2010a, b) investigating the frequency of dyslexics amongst corporate management and entrepreneurs. Her conclusions based on a small response rate (43% in the UK study and 7% in the US study) of undiagnosed dyslexics (a screening questionnaire was used) found more self-diagnosed dyslexics as entrepreneurs (from an N=30 US sample). However due to the sample size, response rate and that no evidence of dyslexia diagnosis was required to participate, these findings should be taken with caution.

It is argued that self-employment allows dyslexics the ability to work in their own way, concentrating on strengths, rather than suffering huge amounts of paperwork in middle-management. Success also came through delegating paperwork and other tasks, so they could concentrate on what they do best, talking to people and coming up with novel/divergent answers to problems. Fitzgibbon and O’Connor (2002) support Logan’s conclusions that dyslexics are least likely to thrive in a corporate environment.

Whilst dyslexic organisations herald well-known dyslexic businessmen (e.g. Richard Branson, Charles Schwab) as role models, are these realistic? Biographies of such men suggest they delegate all menial tasks (note-taking, reading and writing emails, checking financial forecasts etc.), the tasks dyslexics are typically not good at. This frees them up to think creatively/divergently, to sell ideas to others, and indulge in risk-taking; skills dyslexics
can excel in. Gatewood, Shaver and Gatner (1995); Stewart and Roth (2001), and Logan (2001) would argue that such skills are essential for entrepreneurship. Branson and Schwab have built global empires that are built on them acting autonomously - thus they are the brand.

The most relevant study for this paper is by Fink (2002) who investigated 60 successful men and women with dyslexia (e.g. doctors, lawyers, educationalists, filmmakers, computer programmers, writers, administrators etc.). The aim of the project was to assess how diagnosed dyslexics had attained in prestigious careers whilst battling with literacy problems. Results of the interviews found that: (1) they pursued passionate interests – subjects they were happy to read about and thus improve reading ability with; (2) development of persistence and empathy – to not give up in the face of struggles/problems and to empathise with others with similar struggles; (3) mentors were important role models and supporters in struggling times; and (4) denial of access to chosen careers by others – being discouraged reinforced motivation to overcome barriers.

Goldberg, Higgins, Raskind and Herman (2003) point to findings of a 20 year longitudinal study of successful and unsuccessful adults with learning disabilities (a similar term for dyslexia in the US), with N=47 participants. Interestingly participants were classed as successful by clinical judgement on six domains (employment, education, independence, family relationships, community relations/interests and crime/substance abuse). Those judged successful had the following variables correlated with success (Perseverance .88, Proactivity .90, Goal-setting .75, Self-awareness .69, Emotional stability .55, Lack of support systems -.84, Emotional instability -.78, Reactivity -.70, Lack of goal setting -.70, and lack of self-awareness -.58). These would support Logan’s (2001, 2009) data.

Tulip Financial Group’s (2003) study of N=300 UK millionaires found that 40% were dyslexic in a study reported in the media in 2003. Adrian Atkinson, a business psychologist who worked with the study, noted that ‘Most people who make a million have difficult childhoods or have been frustrated in a major way. Dyslexia was one of the driving forces behind that’. Millionaires they found knew that mistakes were OK, speed is the key to business advantage, and they work within their strengths. Rene Carayol, a business adviser and another member of the research team stated of dyslexic millionaires ‘They don’t do failure, they redefine it. Failure for them is a learning experience that will enable them to be even better. If they fall over, they just come straight back up again’ (Sunday Times, 2003).
Many researchers find successful dyslexics, whilst experiencing success, also fear failure; over produce; have a very strong personal self-drive for financial freedom; dream about achieving their goals; are control freaks; extremely self-critical; perfectionists; always striving to do better; have a need for order, are confident; persistent and show stubbornness (Scott et al. 1992; Wszeborowska-Lipinska, 1997; Reiff, Gerber and Ginsberg, 1997). However, studies of individuals who go on to become millionaires have shown that the proportion of dyslexics among them is four times the proportion of the general population (Stanley, 2002), suggesting such attributes are not necessarily debilitating.

There seem to be counter-arguments concerning self-esteem. Scott et al. (1992) suggest successful dyslexics will: lack self-confidence; self-doubt, have low self-esteem and fear rejection. Whilst Wszeborowska-Lipinska (1997) counters this by suggesting that, as successful dyslexics are not only reaching the heights of their peers but feel the need to surpass them, they therefore require more self-confidence and higher self-esteem than their peers do.

Richardson (1994) and Richardson and Stein (1993) take an interesting perspective on the personality profile of successful dyslexics, looking at psychological factors. Findings indicate that successful dyslexics were eccentric, extroverted and used unusual perceptual experiences (hunches, gut reactions and delusions) for decision making.

A main difference between successful and unsuccessful dyslexics found by Scott et al. (1992), is that they had at least one person who believed in them (mostly their mother) and encouragement of talents and hobbies (also found by Morgan and Klein, 2003 and Thomson, 1996). Thomson also noticed that successful dyslexics were commonly those who ‘got by’ by being highly intelligent, but were often under-achievers, failing to attain their potential and sometimes suffering a lifetime of frustration.

Gerber, Ginsberg and Reiff (1992) believe a ‘goodness of fit’ and the seeking of support systems are two key external factors for dyslexics and those with learning difficulties (an American term which covers dyslexia) to achieve success at work. The ‘fit’ or ‘match’ of dyslexic abilities to the employment environment and expectations create success for both employer and employee. Morgan and Klein (2001, p. 130) interestingly contemplate that employers need to be ‘aware that whilst some dyslexic difficulties seem like incompetence, they need not necessarily be an impediment to doing the job’. Dyslexics doing jobs differently can also have their advantages, as Klein and Sunderland (1998) found with one young dyslexic labelled a ‘slow learner’ at school. At 16 years old she went to work
for a local factory making electrical components for cars. Her role was basic and routine, but within a short time she had re-wired one of the components in such a way that it was more efficient, used less wire and saved the company large amounts of money.

**Dyslexics who struggle**

A high percentage of individuals in UK and Swedish prisons with reading difficulties or dyslexia (30-52% of all prison inmates in tested prisons) would suggest that many leave mainstream education unable to find gainful employment and are forced to use illegal means to support themselves and their families (Alm & Andersson, 1995; Kirk & Reid, 2001; British Dyslexia Association, 2004; British Dyslexia Association and HM Young Offender Institution Wetherby, 2005; Dyslexia Institute, 2005; Herrington, 2005). Some individuals with dyslexia (depending on education and severity) may find it very difficult, if not impossible, to learn to read, write or do mathematics (Scott, Scherman & Philips, 1992).

Frequently, adult dyslexics find they lack not only adequate academic and emotional skills, but also interpersonal communication and social skills as well - putting them at a greater risk of a continual cycle of failure.

More recently, UK research highlights the frequency of dyslexia in UK prisons. Rack’s (2005) study in eight Yorkshire and Humberside prisons suggested dyslexia was three to four times more common amongst prisoners than in the general UK population, with an incidence of 14 –31%. He found that 40 – 50% of prisoners were at or below the level of literacy and numeracy expected of an 11-year old (Level 1), 40% of whom required specialist support for dyslexia. He concluded that dyslexia is three to four times more common amongst offenders than amongst the general population, Herrington (2005) reported that the Basic Skills Agency Initial Assessment recorded 60% of prisoners had a reading ability equivalent to or less than that of a 5-year old child.

Lastly, British Dyslexia Association (2004) indicated that problem behaviour amongst young people with dyslexia was often evident before identified as dyslexic, thus it could be argued that their adverse behaviour was the manifestation of undiagnosed learning difficulties.
Methodology

Sample

Participants were recruited three ways: (1) emails to UK dyslexia newsgroups, (2) adverts on dyslexic web-forums, (3) inclusions on dyslexia associations’ websites. Four dyslexic sample groups were requested (with/without depression, degree/non-degree educated), with dyslexic adults with depression being largest group replying.

All participants were required to provide evidence of: (1) formal diagnosis of dyslexia evidence (e.g. educational psychologist reports), (2) depression (e.g. a clinical depression diagnosis or at least one course of physician/GP prescribed anti-depressants). Whilst mild depression is common in society, only severe cases tend to be referred for clinical diagnosis.

See Tables 1, 2, 3 for sample details. The mean age of dyslexia diagnosis data indicated that non-depressives tended to be diagnosed earlier, however in both groups they were mainly diagnosed post-school and after leaving university.

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<th>Standard Deviation</th>
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Table 1. Sample data: Size, mean age and standard deviations
### Table 2. Sample Data: Depressed Participants

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<th>Age</th>
<th>Diagnosed age of Dyslexia</th>
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<th>Degree-educated</th>
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### Table 3. Sample Data: Depressed Participants

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**Apparatus**

An investigative semi-structured interview script was used with N=24 items (See Figure 1). Interviews lasted between an hour and three hours.

**The Interview Process, Confidentiality, Informed Consent and Personal Disclosure**

All participants were sent details of the study before the interview, and all verbally confirmed participation before the start of each recorded interview. Participants were also advised that they could avoid any questions that were too emotional to answer and could halt the interview and their participation in the study without reason; fortunately, no participants took this option. As avoidance was noted in several interviews, further investigative questions were required.

Confidentiality was assured at several points: (1) in the original study advert; (2) in email confirmation/requests for basic details (name, age, education etc.); (3) at the start of each interview, (4) advising participants that pseudonyms names would be used.

Each participant was also reassured that they would receive a copy of their transcript which they would have the opportunity to check and modify. As the interviews concerned participants disclosing emotionally painful or frustrating events it was felt best that the interviewer (Alexander-Passe) also disclosed, where required, that he was diagnosed dyslexic at fourteen years old and understood and had experienced many of the difficulties at school that they may have encountered.

| 1. Please describe how you are feeling today? (Are you taking any depression medication at present?) |
| 2. Please describe your life/yourself? (I need to create a description of you e.g. age, education, job, character, personality etc.) |
| 3. Do you enjoy life? |
| 4. Please describe your childhood? Was it happy? (e.g. with your family) |
| 5. Do you have any siblings? Do you think you were treated fairly/unfairly to your siblings? |
| 6. Please describe your time at school? Was it enjoyable? |
| 7. Did you ever get frustrated from your learning difficulties? |
8. What does dyslexia mean to you?
9. Is dyslexia something positive or negative?
10. How does dyslexia affect your daily life?
11. What classic dyslexia symptoms do you have?
12. Do you think your hobbies help you? Giving you self-confidence?
13. Do you ever blame your dyslexia for things?
14. Do you/have you ever resented your teachers at school for not seeing your difficulties?
15. Do you ever feel rejected? Please explain?
16. How does failing or getting things wrong affect you?
17. Do you ever say why me? Why am I dyslexic?
18. Do/Did you self-harm? Why? What are the triggers?
19. Have you ever thought about or tried to commit suicide? Why? What were the triggers?
20. Do you think dyslexia and depression are correlated (linked)?
21. Did you ever truant/run away from home?
22. How do you feel going into schools now, what triggers any negative emotions?
23. Do you enjoy being you? Please explain?
24. Would you call yourself a successful dyslexic?
25. What do you think makes a successful/unsuccesful dyslexic?
26. Do you feel you are reaching your potential?

**Figure 1. Interview Script N=24 items. (Alexander-Passe, 2010)**

**Analysis**

Each interview was recorded on audio tape, transcribed, spell-checked with minimal grammar changes; lastly a check was made for readability. The transcript was then emailed to each volunteer for them to check and amend if required, with the opportunity for them to add additional notes or post-interview revelations, as interviews can commonly trigger post-interview thoughts. Interviews were then subjected to IPA analysis.
**Interpretative Phenomenological Analysis (IPA)**

IPA is a relatively recent analysis model but has its historical origins with phenomenology and aiming to return to studying living things (Husserl, 1970). This refers to the concept that “to return to the things themselves is to return to that world which precedes knowledge, of which knowledge always speaks” (Merleau-Ponty, 1962). Husserl was very interested in the life-world, comprising of the objects around us as we perceive them and our experience of our self, body and relationships.

Whilst there are many forms of phenomenology in use (Idiographic, Eidetic, and Transcendental), IPA using Idiographic ideals is used in this study. Smith developed Interpretative Phenomenological Analysis (Smith, Harré & Van Langenhove, 1995; Smith & Osburn, 2008) to analyse elements of the reflected personal experience - the subjective experience of the social world. Giorgi (1994) argues that phenomenology avoids the reductionist tendencies of other research methodologies, and uses the researcher’s assumptions/divergent links to inform new insights from the data, rather than forcing data to fit pre-defined categories. Such intuition in the researcher allows ‘outside the box’ thinking. The researcher is an interpretative element to understand themes and body language, compared to Discourse Analysis (Potter, 1996) which relies on precise analysis of the words used.

IPA has been used in many research studies (Thompson, Kent, & Smith, 2002; Clare, 2003; Biggerstaff, 2003; French, Maissi, Marteau, 2005).

IPA is suitable for this sample due to: (1) Being ‘social model of disability’ and inclusion friendly, aiding understanding in special need samples; (2) Allowing flexibility and the ability for themes from initial participants to inform an investigative interview script; and (3) Dyslexic friendly as it does not rely solely on discourse.

**Analysis Methodology Used in this Study**

This study predominately uses IPA methodology for analysis of data; however the results from the transformations (themes) were then used to create quantitative data, thus mixing qualitative and quantitative methodologies. Nineteen main themes were identified from transformations in the third stage of IPA and two-hundred feelings or aspects were identified for these nineteen themes, displayed in quantitative percentages. The quantitative data was then used to create tables along with interview evidence in the form
of quotes (from mean units from the second IPA stage) are used to form each argument/topic for the results.

Results

Profiles

Profile results from this study are drawn from Table 4. Primary questions were about ‘do you feel successful or not’? Secondary questions are drawn from the wider study on depression and emotional coping.

Overall the whole sample felt more successful than unsuccessful (65.4% to 30.8%). However, males felt more unsuccessful (45.5% to 36.4%), but females felt significantly more successful (72.2% to 16.7%). The secondary questions points to reasons for this: compared to females, males felt rejected by peers (72.7% to 55.6%), felt inadequate (54.5% to 11.1%), frustrated (81.8% to 50%), and self-blamed (45.5% to 22.2%).

Looking at the depressive data, depressives compared to non-depressives felt significantly more successful (63.6% to 22.7%), this was due to high feelings of: rejection by peers (68.2%), being misunderstood (63.6%), helpless when failing at tasks (63.6%), frustrated (59.1%) and lastly alienated by others (54.5%). Non-depressives tended to be undecided about feeling successful and unsuccessful (both at 42.9%) and showed high ratings for feeling frustrated with life (71.40%), and misunderstood and inferior (both 57.1%).

Both depressives with and without degrees felt more successful than unsuccessful (63.6% to 18.20% and 27.3%), however those without a degree felt strong feelings of rejection by peers and helpless when failing tasks (both 81.8%), along with frustration (72.7%).

Comparing depressive gender data, females felt more successful than males (73.7% to 42.9%), with lower frequency unsuccessful (13.3% to 42.9%). Males felt high levels of rejection by peers (85.7%) and frustration (71.4%). Whilst a smaller sample, non-depressives tend to follow a similar pattern with females feeling more successful than unsuccessful (66.7% to 33.3%), however males felt more unsuccessful (50% to 25%)
Table 4. Results data

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**Interview Evidence & Discussion**

**Feeling successful**

*Would you call yourself a successful dyslexic? To a certain degree, yes. But I would say it has been very work hard to get where I am. You know, I’m a very stubborn person and*
if I put my mind to do something, I’ve always been like that to a certain extent. So yes but I’ve had to work very hard to get there. (Andrea).

Do you feel that you are reaching your potential? No! I think my opportunities to reach my potential were reduced by me being diagnosed too late. I think going back into education when I did, showed that I missed out on so much opportunity. Would you call yourself a successful dyslexic? Yes. I think that in spite of the lack of help when I was at school, I think that I am in professional employment, a professional and I have a higher education qualification, I am happy in my job and happy in my life. What makes a dyslexic successful? [Long pause] the main thing for anybody is to be happy, but I think to basically achieve in a world not made for us. It is a difficult one to define. For me, it is not about having a degree. It is about being happy with where you are at. Yes, I agree. Whilst I needed to prove to myself I could do it, I admire anyone who can go further. I do not have an honours degree, as I could not deal with a dissertation. I feel I have enough to stick two fingers up at my old teachers. I just got to the stage where I have a good job, foster kids. The trauma of doing a dissertation was going to be too much. (Anita).

Would you call yourself a successful dyslexic? [Laugh] Yeh, I would actually... I’m quite pleased and if I was to die today, I feel I have achieved quite a lot. Do you feel you have reached your potential? Nowhere near yet. Well... just over half way there. (Emma).

Would you call yourself a successful dyslexic? I would like to think I’m as successful as I want to be now, but I want to become more so. What do you think makes you a successful dyslexic? Being positive, not bitching about it, moaning about it, not saying ‘I’m dyslexic, help me, I have a disability’ … Don’t use anything as an excuse, not being dyslexic. If you are going to be successful you will no matter what. Just do not use dyslexia as an excuse. Know when you are wrong and accept it, no one is perfect and that you will make loads of mistakes. To not be afraid of failing as well. So it sounds like being contented with your life, not resenting your past. Not resenting it one bit, it’s who I am. I wouldn’t change anything about my life. (Izzy).

Would you call yourself a successful dyslexic? Yes. I think that comparing what I have done to what I could have left school with. I could have left school at sixteen years old and done nothing. I think that I put a lot of the good characteristics of dyslexia, like being inordinately stubborn to good use and I wasn’t going to let people say that ‘you can’t do this’, I’ve been to university and I have my BA, you know I think I am successful as a dyslexic and I think that dyslexia got me there and I’m not sorry for that. So what do you
think makes a dyslexic successful? Reaching your potential or getting a degree? I think you have to set your own rating of successful, my view of it might not be suitable for someone else, and I would never tell anyone that my version is the right one. I said I wanted to get a degree and I did, that for me is my success...I do not think you should cramp (judge) anybody else’s success, in terms of some people getting through school is a success if they are dyslexic and hate it that much, for them that is success. (Kirsty).

Would you call yourself a successful dyslexic? [Pause] yes, as I am not in prison. Why prison? So many dyslexics end up in prison. Most cannot read and write. But the fact that I have what I have, with whatever means I have used to get it, makes me successful. I am successful, as I have a lovely family and I am not in prison yet. Do you think it is a fine line to your past that you might have ended up in prison? Probably being Jewish is part of why I am not. (Malcolm).

Would you call yourself a successful dyslexic? I would say I was successful at hiding it for thirty-three years. I think subsequently I have been told I am successful, people have said to me ‘it is really impressive, and you have done really well’. Basically I got half way through my master’s course and doing very well before I was diagnosed. They said ‘you have O’levels, A’levels, and an undergraduate degree, and you didn’t have any support!...That’s fantastic’ and I that sort of flipped one-hundred-and-eighty degrees with the feelings I had about it, that I didn’t do as well as I should have done, that I could have done better, as there were people now saying ‘you did really well, considering all the stuff you had to deal with’. So I kind of probably am, but I don’t feel successful in my own camp, so in some ways I kind of... it’s difficult. So other people call you successful but you don’t feel it yourself? Yep. So what would you need to feel successful? I think to feel successful; I would need to feel that I was fulfilling my potential in terms of understanding and ability to act. I have had one or two experiences, where I was absolutely stretched and reached for something and achieved it. (Norman).

Would you call yourself a successful dyslexic? You are using very ambiguous terms. For some, being successful is the ability to write a letter or an essay for the first time. For me, I think I’ve done relatively well compared to the average person, I have more than the minimal wage coming in, but there are colleagues doing better than me. We all drive to do better and I know I have done better than some people have [my peers]. To some dyslexics that having a degree means they are success. I read about someone who studied for a degree and was dyslexic, but it didn’t make them any happier, so I think if I got one I would
feel better about myself, it won’t change me, it won’t take away the years of bullying. I think it’s good to get a degree and I would feel better about myself. There is no right or wrong answers to such questions; I see it is more to do with one’s potential. How you judge yourself. It is about status and stuff. Some see it about money or about being happy. I would feel happy to have a degree but it wouldn’t make me happy every day. It would make me feel better about my work and my capabilities, so in that sense I can understand that. But it wouldn’t make me whole (complete), it’s just one aspect to your life. I see the need to do better, that part of me, to conquer it [getting a degree]. (Phoebe).

Would you call yourself a successful dyslexic? I might turn it round and say that I am successful and I am dyslexic, which sits more comfortable with me (Shelley).

The quotes powerfully describe how dyslexics feel about success. Attributes noted to success were: stubbornness, hard-working, degree-educated, proving oneself, positivity, not fearing failure, relaxed about making mistakes, and hiding one’s dyslexia. Many talk about stubbornness as believing in oneself and ones abilities, such individuals note that move towards success was not being afraid of making mistakes, and seeing mistakes in a positive means to gain mastery in a profession or field.

There were many positive definitions of success ranging from being married to having children. Whilst many agreed that attaining a degree made them successful, others disagreed and said it would just make them feel better about themselves (higher self-esteem) which was a personal challenge.

Norman interestingly remarked that he was successful as he had hidden his dyslexia for thirty-three years, but was this success? It suggests that only through hiding his dyslexia could he have gained success, a negative perspective. Another negative view by Norman was being successful by not being in prison, as research suggests a high frequency turning to crime as a means to maintain self-esteem (Morgan, 1996; Kirk and Reid, 2001). Shelley was at odds with the term ‘successful dyslexic’ and preferred ‘successful and dyslexic’, suggesting that success came despite her dyslexia, not because of it.

Feeling unsuccessful

Would you call yourself a successful dyslexic? No. What do you think you would need to call yourself a successful dyslexic? A degree? Well. I think a degree is just one milestone to complete. For me at this age, if at a young age I had achieved my degree it would have made an advantage in my life, which would be more than an achievement, to respect
myself. A degree is to achieve something that I was not equipped to achieve [when I was younger]. It was not that I was not inspired and that people were not there for me, I just did not do it. (Jordan).

Would you call yourself a successful dyslexic? No, because there is so much more I want to achieve. Do you feel you are reaching your potential? No. Do you feel you will ever reach it? I hope so. (Jean).

Would you call yourself a successful dyslexic? No, I wouldn’t say I was. Perhaps it’s just I’m accepting that I am where I am, I do what I do, and I can’t change the past, but there is the opportunity to change the future. To sit back to think and ask myself if I’m successful or unsuccessful? [Pause] you can wallow in that for a long time, and then you suddenly realise you have wasted a lot of time, something that’s not productive. Many dyslexics feel that having a degree is their mark of success, to get to that point. But you have that and beyond but still you don’t feel you are successful? I have achieved a lot of things which is quite good, I’ve stood for [the UK] parliament, I got a degree, I’m now teaching which is something I really enjoy. Have you reached your potential? No. There is always more to do. (Harry).

Would you call you’re a successful dyslexic? [Long pause] I have to answer that no. Why? Because I am never happy with what I have done. You were comparing yourself with your dyslexic brother with the degrees and qualifications, would you call him a successful dyslexic? [Long pause] I would not call him a successful dyslexic because he has degrees, I would call him more successful than me because he is more contented with life, whether he is or not I do not know, I do not see him that often. I would hazard a guess he is more contented with life and I am very discontented with my achievements. Do you think he is happier and more contented because he is reaching his potential? Yes maybe. Do you think you are? No. Near it? No. So what would be reaching it? When I have a house in Africa, Costa Rica and do not need to work anymore. So it is about money then? Unfortunately, yes, and that is one of the things I hate about myself. I used to be incredibly materialistic, crave a nice bike or car, and crave to be seen to have money. I do not care about that anymore, so I am not as materialistic as I used to be. (Peter).

Would you call you’re a successful dyslexic? Nope, not yet. Every dyslexic feels they have under-achieved don’t they. Do you think when you get a degree that you will be a successful dyslexic? Yes. No I don’t think I will actually, because even if I get it, it would be like, thinking ‘I got support, so it’s not really me’. So you think the support you get would
take from the value of the achievement? Yes. Don’t you think getting the support is purely there to be a support; they aren’t doing it for you? In a way, but it still feels like that. (Ronnie).

The quotes above largely describe potential, under-achievement and unrealistic concepts of personal success. Going back to attribution theory, if individuals set very high success criteria and they are unable to reach them, and then they are setting themselves up for constant failure. Seligman would argue that one needs to create smaller and more specific goals, where one can experience success, so that mastery can be experienced and self-esteem can be enhanced. Peter talks about a monetary definition of success, as only through riches can he outwardly be successful and not need to work, many successful individuals carry on working whilst attaining wealth and positions of influence (e.g. Richard Branson is a Billionaire), and enjoy personal challenges. Others in the study talk about personal definitions of happiness and accomplishing goals. Both are valid definitions.

**Feeling both Successful and Unsuccessful**

Would you call yourself a successful dyslexic? I probably would have done a year ago when I graduated, as I felt good from that, also I had to do a CertEd as well (certificate of education, a teaching qualification), so for those two years at university, I was also teaching, so I would have said then. But now I have that on paper it really does not seem to be helping me, you know. But I don’t know if that is normal or to do with the dyslexia? (Rachel).

Would you call yourself a successful dyslexic? Um, I’m very tempted to give two answers. Okay give both. If in terms of the world, they might say no. I think for me I have been a successful dyslexic, as I have proved to myself and the world that I’m pretty able and have a lot of talent. At the end of my career as a theatre critic I was admitted to the ‘critic’s circle of Great Britain’, so that’s a professional body and means that you’re good. Potential comes up a lot when talking to dyslexics, do you feel you have reached your potential, or working towards it. I think I am working towards it, I am still frustrated because I feel I should have at this stage have achieved more of my potential than I have, but whilst some of it is due to me, most is due to the frustrations concerning the way the world is. (Trixie).

Would you call yourself a successful dyslexic? It is quite funny in this one. In the material world, I am a failure, because I cannot get a job, which is how most people measure themselves. But in the providing help to others I seem to be quite good at that, and that is
helping me understand me, it means when people say ‘thank you for helping me’ that gives me a buzz. (George).

The three quotes describe different perspectives on success, one talks about gaining a degree and then finding out that that marker for success was useless and that they needed to be more realistic, another talks about others calling her successful but she talks about constantly not reaching her potential, thus she denies her own success. Lastly George brings the study back to outward symbols of success, a degree. However as discussed earlier success is more than academic attainment. He however feels successful in helping others and gaining outward symbols of praise, a simple but powerful ‘thank you’ by helping others.

Conclusion

This paper began by investigating dyslexia, dyslexia and self-esteem, defining success, and looking at dyslexia and success from both theoretical and empirical perspectives. There is a growing body of research that supports the concept that dyslexics can do well in life and attain both academically and in professional careers.

However in the eyes of the ordinary dyslexics that struggle through school and in low paid careers, role models heralded by dyslexic groups (e.g. Richard Branson, Tom Cruise, Charles Schwab etc.) are unrealistic, as they are known for vast success, wealth and do not show any of the negative effects they themselves experience on a daily basis, namely: difficulty reading, misreading things, problems with short term memory, and being unable to tie a shoe lace amongst many attributes of dyslexia. It is argued by some (School of Dyslexia, 2013) that when you are rich and famous or work in the creative arts, then it’s okay being dyslexia, its trendy, however to reach success in other professions (e.g. marketing, law, medicine, accountancy etc.) it can be a distinct disadvantage.

Logan (2009) is typical of the more recent wave of research that has investigated success and dyslexia, citing a study that argues that dyslexics tend to be more suited to entrepreneurship than working in corporate environments, however with a 7% response rate from her more recent US study, the results should be taken with caution. However the Tulip Financial Group’s (2003) study of N=300 UK millionaires found that 40% were dyslexic is another similar study and found that dyslexics were highly resilient and used school
failure and frustration as a motivation for success. A much larger sample which gives suggests a more powerful argument.

Other studies have looked at the attributes related to successful individuals, this the author finds more helpful for ordinary dyslexics and practitioners to develop the skills required for successful careers. Fink (2002), Goldberg et al. (2003), Scott et al. (2003) note perseverance/resilience, the ability to bounce back after failure, goal setting, proactivity and lastly having support systems in place. This last point is defined as someone who believes in them, and can assist in the areas they find difficult e.g. reading, writing, and organisation. This is commonly a family member, a teacher or a mentor.

The quantitative data in this study found that this sample felt more successful than unsuccessful, with females feeling more successful than males. This was explained as males experiencing more rejection from peers, feeling inadequate compared to peers leading to frustration and self-blame. Interestingly the depressive sample felt more successful than the non-depressives (however most in this study had depressive symptoms), feeling unsuccessful was due again to similar factors: rejection from peers, feeling misunderstood by others, helpless when failing at tasks, which lead to frustration and perceived alienation by others. Non-depressives were undecided whether they were successful or unsuccessful and felt highly frustrated, misunderstood and inferior.

Interestingly, those with a degree felt more successful than not, with those with a degree, feeling rejection by others and helpless when failing leading to frustration. Gender data also shows depressive females feeling much more successful than males, with males feeling rejection from peers leading to frustration.

The interview data adds flesh to the bones of the hard quantitative data, and heavily talks about potential. Whilst attaining a degree and surviving school to reach university, their real success was personally defined concerning happiness with life. They echo the empirical studies, in that their success came from being stubborn, attaining despite educational struggles/failure, resilience, and hiding their dyslexia. Success came despite their dyslexia, not because of it. It was also noted that success came from not ending up in prison, as many dyslexics do turn to crime for self-fulfilment and for monetary gain. Norman powerfully concludes if he had gained so much without a dyslexia diagnosis, how much more they could have achieved if they had been actually diagnosed and helped at school. One could argue that being the underdog was his motivation for success.
Those feeling unsuccessful talked about not reaching their potential, and whilst other might class them as being successful, they did not and thus struggled to create realistic goals. Unfair family comparison to non-dyslexic or even dyslexic siblings was noted by one, which caused anxiety. Each dyslexic or individual is different, and each has their own abilities and struggles in life, and as noted earlier success is personally defined and this can have a powerful influence on one’s mental health. Self-blame and thus self-doubt was noted in the study data, which explains why many in this study denied their success in life.

To conclude, this study has raised interesting questions about personal definitions of success, and highlights that dyslexics can be plagued by self-doubt and unrealistic concepts of potential. Whilst many in the study had gained a degree, this was not seen by them enough to herald them as successful. However personal satisfaction and having a loving family unit was seen by many as more important than status and money. Lastly, it was noted that success came despite their dyslexia and not because of it, and their school struggles gave them their motivation to prove themselves in life. To end, Shelley argued that she was uncomfortable being called a ‘successful dyslexic’; she preferred ‘successful and dyslexic’, which again discusses the phenomena that having dyslexia will not give you special powers, it is just a learning or life difference.

**Strengths and Limitations**

Whilst 29 participants took part in the study, 22 were diagnosed as depression and only 7 had no depression diagnosis. The author took the viewpoint that the vast majority of the participants (N=29) suffered one or more depressive symptoms, and that the study would not label any quotes as from a depressive and others from a non-depressive, as this would be misleading and lead the reader to make assumptions. It is striking that even in a sample that is plagued with depressive symptoms, there are greater feelings of success than failure.

This study significantly adds to the literature on dyslexia and success, and indicates that dyslexia adults with a range of achievement levels can be successful even in the presence of depressive symptoms. One of the most striking findings is that over 50% of all males in the sample felt inadequate, in comparison with only 11% of depressed females and no non-depressed females. Moreover, significantly more females felt successful than males. One might argue that this is a legacy of dyslexia for males, whether or not they are successful in later life.
8.0 The School’s Role in Creating Successful and Unsuccessful Dyslexics


**Abstract**

**Introduction:** This paper investigates school-based trauma and the life-long post-school effects of such trauma, creating successful/unsuccessful individuals in society.

**Method:** Three studies were investigated: (1) A study of N=20 successful dyslexics, many in business and the charity sectors, (2) A study of N=29 dyslexic adults, many indicating depressive symptoms; (3) A study of N=88 adults using a screening measure to indicate severity, looking at gender, degree-education, with profiles created to aid understanding.

**Results:** School-trauma was a found in all. Successful individuals enjoyed higher parental-child support, sports and non-academic subject success. As adults they were more willing to take risks, saw failure in a positive light, and frequently were self-employed, allowing a focus on strengths rather than weaknesses. Unsuccessful adults were prone to doubt their own abilities, self-blaming, pessimistic and getting upset when things go wrong.

**Conclusion:** School is a crucial environment that is the melting point of a young dyslexic’s life, an environment in which they learn how society works and whether they can succeed or fail, setting them on a path for life. Both successful/unsuccessful dyslexics agree that their educational experiences were mostly terrible and in most cases traumatic, but each have taken different lessons from their time at school.

**Keywords:** Dyslexia; School trauma; Success; Successful; Unsuccessful; Post-traumatic growth
**Introduction**

This paper researches the experience of dyslexics at school and how these experiences can either positively drive them to success or negatively drive them into helplessness and possibly crime.

The nature vs nurture argument has a long history; from John Locke in 1690 (Lowe, 1995) arguing that humans begin in a ‘blank state’ and that we are the product of our environment and experiences. Of course Darwin & Beer (1996) and Galton (1895) should not be discounted in this discussion, and this argument is summarized in Pinker (2003). Locke, Darwin and more modern thinkers have argued that we are the product of our environment, and all human experiences are placed into the mixing pot to create the individuals we are today. Thus in the case of dyslexics, who experience 10 or more years of hardship at school, where learning in classrooms is not differentiated to their needs, and by teachers that do not recognise they have different learning needs and requirements.

It is argued that some teachers have perceived un-identified dyslexic children as ‘lazy and ‘stupid’ through:

1. A lack of dyslexia/ SEN awareness;
2. A lack of understanding of dyslexia/SEN; and
3. A lack of training to identify and differentiate to engage all learners in their classrooms, creating a lack of educational opportunity.

If success breeds success, then failure must also breed failure, thus it is argued:

- Successful dyslexics are a product of using failure in a positive way (resilience) and more success reinforces this positivity
- Unsuccessful dyslexics are a product of using failure in a negative way (learned helplessness) and more failure reinforces this negativity

**Literature Review**

This paper uses a broad empirical review to introduce the reader to different aspects of a dyslexic’s journey through education and in the workplace, and theories to understand their post-school experience.
Sections include: dyslexia, school experience/emotional coping in dyslexics, social exclusion, defining success, successful dyslexics, and unsuccessful dyslexics, the disability paradox, dyslexia and depression/mental health, and post-traumatic growth.

**Dyslexia**

**Definition:** Dyslexia (specific reading disability) is defined as a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. Dyslexia occurs across the range of intellectual abilities.

It is best thought of as a continuum, not a distinct category, and there are no clear cut-off points. Co-occurring difficulties may be seen in aspects of language, motor coordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia. A good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to well-founded intervention (Rose, 2009).

Elliot and Grigorenko’s (2014) recent influential but controversial review of literature argued that the term dyslexia poorly defines a condition that affects not only reading, writing, spelling, but also short-term memory, balance, organisation, visual difficulties. There are also difficulty with no single model of diagnosis, with diagnosis being made through the recognition of difficulties in a range of skills with various assessment measures, thus diagnosis is made of ‘dyslexic type difficulties’. The literature also argues that no two dyslexics have the same range of difficulties, a view supported by UK Government’s report, which might explain the delays and/or confusion gaining diagnosis in schools (Rose, 2009).

It could be argued that there are two main perspectives concerning dyslexia, one looking at the root causes, be it through hereditary or damage in early childhood, with a focus on the deficits that such a condition brings and how it can be overcome through remedial educational interventions. The second perspective looks at the emotional and psychological effects of having a different learning style than that of their friends, family and peers.
This paper is concerned with the second perspective, looking at both the emotional effects of school, and how dyslexic individuals use such effects in both their child and adulthoods to bring about positive change.

**School - emotional coping in Dyslexics**

Scott (2004), Edwards (1994) and Alexander-Passe (2010, 2012, 2015a) found young dyslexics commonly experience adversity as children, both educationally in school and socially through exclusion and bullying from peers due to their learning differences. Snowling (2000), Hulme and Snowling (2009) and Thomson (1996) note that dyslexics, due to their difficulties in phonological processing, spelling, grammar, reading and writing are at a distinct disadvantage in mainstream education. Dyslexia Action (Dyslexia-SpLD Trust, 2013) reported that teachers lack the skills to effectively differentiate for dyslexic and other different learners in their classes, highlighted through the lack of special educational needs (SEN) training for new teachers and infrequent continual professional development (CPD) of current teachers.

Humphrey and Mullin (2002) and Humphrey (2003) comment on the low self-esteem in dyslexics, especially school-aged dyslexics, with Scott (2004) and Alexander-Passe (2010, 2015a) arguing that bullying by both teachers by their lack of differentiation/understanding and peers through ostracising and exclusion can lead to depression, withdrawal, self-harming and Post-Traumatic Stress Disorder as a result.

Lackaye and Margalit (2006), Morgan et al. (2008) and Alexander-Passe found dyslexics/those with reading disabilities can suffer from low self-concept, self-efficacy, engagement and other emotional coping that can have a significant bearing on a child’s motivation. Many conceal/camouflage the true nature of their reading difficulties from their teachers and underachieve as a result (Wadlington, Elliot & Kirylo, 2008).

Fitzgibbon and O’Connor (2002), Armstrong (2010), Morgan and Klein (2003), and McLoughlin, Leather and Stringer (2002) argue that for too long the main focus has been on the causes of dyslexia, with little understanding of the emotional effects of having such a long-term disorder (their experiences/secondary effects), especially in adults.

**School - Social Exclusion**

How was your time at primary school? I always felt left out, on the outside. By your teachers or peers? I felt I did not fit, I felt they were doing things I could not do. So it was
like a two way process, if I felt I could join in, I would, and thus if I did not join in they just left me alone. Teachers generally tended to be rather supportive without really understanding what the problem was. (George, in Alexander-Passe, 2010).

When you are at primary school, did you feel you fitted in due to your learning difficulties? No, I never felt normal, I have always felt ‘other’ really, that is from beginning to end (of my school life) and to now.

You were talking about being different to your peers, did you think you liked being different? I appreciate it much more now. So you liked being different now, but not growing up? I was happy to be different but I did not like the reactions it caused. ... I was upset that my not liking what they liked, caused me to be ostracised and bullied and that sort of thing.

Were you being physically bullied? Yes, a couple of times. You did not fight back? I am four foot, nine inches now, so no. (Kirsty, in Alexander-Passe, 2010).

Dyslexics like other groups who are unable to fit into the socially accepted ‘norm’ of school, or even their own families of linear thinkers can feel excluded by society (Alexander-Passe, 2010), a view also found by Morgan and Klein (2003) and Scott (2004). Research into families of dyslexic and non-dyslexic siblings interesting supported the view that unless one parent was dyslexic (especially the mother), the dyslexic child can develop a low self-image and question their place in the family unit (Alexander-Passe, 2008). Unfair sibling comparison can be extremely painful for dyslexics, creating anxiety and stress in addition to that from their low academic output.

**Defining success**

‘How each of us define success is deeply personal. We each have our own definition of success, for some success is about what we accomplish for others it’s who we’re becoming and still other it’s what we own. The central issue is not what your definition of success contains or if it’s right or wrong. Instead the central issues is have you created your own personal and organisational definition of success?’ (Amber, 2013).

Success is highly subjective and success to one is not the same to all, as noted by Krakovsky (2014), success is an extremely hard concept to research. Success is context based, so can differ when talking about success in engineering to success and success in trialling a new pharmaceutical drug (Emens, 2008; Ralph & Kelly, 2014).
To summarise the above definition one could conclude that success is accomplishing an aim or goal, and in many ways it is aligned with fame, wealth and social status. This will be the basis of this paper.

**Adults - successful dyslexics**

Logan (2001, 2009, 2010a, 2010b) investigated the frequency of dyslexics amongst corporate management and entrepreneurs. Her conclusions based on a small response rate (43% in the UK study and 7% in the US study) of undiagnosed dyslexics (a screening questionnaire was used) found more self-diagnosed dyslexics as entrepreneurs (from an N=30 US sample).

However due to the sample size, response rate and that no evidence of dyslexia diagnosis was required to participate, these findings should be taken with caution.

Logan and others argue that self-employment allows dyslexics the ability to work in their own way, concentrating on strengths, rather than suffering huge amounts of paperwork in middle-management.

Success also came through the delegation of paperwork and other tasks, so they could concentrate on what they do best, talking to people and coming up with novel/divergent answers to problems. Fitzgibbon and O’Connor (2002) support Logan’s conclusions that dyslexics are less likely to thrive in a corporate structured environment.

Whilst dyslexic organisations herald well-known dyslexic businessmen (e.g. Richard Branson, Charles Schwab) as role models, are these realistic? Biographies of such men suggest they delegate all menial tasks (note-taking, reading and writing emails, and checking financial forecasts), the tasks dyslexics are typically not good at. This frees them up to think creatively/divergently, to sell ideas to other, and risk taking; skills dyslexics can excel in. Gatewood, et al. (1995), Stewart and Roth (2001), Logan (2001) argue that such skills are essential for entrepreneurship. Branson and Schwab have built global empires that are built on them acting autonomously - thus they are the brand.

Fink (2002) investigated N=60 successful men and women with dyslexia (e.g. doctors, lawyers, educationalists, filmmakers, computer programmers, writers, administrators). It aimed to understand how diagnosed dyslexics had attained in prestigious careers whilst battling with literacy problems. Results found that:

1. They pursued passionate interests – subjects they were happy to read about and thus improve reading ability with;
(2) Development of persistence and empathy – to not give up in the face of struggles/problems and to empathise with others with similar struggles;
(3) Mentors were important role models and supporters in struggling times; and
(4) Denial of access to chosen careers by others – being discouraged reinforced motivation to overcome barriers.

Goldberg et al. (2003) findings from a 20 year longitudinal study of successful and unsuccessful adults with learning disabilities (a similar term for dyslexia in the US as defined by Elliott and Grigorenko’s influential study, 2014) with N=47 participants. Participants were classes as successful by clinical judgement on six domains (employment, education, independence, family relationships, community relations/interests and crime/substance abuse). Those judged successful had the following variables correlated with success (Perseverance 0.88, Proactivity 0.90, Goal-setting 0.75, Self-awareness 0.69, Emotional stability 0.55, Lack of support systems -0.84, Emotional instability -0.78, Reactivity -0.70, Lack of goal setting -0.70, and lack of self-awareness -0.58). These would support Logan’s (2001, 2009) data.

Tulip Financial Group’s (2003) study of N=300 UK millionaires found that 40% were dyslexic, that people with dyslexia ‘don’t do failure, they redefine it. Failure for them is a learning experience that will enable them to be even better. If they fall over, they just come straight back up again’ (Sunday Times, 2003).

Scott, Scherman & Phillips (1992) found a main difference between successful and unsuccessful people with dyslexia was that successful individuals had at least one person who believed in them (mostly their mother) and encouragement of talents and hobbies (Thomson, 1996; Morgan & Klein, 2003). Thomson also noticed that successful people with dyslexia were commonly those who ‘got by’ by being highly intelligent, but were often under-achievers, failing to attain their potential and sometimes suffering a lifetime of frustration.

**Adults - unsuccessful people with dyslexia**

Morgan and Klein (2003) argue that many undiagnosed children/young people with dyslexia leave school without any formal qualifications resulting in job opportunities being generally limited to unskilled work. Gaining an interview for most jobs in the current market requires many skills which adults with dyslexia find extremely challenging: registering for unemployment benefit by completing forms and attending job centres on specific days and
at specific times, reading hundreds of job advertisements, requesting and completing application forms, writing personal statements.

The shortlisting process for most jobs requires the application form and personal statement to be checked for grammar, spelling (Blake, 2010) and if short-listed the applicant will be required to attend at a specific day and time by navigating transport networks, completing on the spot questionnaires about abilities, and to be able to recall competently their previous experience in a stressful interview setting. Adults with dyslexia commonly fail shortlisting from grammar and spelling errors on forms, along with their lack of academic qualifications, and if luckily gaining an interview they may turn up on the wrong day or time for the interview, or unable to recall their past experiences making them look like they appear to have lied on their application form. Whilst disability legislation is in place in the UK (Disability Discrimination Act, 1995; Equalities Act, 2010) and US, many adults with dyslexia are reluctant to disclose dyslexia on application forms for fear they will not be shortlisted (Trade Union Congress, 2008; Dymock & Nicolson, 2013).

Disclosure of dyslexia is a common dilemma for adults with dyslexia. In the UK and US legislation is in place to put in place technology and other assistance to help them in the workplace, however many do not take up such facilities due to the perception that their promotion prospects will be limited. Morgan and Klein (2003) suggest many adults with dyslexia may turn down career promotion than disclosure their reading and writing difficulties, which would be highlighted in more managerial roles.

Morgan and Klein go on to note that children with dyslexia are often given ‘well-intentioned but misguided advice’ (p.100) by teachers advising ‘office work’ to those who have not performed well at school, but these are ‘one of the least suitable options for dyslexic people’ (p.100). This is due to guidance given based on written language skills and academic qualifications, based on the ‘commonly held assumption that success at school is necessary for success in the workplace’ (p.102).

It therefore is no surprise that Kruze (2015) found that 35% of long-term unemployed adults that attended a job centre in Sunderland UK (N=75) were screened as either dyslexic and/or had ADHD. This supports the view made in the UK Parliament (Baroness Walmsley, 2012) that 40% of unemployed adults using UK government job centres were dyslexic.

A high percentage of individuals in UK and Swedish prisons with reading difficulties or dyslexia (30-52% of all prison inmates in tested prisons) would suggest that many leave
mainstream education unable to find gainful employment and are forced to use illegal means to support themselves and their families (Alm & Anderssson, 1995; Kirk & Reid, 2001; British Dyslexia Association & HM Young Offender Institution Wetherby, 2005; Dyslexia Institute, 2005; Herrington, 2005; Henderson, 2004). Some individuals with dyslexia (depending on educational and severity) may find it very difficult, if not impossible, to learn to read, write or do mathematics (Logan, 2010b). Frequently, adults with dyslexia find they lack not only adequate academic and emotional skills, but also interpersonal communication and social skills as well - putting them in a greater risk of a continual cycle of failure. Projects by Hewitt-Mann (2012) suggest that such success does not occur for some dyslexic prison groups due to various unknown causes, however a lack of early identification and intervention seems evident.

More recently, UK research highlights the frequency of dyslexia in UK prisons. Rack’s (in Tanner, 2009) study in eight Yorkshire and Humberside prisons suggested dyslexia was three to four times more common amongst prisoners than in the general UK population, with an incidence of 14 –31%. He found that 40 – 50% of prisoners were at or below the level of literacy and numeracy expected of an 11-year old (Level 1), 40% of whom required specialist support for dyslexia. He concluded that dyslexia is three to four times more common amongst offenders than amongst the general population, Herrington (2005) reported that the Basic Skills Agency Initial Assessment recorded 60% of prisoners had a reading ability equivalent to or less than that of a 5-year old child. Lastly, British Dyslexia Association & HM Young Offender Institution Wetherby (2005) indicated that problem behaviour amongst young people with dyslexia was often evident before they were identified as dyslexic, thus it could be argued that their adverse behaviour was the manifestation of undiagnosed learning difficulties.

Tanner’s (2004) study of adults with dyslexia makes use of a ‘conundrum of failure’ model to explain a typical negative adult dyslexic experiences:

- **System Failure** – this is explained to manifest when inappropriate educational opportunities are given to children with dyslexia at school resulting in ‘academic or school failure’ (Humphrey, 2003; McNulty, 2003; Wolff & Lundberg, 2002), argued to result in low expectations, insensitive teaching, ignorance, no or misidentification of needs and a weak curriculum. Thus the traditional educational system has failure and this has a knock - on effect in adulthood through reduced career prospects.
• Constructed failure – In the UK there is no mandatory screening of dyslexia or disabilities when a child enters school, thus a child is required to fail educationally for many years before identification and interventions are considered (Poole, 2003). Thus as failure is a mandatory element of the diagnosis of an invisible disorder, with failure being condoned.

• Public Failure – Scott (2004) and Fink (2002) discuss and support the concept that in school and in the workplace the inability of adults with dyslexia to perform basic tasks (literacy and numeracy) makes their failure public. This can lead to humiliation and teasing as a result, and many choose to avoid tasks rather than give additional demonstrations to their abilities.

• Family failure – Dyslexics in families with non-dyslexic siblings can feel they are unable to fit in to their family norms and society, and that they are failing their parents in their inabilities to perform at school, as ‘strong literacy skills are believed to be the key to academic success’ (Scott, 2004).

• Personal failure – Raskind, Goldberg, Higgins & Herman (2002) in a 20 year longitudinal study found that individuals with dyslexia/LD found that many with dyslexia experience continued failure and a fear of learning and new/unknown situations (McNulty, 2003). This personal failure to achieve according to family and society norms can be self-perpetuating causing lifelong self-doubt.

**The disability paradox**

Researchers have begun to question why many individuals despite having disabilities become successful, enjoying a good standard of life.

Rather than withdrawing and being ashamed of their disabilities e.g. being in a wheelchair, having depression, suffering from MS, or a life threatening illness, they are thriving. Levine, Feldman & Elinson (1983), Lerner et al. (1994) argue the paradox is that many looking at them they might imagine a poor life satisfaction, living an undesirable existence, however current research suggests the contrary.

Albrecht and Devlieger’s (1999) qualitative study of N=153 individuals with serious and persistent disabilities, found 54.3% reported an excellent or good quality of life, suggesting the paradox. The research found that after the initial shock of disability (e.g.
losing limbs in a car crash); their ability to bounce back came from looking at positives, reassessing life’s goals, and finding religious faith.

Those who felt they had a poor quality of life manifested defeatist tendencies and a detachment from life. Albrecht and Devlieger concluded that those who perceived a high quality of life, whilst having a disability, identified a ‘secondary gain’ occurring. They ‘adapted to their new conditions and made sense of them, finding enriched meaning in their life secondary to their disability, and reinterpret their lives and reconstitute personal meaning in their social roles’. They ‘understood their condition, took control, and introduced an order and predictability in their lives. They also learned what is and isn’t possible, and developed a value set that helped them make sense of their disability, and harness support and other (support) networks’ (p. 986). In essence they were empowered rather than dispowered by their disabilities, finding the resolve to improve the world, and identify a role for them in society.

Interestingly the difficulties and scars from their trauma came from their discrepancies: what they would like to do compared to what they could do, what they used to be able to do and what they can now do.

This paradox highlights the importance of personal experience with disability, in defining the self, one’s view of the world, social contexts, and social relationships. Lys and Pernice (1995) suggesting a negative bias of attitudes and expectations by the public and health care workers towards persons with disabilities. Connally (1994) also found negative public perceptions of life for individuals with disabilities, understood by the work of Stiker (1999) that disability introduces chaos, ambiguity and unpredictability into the social world of the individual and community. Albrecht and Devlieger suggests that ‘disability shatters preconceived expectations and norms, and calls accepted values and notions of well-being into question’ (P. 980). Antonovsky (1987), Lundberg (1997) concluded that individuals with disabilities have the capacity to find meaning, value and motivation to persist in the face of adversity, thus meaningfulness.

**Dyslexia and depression/mental health**

There is very little research that actually supports a depression correlation with dyslexia; the majority of empirical references are based on observations (Scott, 2004; Ryan, 2004; Duane, 1991; Rutter, 1983), rather than actual studies. Two such studies exist which investigated depression with dyslexic children and teenagers.
Boetsch, Green & Pennington (1996) found that the reports of depression by parents and teachers with primary school children, were not confirmed by children’s own self-reports of depressive symptomatology. The second study, by Alexander-Passe (2006) used the Beck Depression Inventory (Beck, Steer & Brown, 1996), The Coping Inventory for Stressful Situations (Endler & Parker, 1999) and The Culture- Free Self-Esteem Inventory (Battle, 1992) measures with N=19 teenagers with dyslexia. Results strongly suggested gender differences, with females using more emotional and avoidance based coping, resulting in lower percentile scores in general and academic self-esteem with moderate depression. Males tend to use more task based coping, resulting in normal percentile self-esteem levels and minimal depression.

Leonova (2012) in her review of dyslexia and depression noted that different measure and samples are commonly used and many ignore the importance of gender and educational establishment factors. Three studies were seen as robust (Alexander-Passe, 2006; Miller, Hynd & Miller, 2005; Wilcutt & Pennington, 2000).

Alexander-Passe (2010) found that qualitative evidence strongly suggests that difference and negative interactions with society were the triggers that led dyslexic individual’s suffering into depression and other manifestations. One participant (Jean) noted that she felt unable to fit into perceived ‘normal’ stereotypical images and the pressure to fit into such images was highly damaging. As discussed earlier, participants felt different to their peers and dealing with this on a long term basis was emotionally damaging. The need to fit into society stereotypes, is great and when one cannot, the realisation is huge. Depression comes from that realisation that they are different, judged by others as inferior and that they are helpless to change their situation.

Scott (2004) hypothesises that many with dyslexia either internalize or externalize the psychological effect of having dyslexia, with the former more likely. Support comes from Grigorenko (2001) suggesting ‘internalizing, effects include stress, depression and anxiety and, on balance, are those most widely associated with learning disabilities’.

Scott concluded that externalising (aggression) strategies were more common in dyslexic males, and internalizing strategies such as depression and withdrawal were most commonly found in dyslexic females. Riddick (1996) speculated that the levels of self-blame, sensitivity to others and over perfections of others amongst dyslexic females made them particularly vulnerable to adjustment problems. Duane (1991) and Fawcett (1995) note ‘in terms of emotional stability, her study suggests a threefold increase in psychiatric
Fawcett suggests that such problems are a natural sequence of years of school failure (Fawcett, 1995).

Alexander-Passe (2010), Scott (2004), and McNutty (2003) agree that dyslexia is camouflaged in adulthood, due to advanced coping strategies allowing a sense of normality to be projected. Adults with dyslexia are very conscious of their differences, so create a secondary persona to operate in the wider community (Scott, 2004; Alexander-Passe, 2010, 2012). Whilst this persona works the majority of the time; however when it cracks can be highly embarrassing, demonstrates how vulnerable they can be, and confirms their abnormality compared to their peers.

Depression is a frequent complication in dyslexia, according to Ryan (2004), Burden (2005) and Scott (2004). Although most individuals with dyslexia are not clinically depressed, children with this type of learning difficulty are at higher risk of intense emotional feelings of pain and sorrow.

Post-traumatic growth (PTG)

Definition: the term refers to positive psychological change experienced as a result of the struggle with highly challenging life circumstances (Calhoun & Tedeschi, 2001).

Tedeschi and Calhoun (2004) argue that major life crises typically result in unpleasant psychological reactions, however PTG happens when attempts are made to adapt to highly negative sets of circumstances that can engender high levels of psychological distress. Tedeschi and Calhoun after reviewing available literature, argue that growth is more frequent than psychiatric disorders following high levels of trauma, however note that growth and personal distress often coexist, and stories over the centuries point to growth from distress e.g. Christianity: after Jesus’s death his disciples whilst traumed go onto create a powerful new religion; Islamic: Mohammed’s suffering is instrumental to his great work.

Examples of PTG have been documented in those surviving/suffering from:

- Bereavement (Hogan, Morese & Tason, 1996)
- HIV infection (Cadell & Sullivan, 2006)
- Death of a child (Keesee, Currier & Neimeyr, 2008; Znoj & Keller, 2002)
- Heart attacks (Laerum, Johnsen, Smith & Leving, 1987)
- Sexual assault and sexual abuse (Frazier, Conlon & Glaser, 2001)
• Combat (Elder & Clipp, 1989)

It is argued by Tedeschi & Calhoun (2004) and Schoulte, Sussman, Tallman, Deb, Cornick, Altmair (2012) that the following PTG are typical manifestations:

• Positive psychological change (Yalom & Lieberman, 1991)
• Discovery of meaning (Bower, Kemeny, Taylor & Fahey, 1998)
• Positive emotions (Folkman & Moskowitz, 2000)
• Positive reinterpretation (Scheier, Weintaub & Carver, 1986)

Tedeschi and Calhoun define the growth part of PTG comes not as a direct result of the trauma, but the individual’s struggle with the new reality in the aftermath of trauma that defines if PTG in occurring. They use the metaphor of an earthquake, in that it is not the shake that causes the psychological trauma, but the effects of the shake in the building, loss of life, the change from predictable to unpredictability of life, and changes to their regular life pattern which cause the trauma. Wright (1988) suggests that PTG is the consequence of psychological survival to coexist with the trauma. McFarland and Alvaro (2000) argue that most people have positive life changes without a trauma; however Tedeschi and Calhoun (1996) counter that those who have experienced PTG have higher levels of personal change.

It is argued with PTG that it is not a return to baseline levels of activity that defines whether an individual has PTG or not, but the improvement that is experienced, and that it is more common in adolescents and adults than children because PTG implies an established set of values changed through trauma.

Joseph and Linley (2005) aimed to understand the activity of PTG, by categorising it as person-centred ‘organismic valuing theory’, in that trauma causes a break down in self-structure (personal concepts of themselves and their place around others) and that people are intrinsically motivated towards processing new trauma-related information in ways to maximise their psychological well-being.

The metaphor of a shattered vase is used: imagine that one day you break a vase by accident. You can either try to piece it together to badly re-form the original shape, or you use the pieces to create a beautiful new mosaic. If your perspective is to bin the pieces and give up, or try and rebuild in entirety as the original vase - an impossible task as it will still be fractured, vulnerable and prone to break again. But if you take on board that a
return to the original will be impossible and that you need to create a new use for the pieces - then you are more realistic and a new use can be considered.

Gunty, Frazier, Tennen, Tomich, Tashiro & Park (2011) and Zoellner and Maercker (2006) question PTG the weak correlation between the actual and perceived growth, and that the growth is maybe illusionary as a way of coping with distress needs a bit more explanation. Peterson and Seligman (2004) with before and after studies have demonstrated that growth occurs, the measure constructed to date rely on biased non-medical and somewhat biased personal opinion (e.g. The Psychological Well-Being Post Traumatic Changes Questionnaire-PWB-PTCQ by Joseph, et al., 2012).

In the case of those with dyslexia, there is very little to find.

Alexander-Passe (2010, 2015a) argue the concept of the two condition coexisting in a study of N=29 adults with dyslexia. It is argued that a pre-school dyslexic child is normally taught through multi-sensory activity e.g. play and hands on learning with the need to read or write.

Thus when a dyslexic child enters school, they come with an established set of rules (a belief system and assumptions about themselves in the world, which has guided them successfully to this point) about learning and believe themselves to be normal learners, thus at the point that reading and writing is introduced, there is a change that they may or may not be able to develop with as per their peers. The first trauma takes place in that they see their peers understanding and learning a new language of learning and they are unable to. The second and longer trauma is the ongoing effect on others of their inability to learn as per their peers.

Studies underpinning this paper

Alexander-Passe (2016a) notes the initial results from a study of Dyslexia and Success, investigating N=20 dyslexic adults (diagnosed by educational psychologists or specialist teachers), who identify themselves as successful. They were able to provide evidence of their success by being: mainly self-employed, degree-educated, some with master degrees, professionals, senior managers, entrepreneurs and business leaders in their chosen fields. An investigative interview script was used to draw themes of motivation, leadership qualities, attitudes towards risk and failure, entrepreneurship. Questions were posed concerning their families and childhoods, looking at their school experiences as a means to understand their motivation to succeed post-school.
Alexander-Passe (2010) investigated N=29 dyslexia adults (diagnosed by educational psychologists or specialist teachers), some with and without a diagnosis of depression (some clinical). An investigative interview script was used to review childhood trauma and adult coping strategies (negative and positive). Whilst equal numbers of depressed to non-depressed were selected as a sample, the majority N=22 indicated depressive symptoms: self-harm, avoidance, withdrawal, attempted suicide, risk behaviours.

Alexander-Passe (2009b) details a study of N=88 adults and used the Adult Dyslexia Checklist (Vinegrad, 1994) to identify the severity of dyslexia compared to two measures of personality (Eysenck & Wilson, 1991; Eysenck & Eysenck, 1975), personally approved by Professor Eysenck for use. N=46 self-reported adults with dyslexia (N=21 males and N=25 females, mean age 35.63 yrs., SD 11.543) and N=42 adult controls (N=17 males and N=25 females, mean age 43.41 yrs., SD 8.180) were recruited. The measures of: emotional instability vs. Adjustment; Introversion vs. Extroversion were used to identify differing personality profiles for those with dyslexia vary according to its severity. It also allowed a comparison of gender and degree/non-degree education as a means to investigate dyslexia and academic success.

Success - crucial factors

Family factors/other supportive adults

- What I remember is the amount of input my mom had. She encouraged me to draw and to write diary entries (AHD)
- My parents have always been very, very supportive (TPE)
- My mother, I would never have got through school if it hadn’t been for her. If I didn’t want to go into school, she didn’t send me. That’s how I coped with school. She always made me do my homework. She used to sit down at the kitchen table with me for 3-4 hours a night. It was effort not results that mattered to my mum (PUY)
- Fortunately, I had my mum, who was very supportive, as she was always the antidote to anything that I did wring at school. If my self-esteem would have gone down, it didn’t, because she was so encouraging. It balanced itself out (NHN)
Advance of tasks

- One tried to do as little as possible, sit at the back of the class, I was consciously trying to avoid reading aloud. Oh god, I hated that. (JBB)
- You just made sure you didn’t catch the teacher’s eye (TPE)
- I would shy away from writing (PSS)
- I think it suited me to be the cheeky one at the back of the class making everyone laugh (PAT)
- My whole life at school was about not being discovered, keeping my head down and out of trouble, and that fear has stayed with me for 35 years (JEA)
- I coped by not going into school on Mondays and Thursdays, because we had spelling test on those days. One year they made a fuss as I had missed 71 days of school, which they felt was unacceptable (JEA)

Opportunity to show strengths/tasting success (At School)

- Photography, skiing, sailing (JBB)
- Sports, Art and Design, and selling my ceramics and wheeling dealing (TPE)
- Football and wrestling (TBA)
- Music (SDE)
- Drama, Art and Design (PS and PU)
- Art, design, music (JLA)
- Spoken German (EWD)
- Business ventures, stocks and shares, poker, photography (GHD)
- Sports (AHD)
- Music (AMJ)

Use of assisted technology/coping strategies (As an adult)

- I do everything on a PC, I avoid writing, as my writing makes me look mentally retarded. It’s terrible, and then you have the spelling part of it (TBA)
- I avoid writing notes in meetings, but will record bullet points (PSS)
- Work late in the night to get projects completed (PSS)
• I think the modern form of communication is such a help to dyslexics, thank God I was born in the generation with email, because it’s not about using an instrument which is thousands of years old (a pen). I can get away with very concise, short sentences to communicate what you are saying. Modern technology helps me a vast amount (JBB)

• I use Dragon Naturally Speaking to dictate my work (EWD)

Motivation to show self-worth

• I wanted to prove all those people wrong about me (PUY)

• Historically I was always motivated by trying to prove that I was as good as I thought I was, rather than as bad as I looked. This definitely dates back to my school years, as some of my headmasters doubted my abilities (TPE)

• I seek recognition of my skills and abilities, and this goes right back to childhood and school. I will work extremely hard to achieve things, but it’s recognition I seek most of all. I have a chip on my shoulder about not achieving at school (NHN)

• I seek self-worth, I always had a sense of wanting to be known to be good at something (PSS)

• It’s not about money, its gaining self-respect. It just makes me think one of my teachers didn’t waste her time on me. It always links back to my school days, being under-rated. (AP)

Chip on their shoulders from school

• People say I’m unpredictable, but I say this is learned behaviour from school. I would just fight back if I was bullied or teachers unfairly picked on me. If people question me in a certain way, I emotionally just start seeing that chain of events again. It’s just a feeling of being picked on again (GHD)

• Some of the dyslexics I meet are motivated to do well because of traumatic schooling, but not all of them (SDE)

• Some dyslexics I’ve met have gone to the n’th degree to prove that they are not stupid (SDE)
- I think I was simply driven to bounce back from failure. I got used to failing, and I got used to picking myself up again as best I could, because I hated it. That's what drove me as a child and a young adult (JLA)
- Looking back to my trauma at school, I always say ‘I have to thank them because I would never have done as good as I have without that experience’ (PUY)
- I think for everyone that gets a push to prove others wrong, there are several hundred that are emotionally damaged for the rest of their lives (ESA)
- Every time I failed at school I was able to say that Richard Branson also failed at school and has built a hugely successful company. That’s really what got me through the worst of it and where I am today (ESA)
- I absolutely hated the state school system, and I was determined above everything else, to give 2 fingers to the school. I walked out of that gate and the only thing I wanted to do was to go back in a Rolls Royce and tell them to F*** off. That was my main motivation and determination (GHD)
- Yes I have a chip on my shoulders about not doing well at school. I’m described as a workaholic, but is it because of school (ASG)

Risk and failure

**Dealing with risk**

- One of the biggest risks is not trying at all. Actually if you don’t try, you’ll never know if it was a good idea (TPE)
- I am happy to take a risk to do things if I think that would make a difference, I am happy to take on risks (NHN)
- I think risk is something I don’t like, but I think it’s unavoidable for dyslexics. Your whole life is waiting to be ‘found out’ at any moment. You’re so familiar with what it feels like, either to anticipate it or to be in that horrible moment when the wheels just come off in life. You really fear but, so it drives you (JLA)
- I’m a risk-taker without a shadow of doubt, I think ‘what have I got to lose’ (JBB)
Coping with failure

- I always say, in order to succeed in life, you must fail first because you will never understand the taste of success unless you fail. For me, failure is an experience. In order to celebrate success, you must go through the depths of failure (PUY)
- Those who have never failed at school find failure as an adult really hard, as they never had the opportunity to fail as children. I think failure is bad, but at least I’ve done it a lot so at least I know it’s not life threatening (TPE)
- I think some of it is I’m not afraid to fail as I have failed so many times before. So I’m not frightened of failure (TBA)
- It’s a journey. One person said to me, there’s no such thing as failure, there’s results you didn’t want (SDE)
- Failure is important. I think I have more ‘grit’ for long-term projects and perseverance, because I don’t expect to be the best at something when I begin, or expect to get it right first time. This is dates back to school. (ESA)
- Peter Stringfellow said one of the best things that happened to him was leaving school without any qualifications, because there were no expectations on him. He could try whatever he wanted and failure wasn’t a big deal because he wasn’t expected to achieve anything (SDE)

The above study of successful dyslexic adults aimed to look at the childhood backgrounds to understand their motivations for post-school success. The results of the qualitative study indicate several factors:

- Their parents were highly supportive, praising effort and not achievement
- The coped at school by avoiding reading and writing as much as possible
- They had the opportunity to find hobbies and subjects that they could excel in at school (e.g. art, design, sport, drama, ICT)
- They had experienced success as children, thus retained a sense of worth at school
- The find as adults that assistive technology is helping them immensely to deal with their dyslexic deficits

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• As adults they are highly motivated to gain a sense of ‘self-worth’, coming from a need to prove themselves to others, dating back to their teacher low perception of them
• They have a chip on their shoulder from school, to disprove to their teacher that they were not ‘stupid and lazy’
• They have a healthy relationship with risk as they believe they experienced huge risks at school for not be ‘found out’ that they could not read or write
• They perceive failure in a positive light, that they are not afraid of failing in tasks. Failure is seen as a journey and opportunity, rather than something to wallow in.
• They have extreme work ethics which means they are willing to put in 70 hour weeks or more to achieve what needs to be done, this extreme focus allows them to act faster to the needs of the market.

It is interesting that N=15 out of the N=20 sample were self-employed.

They explained that only by working for themselves can they: delegate the tasks they are not good at, buy in talent/skills to allow them to work to their strengths (e.g. selling and motivating), and can be judged on what they can do and not what they can’t.

**Unsuccessful - Crucial Factors**

(Alexander-Passe, 2010)

*Do you feel that you are reaching your potential?* No! I think my opportunities to reach my potential were reduced by me being diagnosed too late. I think going back into education when I did, showed that I missed out on so much opportunity (Anita), p. 251.

*Would you call yourself a successful dyslexic?* I would say I was successful at hiding it for thirty-three years. They said ‘you have O’levels, A’levels, and an undergraduate degree, and you didn’t have any support!...That’s fantastic’ and I sort of flipped one-hundred-and eighty degrees with the feelings I had about it, that I didn’t do as well as I should have done, that I could have done better, as there were people now saying ‘you did really well, considering all the stuff you had to deal with’. So I kind of probably am, but I don’t feel successful in my own camp, so in some ways I kind of...it’s difficult. *So other people call you successful but you don’t feel it yourself?* Yep. *So what would you need to*
feel successful? I think to feel successful; I would need to feel that I was fulfilling my potential in terms of understanding and ability to act. (Norman), p.254.

Would you call yourself a successful dyslexic? No. What do you think you would need to call yourself a successful dyslexic? A degree? Well. I think a degree is just one milestone to complete. For me at this age, if at a young age I had achieved my degree it would have made an advantage in my life, which would be more than an achievement, to respect myself.

A degree is to achieve something that I was not equipped to achieve [when I was younger]. It was not that I was not inspired and that people were not there for me, I just did not do it. (Jordan), p.255.

Would you call yourself a successful dyslexic? No, because there is so much more I want to achieve. Do you feel you are reaching your potential? No. Do you feel you will ever reach it? I hope so. (Jean), p.255.

Would you call yourself a successful dyslexic? [Long pause] I have to answer that no. Why? Because I am never happy with what I have done.

You were comparing yourself with your dyslexic brother with the degrees and qualifications, would you call him a successful dyslexic? [Long pause] I would not call him a successful dyslexic because he has degrees, I would call him more successful than me because he is more contented with life (Peter), p.256.

Would you call you’re a successful dyslexic? Nope, not yet. Every dyslexic feels they have under-achieved don’t they. Do you think when you get a degree that you will be a successful dyslexic? Yes. No I don’t think I will actually, because even if I get it, it would be like, thinking ’I got support, so it’s not really me’. So you think the support you get would take from the value of the achievement? Yes. Don’t you think getting the support is purely there to be a support; they aren’t doing it for you? In a way, but it still feels like that. (Ronnie), p.256.

Would you call yourself a successful dyslexic? It is quite funny in this one. In the material world, I am a failure, because I cannot get a job, which is how most people measure themselves. But in the providing help to others I seem to be quite good at that, and that is helping me understand me, it means when people say ‘thank you for helping me’ that gives me a buzz. (George), p.256.

The above evidence helps to understand the experience of many with dyslexia perceive themselves as being unsuccessful. It is not just about academic achievement, but
personal achievement and working towards one’s potential. Very few people in life are lucky enough to work to their true potential, but in the above evidence they do not feel they are not even close to it, maybe a ‘million miles away’ from it. Schools and lack of early diagnosis and intervention seems to be the root cause for many.

Personality factors: Personality factors (Alexander-Passe, 2009b) were shown in Figure 1 and 2 (Table 1).

![Image](image.jpg)

**Figure 1: Degree educated, split by traits (all trait groups), N=40.**

**Discussion**

Each of the three studies (Alexander-Passe, 2009b, 2010, 2016a) enhances this discussion that aims to investigate a common variable of ‘school-failure’ but how successful and unsuccessful group have differently dealt with their failure.

Alexander-Passe (2016a) talks about how successful adults with dyslexia have positively used their ‘school-trauma’ to drive them forward and that whilst they had positive parenting that focussed more on effort than achievement, they still had huge chips on their shoulders from being called ‘stupid and lazy’ from both peers and teachers. They were lucky to have found strengths at school and enjoyed some success in this, which helped to improve their self-worth. It could be argued that they went beyond the achievements of their peers post-school, and will keep on over-achieving, as they developed a thirst to prove others wrong about their abilities and ideas. Many are self-employed and this was chosen to allow them to be highly creative and do what they do best without needing to be forced into corporate structures routines, it also has allowed them to delegate their skill weaknesses to others better suited to certain tasks, mainly linear thinkers/non-dyslexics.
Interestingly many are social entrepreneurs and are motivated to fix a perceived broken system, whether it is re-entering the education sector (their feared stimulus) to put in the support that they would have wished to get at school, or to use modern technology to create apps for those with dyslexia, or support services so that dyslexic adults are supported. Others have noted that working for themselves allows them to create some of their ideas, as they are constantly solving problems in their heads, and most companies would not inject the sums needed for research and development. The data from the Alexander-Passe (2016a) study is in its early analysis stage and further investigations with IPA and other models will be used to uncover greater insights.

Alexander-Passe (2010) was an interesting study of dyslexic adults, looking at a range of issues including depression, self-harm and attempted suicide. The investigative interview script began with childhoods and worked into adult-life to understand how they cope.

The quotes included in this paper describe their lack of success.

The evidence describe how many adults with dyslexia were diagnosed late in their lives, at university or in the workplace, and that this delay in assessment had ramifications for them. Many mentioned (e.g. Norman) that the diagnosis was too late and they had gone through a grieving process after a positive diagnosis, for the countless missed opportunities at school, along with anger towards teachers who had missed sometimes very severe dyslexia symptoms. They ask ‘if I have achieved so much without the diagnosis, how much more with the help that a diagnosis would have brought at school’. However one could question they had achieved so much to date because they had this urge to prove themselves to others that they were not ‘stupid’?

When questioned them about success, they talked about potential namely missed potential, along with contentment. Many were questioned whether a degree was enough to call a dyslexic successful and many thought not. Success for them was contentment and having their skills recognised.
Figure 2: Non-degree educated, split by traits (all trait groups), N=47.
<table>
<thead>
<tr>
<th>Academically successful dyslexic males</th>
<th>Academically successful dyslexic females</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Physically inactive and lethargic</td>
<td>• Does not regret past actions/behaviour</td>
</tr>
<tr>
<td>• Casual, easy going and have less</td>
<td>• Cheerful, optimistic and mentally</td>
</tr>
<tr>
<td>need for order</td>
<td>healthy</td>
</tr>
<tr>
<td>• Resistant to irrational fears or</td>
<td>• Resistant to irrational fears or</td>
</tr>
<tr>
<td>anxieties</td>
<td>anxieties</td>
</tr>
<tr>
<td>• Confidence in themselves/abilities</td>
<td>• Systematic, orderly and can be</td>
</tr>
<tr>
<td>• Enjoys freedom, independent and</td>
<td>cautious</td>
</tr>
<tr>
<td>are realistic about abilities</td>
<td></td>
</tr>
<tr>
<td>• Careless, late and unpredictable</td>
<td></td>
</tr>
<tr>
<td>• Enjoys socializing and meets people</td>
<td></td>
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<tr>
<td>easily</td>
<td></td>
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<tr>
<td>• Lives dangerously, can be gamblers</td>
<td></td>
</tr>
<tr>
<td>and enjoys taking risk</td>
<td></td>
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<tr>
<td>• Likes ideas, discussions and</td>
<td></td>
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<tr>
<td>speculations</td>
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<tr>
<td>• Does not regret past</td>
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<td>actions/behaviour</td>
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<td>• Cheerful, optimistic and mentally</td>
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<td>healthy</td>
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<table>
<thead>
<tr>
<th>Academically unsuccessful dyslexic males</th>
<th>Academically unsuccessful dyslexic females</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Careful, highly disciplined and</td>
<td>• Self-blaming and can be self-</td>
</tr>
<tr>
<td>finicky</td>
<td>questioning of life</td>
</tr>
<tr>
<td>• Easily upset by things that go wrong</td>
<td>• Pessimistic, gloomy and depressed</td>
</tr>
<tr>
<td>• Active and energetic</td>
<td>• Are easily upset by things that go</td>
</tr>
<tr>
<td>• Has low self-opinion and feel</td>
<td>wrong</td>
</tr>
<tr>
<td>unattractive failures</td>
<td>• Can make hurried and premature</td>
</tr>
<tr>
<td>• Lacks self-reliance and can be easy</td>
<td>decisions</td>
</tr>
<tr>
<td>pushed around</td>
<td></td>
</tr>
<tr>
<td>• Reliable, trustworthy and a bit</td>
<td></td>
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<tr>
<td>compulsive</td>
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</table>
- Few special friends and enjoys solo activities
- Prefers familiarity, safety and needs security
- Self-blaming, and self-questioning of life
- Pessimistic, gloomy and can be depressed

<table>
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<tr>
<th>Table 1: The dyslexic adult personality (academically successful and unsuccessful).</th>
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Alexander-Passe (2009b) describes the personality traits of a sample of N=88 adults, most with dyslexic symptoms. A dyslexia screening measure was used to identify hidden adults with dyslexia in the sample and to understand the differences that come with the severity of dyslexia. 10+ symptoms were perceived by Vinegrad (1994) to be enough to define a severe dyslexic, however some indicated 15+ symptoms. The 10-14 symptom group was assessed compared to the 0-4 symptom control group. The results indicate personality differences between adults with dyslexia with a degree (deemed as successful) and those without (deemed unsuccessful), whilst the term unsuccessful was not ideal it was kept to aid understanding. This does not discount that many were successful without a degree and ‘school-success does not always mean work-success’, in the case of those with dyslexia it’s even more so (Morgan & Klein, 2003) as many are successful in vocational fields (e.g. plumbing, building, sales, and training).

Even with a degree, those with most severe dyslexia (11+ symptoms) experienced higher levels of anxiety/hypochondria and lower self-esteem than controls. Those without a degree, both in the severe and most severe dyslexic group had lower self-esteem, lower sociability, more anxiety, and were more obsessive than controls.

The profiles describes successful male and female groups who are highly resilient, resistant to irrational fears, optimistic and were willing to take risks for success (males only) and were systematic in their approach (females only). Those who were unsuccessful were more self-blaming, upset when things go wrong, made hurried decisions in life, were pessimistic/gloomy/depressive (females only), and had a low self-opinion of themselves and felt a failure (males only).
Pulling the three studies together both successful and unsuccessful adults with dyslexia experience similar experiences at school, but each group cope different and have varying support structures. However both groups leave school with a need to find self-worth.

It is not surprising that following school without support and the unidentified of strengths, many can be led into low paid and unfulfilling careers that can led to self-harm (drugs, self-harm, attempted suicide) to improve their self-esteem. Depression and withdrawal was found as a means to cope defensively with their low self-fulfilling life, lacking the literacy/communication skills to find gainful meaningful employment.

Therefore it could be argued the turn to crime is a strategy of self-survival and find a sense of fulfilment in a community that does not judge individuals by academic achievement. One could argue that this is vocational success.

Self-belief featured an all three studies, in that those who were successful believed in their gut that what they were doing was the right thing, however the unsuccessful personality sample had self-doubt and this is hypothesised to come from the lack of childhood successful experiences.

Conclusion

This paper began with a research question about the impact of school experience on the creation of post-school successful and unsuccessful adults with dyslexia.

A wide literature review covered many topics: Dyslexia, School Experience/Emotional Coping, Social Exclusion, Success, Successful Dyslexics, Unsuccessful Dyslexics, The Disability Paradox, Dyslexia and Depression/Mental Health, and lastly Post-Traumatic Growth.

Taking the reader through a journey to understand what dyslexia is, how it manifests in the classroom and how many cope at school with their learning difficulties. Then how they feel socially, then moving onto why some are successful whilst others are not, and how mental health/depression is used by some as a means to cope with a life-long condition that affects many aspect of communication in society (reading, writing, and spelling). Many find coping with dyslexia difficult and the workplace is very inhospitable to those who lack back literacy skills.
Lastly the reader is led to question why some adults with dyslexia can succeed and to huge heights commercially but still have experienced educational-trauma in school.

The three studies (Alexander-Passe 2009b, 2010, 2016a) looked at success and the lack of success in different ways: a sample of successful dyslexics, a mix of successful and unsuccessful dyslexics, many manifesting depressive/mental health manifestations, argued to come from coping in out literacy-based society. Lastly a personality investigation looking at not only severity of dyslexia, but also gender and attainment of a degree education.

The result of the three studies indicate similar school experiences in all with dyslexia in mainstream education: late diagnosis, teachers without an awareness of dyslexic barriers to learning, and lastly humiliation from both peers and teachers due to their low academic attainment and at times their avoidance strategies.

What seems to separate the successful and unsuccessful group of dyslexic adults were:

- The level of parental support as children
- How they coped at school by avoiding reading and writing
- Opportunity to find hobbies and subjects that they could excel in at school
- Experience of success as children
- Use of assistive technology is help them cope with their dyslexic deficits
- Being highly motivated to gain a sense of ‘self-worth’
- Seeking to disprove their teacher that they were not ‘stupid and lazy’
- Having a healthy relationship with risk
- Perceiving failure in a positive light, as a journey and opportunity
- Extreme focus on tasks or project

**Limitations**

The Alexander-Passe (2009b, 2012) personality data was sourced from self-disclosing individuals who identified themselves as dyslexic, thus caution should be used in generalizing from the data, however generalized themes were its main intention.
9.0 Thesis review and conclusion

This thesis began with an introduction chapter (Chapter 1) setting the scene with a contemporary definition of dyslexia, describing developmental dyslexia as a phenomenon that manifests with a spectrum of difficulties and severities, including difficulties gaining the skills of reading, writing and spelling, phonological delay, poor short-term memory, and a lack of co-ordination, etc. (Rose, 2009). Dyslexia is viewed within this context as affecting individuals at school/college/university and in the workplace, and as a condition without a cure. However, those with this condition can develop a range of skills and coping strategies which can mitigate many of the difficulties faced (Scott, 2004; Alexander-Passe, 2016a, 2017; Logan, 2009; Agahi, 2015) to achieve post-school success.

At school, evidence suggests children with dyslexia can face significant difficulties gaining the basic building blocks of learning, and due to these difficulties or barriers, many develop defensive avoidance (often emotion-based) strategies to cope in educational environments, safeguarding their self-esteem (Carawan, Nalavany & Jenkins, 2015; Eissa, 2010; Burden, 2008; Snowling, Muter & Carroll, 2007; Burden & Burdett, 2005; Ridsdale, 2004; Riddick, 1996; Scott, 2004; Dahle, Knivsberg & Andreassen, 2011; Alexander-Passe, 2016a; Rack, 2005; Harris, 2012).

Key issues were identified as: the lack of early identification; the variability of provision in mainstream education, resulting in educational failure (Scott, 2004; Bercow, 2011; Scott, 2016); and secondary emotional manifestations as a result of these issues (Alexander-Passe, 2015a; Burden, 2008; Scott, 2004; Edwards, 1994; Agahi, 2015; see Chapters 2 to 8 of this thesis). Regarding adults with dyslexia, the lack of early identification and delayed intervention at school resulted in many leaving school undiagnosed and unsupported (National Statistics, 2017a, 2017b; Alexander-Passe, 2016a), and without adequate academic qualifications, and they struggle to find suitable employment as a result (Alexander-Passe, 2016a, 2017; Reid, 2001; McLoughlin, Fitzgibbon & Young, 1994; McLoughlin, Leather & Stringer, 2002; McNulty, 2003; Leather & McLoughlin, 2010). Empirical evidence suggests there is a paradox in that many adults with dyslexia can be found among the prison population (Hewitt-Mann, 2012; Harris, 2012), and also amongst highly successful businessmen/entrepreneurs (Logan, 2001, 2009, 2010b; Alexander-Passe, 2017; Chapters 7 and 8 of this thesis), with little understanding to why such a paradox exists. This thesis aimed to understand the motivations for post-school success.
Dyslexia and mental health were discussed to inform the reader that many coping strategies developed in childhood and adulthood can have a negative effect on mental health (Scott, 2006; Alexander-Passe, 2016a; Chapters 2 to 6 of this thesis). The child or teenager with unidentified dyslexia can question their self-image as a result of long-term educational failure (argued by the author to be a form of educational neglect) in mainstream educational settings, asking why they are perceived by their teachers, peers and parents as lacking the ability to succeed at school with the skills of reading, writing and spelling. Very soon they start to believe the labels of ‘lazy’ and ‘stupid’ from teachers and peers to be true, and may withdraw as a means of self-preservation (Scott, 2004; Riddick, 1996; Edwards, 1994; Humphreys 2002, 2003; Humphrey & Mullins, 2002; Alexander-Passe, 2016a, 2017; Chapters 5 and 6 of this thesis). Whilst depression is a common manifestation, self-harm and attempted suicide also feature; and parallels can be made with other groups with hidden disabilities (compared to disabilities with visual presentations, for example using wheelchairs or having facial disfigurement) who also manifest both internalised and externalised coping strategies (Beatty & Kirby, 2006; Clair, Beatty & MacLean, 2005; Scott, 2016; Alexander-Passe, 2016a; Chapters 2 to 6 of this thesis).

Adults with dyslexia continue to use withdrawal strategies first developed as children/teenagers (Scott, 2004; McNulty, 2003; McLoughlin, Leather & Stringer, 2002; Chapters 2 and 3 of this thesis), but now with the ability to avoid situations requiring reading, writing and spelling. This can result in: withdrawal from the employment market and surviving on benefits; turning to vocational criminal activities to gain an income (Hewitt-Mann, 2012; Harris, 2012; Alexander-Passe, 2017); or being employed in low-paid careers (for example, car mechanics or double glazing fitters). Alternatively, if they recognise and utilise their strengths they can choose suitable well-paid and satisfying careers, however many still harbour grudges towards their teachers over their lack of literacy skills and their traumatic schooling experiences (Alexander-Passe, 2006a, 2017; Fink, 2002; Logan, 2009, 2010a; Fitzgibbon & O'Connor, 2002). This is a main theme of this thesis, the development of ‘post-traumatic growth’ as the ability to use traumatic school experiences as a positive motivation for successful post-school careers (Alexander-Passe, 2017; Agahi, 2015, Nicolson, 2014).

UK educational policy between 2000 and 2017 (during the time of this research study) was reviewed. This was important in order to understand the policies that are
currently (or have been) in place to identify and support intervention for individuals with dyslexia in schools. The Warnock Report (1978) first recognised the frequency of SEN in schools (suggesting 20% of all children will experience a learning barrier at one or more stages of their educational careers), and the SEND Code of Practice (2015), the latest educational legislation, enlarged the role of parents to be co-producers with schools for the education of their children, seeing parental voice as very important. UK government educational reports, OFSTED (2010), Bercow (2011) and lastly Scott (2016) identify that many children are incorrectly identified as having SEND when they did not (and vice versa), and whilst class teachers are required to be the main educators for ‘all’ children regardless of any SEND (delivering ‘quality first’ teaching as the main SEN element), parents’ reports of inconsistencies in school SEND provision were well-founded, with a ‘postcode lottery’ regarding SEND support in schools. A recent report (Johnson, Carroll & Bradley, 2017) also found that only 66% of teaching staff felt responsible for identifying SEND in schools, reflecting the view that the role of teachers and school leaders is commonly misunderstood regarding SEND and the SEN Code of Practice, which specifies that ‘all’ teachers are responsible for identifying SEND in students.

Whilst all mainstream schools are required to have a qualified teacher as a SENCO (Special Educational Needs Coordinator) to champion the rights of and interventions for students with SEND in schools, and are given a SEND nominal budget (not ‘ring-fenced’ to guarantee it is actually being used for SEN purposes), many SENCOs lack the skills and qualifications to assess (Alexander-Passe, 2016d), and children with behavioural and autistic difficulties are often prioritised over those perceived as having more ‘mild’ impairments (such as dyslexia), due to the scarce resources available to schools. Based on the view advocated in Johnson, Carroll & Bradley (2017), if teachers feel unqualified to make pupil referrals, many SEND pupils will remain invisible, and SENCOs are unable to assess their needs and will remain ineffective in their roles.

Whilst Warnock (1978) suggested a frequency of 20% of SEN in mainstream education, in 2010 the UK government felt that SEND data from schools was over represented (OFSTED, 2010) due to the notion that ‘some pupils are being wrongly identified as having special educational needs and that relatively expensive additional provision is being used to make up for poor day-to-day teaching and pastoral support’ (p.9). This has resulted in firstly a rapid decline of SEND being recorded in schools, with the latest National Statistics data (2017a) suggesting that overall frequency of SEND in schools
reduced over the last 6 academic years, from 21.1% in 2010 to 14.2% in 2017 across all school pupils. Breaking this down, there is a lesser reduction of SEND in primary schools from 20% in 2010 to 14.2% in 2017, and in secondary schools from 21.7% in 2010 to 12.7% in 2017. One explanation for the decline in frequency could be due to a change in how SEND is reported, from ‘by pupil need’ to ‘pupils receiving provision’. Therefore, for example, pupils with high-functioning autism (recently reclassified from having Asperger’s Disorder), who have specific SEND needs, may not be recorded as having SEND as they may be coping well at school and argued not to need any specialist intervention/provision. Likewise, a child with unidentified dyslexia who is receiving phonics interventions in class is not listed because their classroom support is believed to be sufficient (SEND Code of Practice, 2015). However, National Statistics data (2016a, 2017a) also notes that ‘specific learning difficulty’ (a UK educational term to include dyslexia) increases from 10.8% of all SEND children in primary schools to 23.3% in secondary school, reflecting the lack of correct identification of SEND in schools. Johnson, Carroll & Bradley (2017) report that ‘speech and language difficulties’ is commonly the default first diagnosis and provision in schools, irrespective of any actual learning barrier faced.

The ‘bi-ability’ model was then introduced (Valeras, 2010), which was argued to be more suited to dyslexic populations than either the ‘medical’ or ‘social’ models of disability. It was argued that many individuals with ‘hidden disabilities’ such as dyslexia and asthma reject a ‘disabled’ identity (Kanuha, 1999; Threlkeld, 2015) and frequently ‘pass’ in their daily lives to achieve careers success without limitations (Cavet, 2000; Fitzgerald, 2000; Alexander-Passe, 2017; Threlkeld, 2015; Agahi, 2015). Results in Chapters 4, 7 and 8 of this thesis support the view that many individuals with dyslexia reject a dyslexia diagnosis whilst recognising that they have a difference to their peers, seeing it as a ‘learning style difference’ rather than an impairment or disability as per the ‘medical’ model of disability.

Their ability to be ‘able-bodied’, ‘dis-abled’ or neither means they exist as a group with identity dilemmas in society. The term ‘dis-abled’ was perceived to only relate to physical disabilities/impairments/barriers, which people with dyslexia do not have, resulting in others seeing them as unworthy to claim allowance for any learning difficulties/differences (Reeves, 2004). It could be argued that identifying as ‘dis-abled’ can be career limiting, but identifying as ‘able-bodied’ can also mean they are always wary of being found out for their hidden (non-physical) difficulties, resulting in emotional and mental health issues developing from repression, and anxiety from constant vigilance.
Participant responses in Chapters 4, 7 and 8 of this thesis support the notion that ‘passing’ as able-bodied can be advantageous in terms of career advancement, but recognising the stress and anxiety that comes from repressing their dyslexic identity, argued to living like a ‘spy’, unable to disclose their true self (Alexander-Passe, 2015a, 2016a).

UK educational policy utilises a ‘medical model of disability’ that suggests that all children can attain similar educational levels despite socio-economic factors, gender, learning difficulties or coming from different starting points, and that ‘quality first’ teaching by class teachers can teach ‘all’ children regardless of barriers (SEND Code of Practice, 2015). Where children have learning barriers, they should be provided interventions for ‘accelerated progress’ to bring them up to the required level, so they can be re-classified into the group called ‘average’ or ‘age-appropriate’ learners. This is argued to run contrary to UK equality legislation (Equalities Act, 2010) and the ‘social model of disability’ (Macdonald, 2009a, 2009b; Riddick, 2001), which place barriers to learning with the ‘environment/society/policies’ and not with the ‘individual/child’. It could therefore be argued, according to equality legislation, that it is the role of the school to modify how they teach so that all pupils can shine, as ‘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’ (Kelly, 2004).

Regarding the methodologies used in this thesis, a quantitative approach was first chosen by the author (Chapters 2 to 3), using standardised measures of self-esteem, depression, coping and stress. These measures allowed comparisons to broader control samples of school-aged children with and without dyslexia, supporting investigations of emotional coping. However, it was felt by the author that whilst the quantitative data gained was useful, due to the nature of dyslexia (avoidance of forms, reading, writing and handwriting) such measures placed additional barriers to future research participation. Later investigations (Chapters 4 to 8) used mixed and qualitative methodologies (interpretative phenomenological analysis – IPA) to better understand the emotional journeys that individuals with dyslexia experience (Smith, 2004, 2007). This enabled greater participation of the targeted group and brought a much deeper and richer understanding of the target group’s ‘life-world’, the relationship with and perception of objects around us, and our experience of ourselves and our bodies. As the investigations were large compared to others using IPA, quantitative data was created from the many themes highlighted, allowing a data-rich mixed-methods approach. However, these were still
insignificant sizes for generalisations to be made. This qualitative methodology makes use of ‘insider view’ (Dwyer & Buckle, 2009; Milligan, 2016) to describe how the researcher was informed with similar common experiences as the population being studied, being dyslexic himself; however, recognising his own biases and preconceptions helped him to recognise slight patterns in the responses which an outsider might not recognise or value (Maykut & Morehouse, 1994). This was related to gender investigations indicating the ability to be both an ‘insider’ and an ‘outsider’ to the group being investigated (Brown, 2012; Collins, 1986). Serrant-Green (2002, p.4) concluded that no researcher is a complete ‘outsider’, as through their investigations their identity is constantly changing and is not fixed.

Defining the research aim and objectives of this thesis allowed the reader to understand the journey they were about to follow through the author’s research chapters, which can be split into three main areas: understanding the frequency of emotional coping in school-aged individuals with dyslexia; understanding the emotional repercussions for those with dyslexia over the short- and long-term; and understanding the long-term effects of school-based trauma in the creation of adult careers, and how many adults with dyslexia can be highly successful in the workplace (using the concept of ‘post-traumatic growth’).

As this is a ‘PhD by existing works’ made up of 7 peer-reviewed, previously published papers, the author recognises that there was a limitation on what could have been added to those chapters, and the nature of this award precludes from making additions to Chapters 2 to 8 of this thesis.

It is argued by the author that this thesis offers original research that contributes to the field of developmental dyslexia and emotional coping.

This thesis aims to investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling. Each of the five objective themes will now be discussed in regard to the research findings of this thesis.

This ‘Conclusion’ chapter uses a number of themes to pull the thesis together, combining four overview concepts (the influence of gender; neoliberalism, SEND policy and provision, post-traumatic growth-PTG an underlying theme; and bi-ability, a new way of understanding those with invisible disabilities and developmental dyslexia.) Other sections from the nine aims of this project are also included (coping strategies used by school-aged individuals with developmental dyslexia; understanding the life experiences of individuals
with dyslexia; destructive behaviour used by individuals with dyslexia; possible post-traumatic stress disorder (PTSD) in adults returning to school as parents). It is argued by the author that these additional sections are relevant to the argument and reflect the research chapters of the thesis (Chapters 2 to 8), and are part of the journey towards identifying ‘post-traumatic growth’ and ‘bi-abilities’ as main outcomes from the thesis. Appendix 4 includes a section investigating the medical and social models of disability, and was an important investigation towards the selection of the ‘bi-ability’ model for this thesis.
The influence of gender in this thesis

**The concepts of sex and gender**

It is argued that sex and gender are different concepts, but are commonly combined by society. ‘Sex’ is argued to be a biological concept, being related to the ‘male or female’ physical features (chromosomes, sex organs, hormones and other physical features); ‘gender’ is argued to denote the terms ‘men and women’ based on social factors (social role, position, behaviour or identity), as clarified by Mikkola (2017). de Beauvoir (1989) is famously quoted to argue that ‘one is not born a woman, one becomes one’, suggesting that gender, being a woman, is a socially constructed concept, a view supported by sociologists, thus gender is culturally learned or acquired. de Beauvoir suggested that ‘social discrimination produces in women moral and intellectual effects so profound that they appear to be caused by nature’ (1972, p18). Critics such as Freud (Winer & Anderson, 2004) and Butler (2007) argue against de Beauvoir’s concept, suggesting gender behaviours are not socially constructed, and are biological and inert. Recent research suggests that there are different brain structures between male and females that could account for behavioural differences, suggesting gender differences may be biological after all (Ruigrok et al., 2014; Sheherd et al., 2012).

**Gender socialisation**

It is argued by Mikkola (2017) that as soon as a baby is born and the doctor/midwife announces they are a boy or girl, the child begins both conscious and unconscious socialisation into their assigned gender. Boys are dressed in blue and given cars/trains to play with, and girls are dressed in pink and given dolls/toy babies to look after. These, it is argued, reinforce a female ‘subordination role’ so they learn to be passive, ignorant, docile and emotionally helpless for men (Millett, 1971, p.26), reinforcing ‘appropriate’ behaviours, with girls discouraged from playing rough games like football, and boys told to not ‘cry like a baby’, and to play with guns (Kimmel, 2000).

**Social construction**

The World Health Organisation (2010) defines ‘gender roles’ as ‘socially constructed roles, behaviours, activities and attributes that a given society considers appropriate for men and women’ (p.1). The question is: do women and men cope differently based on
stereotypes or genetic differences? Caske (2003) and Hammen (2005) suggest there is an ‘underlying mechanism’ that men and women use to cope with stressors. Matud (2004) and Ptacek, Smith & Dodge (1994) observed that women tend to use coping strategies aimed at changing their emotional responses to stressful situations, whereas men use more problem-focused or instrumental methods of handling stressful experiences. Kelly, Tyrka, Price & Carpenter (2008) also observed gender differences in the use of coping strategies, and their association with depression and anxiety-related problems underscores differences in the clinical presentation of anxiety and depression between women and men, a view also supported by Barlow (2001) and Nolen-Hoeksema, Larson & Grayson (1999). As reflected in this thesis (Chapter 3), female participants tend to use emotion-focused coping strategies to manage stressors, and these are more associated with depression and anxiety than they are for male participants, a view supported by Mezulis, Abramson & Hyde (2002). This in turn, it is argued, affects their ability to cope as adults.

**Social subordination and gender**

Haslanger (2012) argues that gender is a matter of occupying either a subordinate or privileged social position, and that societies in general tend to ‘privilege individuals with male bodies’ (Haslanger, 2000, p.38), occupying better social positions than those with female bodies, generating persistent sexual injustices. However, this argument is not without its flaws, with Mikkola (2007) suggesting if this concept were true then the Queen of England would not be a woman, and that all men who are not privileged in society would not be men. Bach (2012) therefore suggests that women are women due to shared surface properties with other women, for example, growing up as a woman with gender socialisation. However, this may cause difficulties considering those individuals who have undergone gender transformation, as they could be argued not to be women (Mikkola, 2017), due to lacking a shared childhood/history.

**Performative**

If de Beauvoir’s (1989) argument that ‘one is not born a woman, one becomes one’ is true, then to be a woman or man is something that is created in society by society. Gender as a performance and ‘self-identification’ is an argument supported by Bettcher (2013) and Jenkins (2016) for the trans-women community, allowing those who have undertaken gender transformation to be seen as women. Jenkins argues that ‘gender is a
lived experience’ (2016, p.397) and that social oppression is not a fundamental, a view that Haslanger (2000, 2012) challenges.

**Is gender uniform?**

It is argued by MacKannon (1989) that ‘all women are thought to differ from all men’, but Spelman (1988) has argued against gender realism, being mistaken in assuming that gender is constructed independently of race, class, economic position, ethnicity and nationality. Do all women experience womanhood or childbirth in the same way? Spelman argued that middle-class white feminists dismiss the importance of race and class, therefore conflate and confuse ‘the condition of one group of women with the conditions for all’ (p.3). Young (1997) suggests that, whilst Spelman argued that gender realism is ‘untenable’ (p.13), Mikkola (2006) argues that whilst many of Spelman’s concepts about gender realism are unsound, and that there are many aspects of womanhood that are shared amongst women. The feminist movement relies on women being a distinct group in society, arguing that they are a subordinate, oppressed group in society who share many common features (Stoljar, 1995).

**Gender and the diagnosis of SEND/dyslexia**

Miles, Haslum & Wheeler (1998), in a sample of N=269 children with dyslexia, found the ratio of 4.5:1 boys to girls. Vlachos, Avramidis et al. (2013), in a study of N=598 Greek secondary school students, suggested that boys were twice as likely to be ‘identified’ with dyslexia. Sun, Zou et al. (2013) found that, of N=195 primary and secondary school students in one Chinese city, a ratio of 3:1 boys to girls was identified. The word that could be questioned is ‘identified’, and was this through teacher referrals or blanket screening. Sun, Zou et al. suggested that only 1 out of 4 boys and 1 out of 7 girls who were identified as reading impaired in their study were school identified as learning disabled, and concluded that gender differences in reading impairment are attributable primarily to male vulnerability rather than a certain bias (Quinn & Wagner, 2013).

Elliott & Grigorenko (2014) concluded that the size of the gender ratio in dyslexia is disputed, due to differing definitions and measures employed: for example, Finnucci & Childs (1981) suggested 5.9:1 males to females, Katusic, Colligan et al. (2001) 2.0–3.0:1.

Shaywitz, Shatwitz et al. (1990), and later Shaywitz (2003), argue that dyslexia only seemed to be more common in boys due to school identification procedures. Shaywitz
advanced a ‘referral bias’ concept, purporting that there was no significant difference in
the prevalence of reading disability in boys and girls. Share and Silva (2003) also oppose
such gender ratios, finding in a study of N=900 children that the predicted reading scores
for boys by school teachers were systematically overestimated, thereby inflating reading
discrepancies; the converse was found for girls. When defined separately for girls and boys,
they found severe underachievement in reading was equally prevalent in both genders.
Supporting this view is Pennington (2009) suggesting that boys tend to externalise their
behaviours more whereas girls tend to internalise any difficulties, hence boys can be
perceived to be more needy. Zabell & Everatt (2002) suggest a ‘referral bias’ may be based
on current diagnosis models and ‘behaviour manifestations’ rather than the actual level
need of children.

**Gender in this thesis**

The author of this thesis sought no gender bias, and on examination of the gender
breakdown of each research chapter, each indicate at times a male bias and at other times
a female bias, due to recruitment variabilities. Chapter 2 investigated N=12 dyslexic males
to N=7 females, Chapter 3 had N=56 dyslexic males to N=22 females, but N=26 control
males to N=51 females. Chapters 4 to 8 have a perceived female bias of N=18 dyslexic
females to N=11 males, but on further investigation of the non-depressive sample there
was no bias, with N=4 males to N=3 females. Within the depressive sample there was a
female bias of N=7 males to N=15 females, and this is suggested to reflect differences in
coping strategies, with females having a greater need for emotion-based coping. In Chapter
9 there were two additional studies: of the N=20 successful dyslexic individuals, no gender
breakdown was given; and with the personality study there were N=21 self-reported
dyslexic males to N=25 females, compared to N=17 males and N=25 females in the control
group.

In the main study, presented in Chapters 4 to 8, there was a significantly greater
female bias in those with depressive symptoms. This could be answered from Chapter 2, in
that there is a difference in gender coping strategies/styles, with females choosing greater
emotional and avoidance with moderate depression, compared to males with no
depression and choosing more task-based coping. The interview study, such as the one
found in Chapters 4 to 8 with adults, is argued by the author to be a talking emotional
therapy, which males might be less likely to volunteer for due to their strategies of avoiding emotional vulnerabilities.

The author, whilst noting gender bias in the sampling, has in each study not only given gender breakdowns but also analysed according to gender, a variable not commonly found in dyslexia-based research. Therefore any gender bias is argued to be transparent and gender differences are clearly identified.

**Implications for policy and practice**

Each research chapter in this book (Chapters 2 to 8) indicates gender differences in emotional coping, manifestations and personality differences in those who are academically successful and less successful. Gender is rarely investigated in studies with individuals with developmental dyslexia due to a perceived gender bias towards males. However, this thesis argues that any gender bias comes through the different coping strategies manifested by males and females, resulting in boys who are more external in their behaviour being seen as a higher priority by schools, compared to girls who would rather keep their heads down and coast through school (Scott, 2004; Riddick, 1996).

The challenge of educationalists is to screen ‘all’ children for learning difficulties and assess for dyslexia according to need, not manifestations of misbehaviour. The need to tackle gender stereotypes is important in schools and with parents, so that a quiet and reserved girl is questioned, and any underlying learning difficulties can be quickly identified. In addition, researchers should aim to investigate both genders for their differences, and report their findings so that targeted interventions can be developed.

The personality profiles using gender found in Chapter 8 (Table 1) found greater male traits in both the academically successful and unsuccessful groups, indicating greater group differences, and in successful males an ability and/or freedom to take risks in society. In comparison, academically successful females were found to be systematic, orderly and cautious.

Regarding the creation and nurturing of successful individuals with dyslexia, there is a need to be aware that due to gender socialisation, females may be less able to take risks in their learning and career development, and will need nurturing or mentoring to achieve at school or in the workplace.
Neoliberalism and SEND policy and provision

What is neoliberalism?

Olssen (2000, p.482) suggests that ‘neo-liberalism reinforces many of the central axioms of classical liberalism. It reinforces those pertaining to the relations between the individual and society, the conception of freedom, the view of the self as a rational utility maximiser, the... distinction between public and private spheres as separate, and the rejection of any conception of a public good, over and above the aggregate sum of individual ends’. Macpherson (1962) notes that neoliberalism can be traced back to the utopia project from philosophers such as Locke and Hobbes who were committed to the ideals of personal freedom and possessive individualism. As Macpherson (1962, pp.263–4) notes, the liberalism ideals are: freedom from dependence on others, the individual is the proprietor of his own person and capacities; human societies consist of a series of market relations, and political society is constructed to protect an individual’s property and goods. In other words, supreme value is given to individual autonomy, agency and property. Neoliberalism differs from liberalism in that it recognises that some state intervention is necessary, like a hidden hand, so that the market can function effectively.

Background to neoliberalism

Post-Second World War there was a need for the state to take a significant part in rebuilding many economies that were significantly damaged by the war and rationing. Hobsbawm (1994, p.270) noted that post-war capitalism was unquestionably ‘a system reformed out of all recognition... a marriage between economic liberalism and social democracy’, being the ‘golden years of the welfare state’ (p. 258). Keynesian socioeconomic policies were widely deployed by countries in order to institutionalise demand management, deficit spending, collective bargaining, monopoly pricing and counter-cyclical monetary policies. There was significant spending on utilities and social and political infrastructures, as well as various collective goods including health and education (Jessop, 2002; Brenner, 2004).

However, by the 1960s things had begun to change. The balanced compromise between defence of welfare and a liberal international economic order that had sustained three decades of growth and progress was seriously destabilised. Firstly, the move of industries to less-developed counties, for example in Asia, and the recovering economies of Western Europe and Japan brought the import of cheaper goods which reduced the need for nationalised industries. Secondly, the reduction of internal demand and the inability to export
goods at a price cheaper than goods from less developed counties (with their cheaper labour costs) brought a rise of inflation and the weakening of home economies. The recession of 1973 shook the capitalist world, leaving it to more than two decades of subsequent economic restructuring, along with social and political readjustment (Robertson, 2007, p.4–5). Hobsbawm (1994) suggested that before the stock market crash of 1973 the ultra-liberal economic theologians were in the minority. However, after the crash of 1973 they went on the offensive (Marchak, 1991), but did not dominate government policy until the 1980s. Hobsdawm (1994, p.409) observed the difference between Keynesians and neoliberals were their polar opposite ideologies for dealing with economic problems: ‘The Keynesians claimed that high wages, full employment and the Welfare State created the consumer demand that had fuelled expansion, and that pumping more demand into the economy was the best way to deal with economic depressions. The neo-liberals argued that Golden Age economics and politics prevented the control of inflation and the cutting of costs in both government and private business, thus allowing profits, the real motor of economic growth in a capitalist economy, to rise. In any case, they held, that Adam Smith’s ‘hidden hand’ of the free market was bound to produce the greatest growth of the ‘Wealth of Nations’ and the best sustainable distribution of wealth and income within it; a claim which the Keynesians denied’.

Robertson (2007, p.6) noted that from the 1980s there was ‘a purge of all forms of Keynesian policy’ by international organisations, lending agencies, and national governments. Tickell & Peck (2005, p.174) observed that ‘In its own terms, neoliberalism’s roll-back phase was a phenomenal success. Markets and institutions were transformed as the politically legitimate remit of state intervention was redrawn’.

Cox (1996, p.31) noted there were three central principles which feature in most models of restructuring – deregulation, competitiveness and privatisation – and these were sold to the population as short-term pain for long-term gain. Deregulation refers to the removal of the state from a substantive role in the economy, except as a guarantor of the free movement of capital and profits. Competitiveness is the justification for the dismantling of procedural state bureaucracies and range of welfare provision that were built up in the post-war period. Privatisation advocates the sale of government businesses, agencies or services to private owners, where accountability for efficiency is placed on profit-oriented shareholders.

Scott-Samuel, Bambra et al. (2014) argue this change towards neoliberalist policies began from the time when Margaret Thatcher and Ronald Reagan were respective heads of government in the USA and UK, driving through financial deregulation, trade liberalisation and the privatisation of public goods and services. ‘The Sprit Level’ (Wilkinson
& Pickett, 2009) was one attempt to explain the negative results of neoliberal government policies, but while this was heralded as an important document, it was not without its critics, who argued that its selective use of data meant the publication should be read with caution (Sanandari, Sanandari, Malm & Snowdon, 2010; Saunders, 2010; Snowden, 2010).

**Critics of neoliberalism**

The move towards neoliberalism had, and still has, its critics. The shift from nationalised industries to privatisation brought huge changes to the UK National Health Service, schools and utility suppliers, along with the closure of uneconomical state-run companies, such as coal mines and British Leyland Cars. Blanton & Peksen (2016a, 2016b) observed that the lack of concern for human rights is one of the most commonly cited ‘human costs’ of neoliberalism, particularly in the area of labour rights. Collective bargaining, changes to acceptable work conditions, anti-unionism, and increased labour flexibility have allowed ‘business-friendly’ regulation to put profit before workers’ rights.

Critics of neoliberalism comment on the following areas: its focus on economic efficiency, and its effect on a class system, global health, infrastructure, corporatism, and political opposition. The economic efficiency focus means that, by allowing the market to decide the viability of industries, profit and efficiencies are placed before workers’ rights (Birch & Siemiatycki, 2015). The class system is affected by the rise of profit-led markets and the political and economic power of Wall Street capitalists, leading to the substantially enlarged salary gap between the leaders of industry (upper class), the managerial class (middle class), and the workers (lower class) (Wacquant, 2009; Springer, Borch & MacLeavy, 2016). Neoliberalism’s effect on global health is evidenced by the rise of ‘non-governmental organisations’ (NGOs), which are perceived to offer better social welfare than governments, both in home countries and abroad via foreign aid budgets. Infrastructure is affected by the rise of neoliberalism because the state is less likely to engage in large-scale infrastructure projects, and are more likely to help fund private ‘for profit’ companies to create and service large projects at high long-term expense – for example, railways, hospitals and schools (IMF Finance & Development, 2016; Firzili, 2016). Corporatism has a negative effect because the rise of large international corporations, relied upon by the state for major projects, can mean they become too powerful for a single government to control – for example, the rise of Amazon and Google (Arthur, 2003). Political opposition to neoliberalism is based around the notion that placing industries in
the hands of large ‘for profit’ corporations, through deregulation and privatisation, can deprive citizens of the right to shape their daily lives – for example, the reduced numbers of union members can lead to economic inequality through lack of negotiating power (Haymes, de Haymes & Miller, 2015).

**Education and neoliberalism**

Rikowski (2007) interprets the neoliberalism of education as the ‘businessification’ of education, argued to include the privatisation of schools/colleges/universities, the regulation (or de-regulation) of the teaching profession, the state prescribing what is taught (a National Curriculum) and by whom, and the increase of centralised control through the reduced autonomy of local educational authorities.

The privatisation of schools started through the 1988 Education Act, placing ‘business’ governors in schools to reduce the control of local educational authorities, with budget control being handed to school head teachers. Private sector sponsors or charities were allowed to take over ‘underperforming or failing’ schools, with direct funding from central government (omitting the percentage normally taken by local authorities for a range of services), with the freedom to run schools as a businesses, exempt from the requirements to teach the National Curriculum (a government-prescribed curriculum) and to employ qualified teachers. It was argued that injecting competition would improve standards. The Academies Act (2010) expanded this project by allowing ‘any’ school to be centrally funded and gain less regulation from local educational authorities. In May 2010 there were only 200 academy schools, but by November 2012 there were 2,456 (RSA, 2013), due to significant financial incentives from the government, with each Academy gaining a personalised contract with central government allowing greater freedom to promote religious and same sex schools (Academies Commission, 2013). Academies now account for 25% of all schools (National Statistics, 2017a, 2017b). Allen, Armstrong, Bunting, et al. (2008) argued that academies employed 12% of unqualified teachers (i.e. without Qualified Teacher Status).

Neoliberalist policies have also affected the role of the teaching profession, with the introduction of a ‘national curriculum’ that specifies what should be taught, the introduction of ‘teaching standards’ to specify how they should teach, and more recently the introduction of ‘performance related pay’ to reduce the labour rights of teachers (Hill, 2013a).
The introduction of published ‘league tables’ for schools, not only based on the results of students but also on ‘added value’ a school brought to students, resulted in a ‘market-led’ sector to be created, allowing for ‘parental choice’ as to which school they wished their child to attend. This has been argued to create a motivation for some parents to move home to be in the catchment areas of ‘good or outstanding’ schools, and less well-off parents to gain less choice through their inability to move to be closer to those schools, resulting in children from disadvantaged homes receiving a poorer education (Hill, 2013a).

**SEND and neoliberalism**

When considering educational policy in regard to SEND, it is important to consider overall governmental considerations that affect the development of educational decisions. The Special Educational Needs and Disability Act (SENDA) (2001) was one of a number of strategies by the UK government to introduce free-market and greater parental choice policies to the education and care of those with special educational needs. Up to this point, local educational authorities (LEAs) were responsible for the care of all school students with SEND, establishing numerous special SEND schools. The Audit Commission Report (2002) led to the redistributing of SEND funding from special schools to mainstream schools, with the perceived aim of ‘inclusivity’ in education, so that most SEND students were taught amongst their peers. This mind-set change is also reflected in care for the elderly, those with mental health difficulties, and in the UK healthcare system (Scott-Samuel, Bambra et al. (2014), where services have been privatised leading to, it is argued, substantial increases in socioeconomic and health inequalities.

These instances, under the argument that ‘care in the community’ is more inclusive, have resulted in the closure and dilution of specialist care institutions and their specialist teams, reducing funding from central to local decision makers, with care now being provided by local contractors who bid against local authority stakeholders to offer ‘better-value’ services.

In educational policy, the Academies Act (2010) established the ability for schools to be centrally funded, rather than through LEAs; this meant that Academy schools had the choice over whether they purchased provision from LEAs’ specialist SEND teams (for example, speech therapy, educational psychologists, autism specialist teachers, visual impairment teams, etc.). Also, the introduction of Educational Health and Care Plans (EHCPs) (SEND Code of Practice, 2015) gave parents the choice of a ‘personal budget’, and
increased the need for schools to demonstrate why they were the best choice and best value for allocated student SEND funds.

As a practitioner in a mainstream academy school, who chooses to ‘buy into’ many of the LEA’s offer of services, I personally see that LEA SEND budgets are squeezed more each year, and teams full of specialists are now reducing to an advisory service, rather than one that is able to offer direct interventions to students (Full Facts, 2018; Bramble, 2017). This may be due to academy schools choosing to purchase services elsewhere.

In the care of students with severe SEND, who are now being changed from having ‘Statements of SEND’ to having ‘Educational Health and Care Plans-EHCPs’, neoliberalist policies are also evident. Students are allocated funding for a number of hours of an unqualified Teaching Assistant (TA) or Learning Support Assistant (LSA) supporting them in class, rather than with a qualified Specialist Teacher. This is thought to be the cheapest support option. It is argued by the author, OFSTED (2010) in their report ‘A Statement is not enough’, and Sharples, Webster & Blatchford (2015), that such provision is driven by money rather than seeking the most effective care for such students. Likewise, the clarification in the Code of Practice (2015) that every mainstream class teacher is responsible for the education of ‘all’ students in their classrooms (on average 30 students), varying between high achievers, low achievers, those with SEND, those with behavioural issues, those more able, and those with English as an additional language (EAL), is a reflection that such policies are driven by funding decisions over those of the effective education for so many types of learner. Sharples et al. (2015) argue this has a significant negative effect on the educational outcomes for students with SEND.

Cameron & Billington (2017), Cameron (2015), and Stangvik (2012) argue that a neoliberal curriculum distinguishes the ‘abled’ from the ‘non-abled’, leaving behind a redundant school population that is excluded from general education and are poorly served, despite government promises of the opposite. Cameron & Billington (2017) furthermore argue that the shift from LEA responsibility towards parent/personal ‘responsibility’ for the specialist education of students with SEND, in both mainstream education and further/higher education, is a change from state responsibility to that of personal responsibility, and that parents should not ask for special allowances, otherwise their child could be argued to have gained an ‘unfair advantage’ in life, according to neoliberalism ideology.
Dudley-Marling (2004, p.483) talks about the promotion of American ideals that individuals succeed through sheer effort and determination, and do not ask for help (a theme developed in Chapter 8 and 9 of this thesis). Cameron & Billington (2017, p.1370) conclude by posing the challenge of those with dyslexia, to manage the internal and external identities/narratives they associate with (their self-image), as discussed in Bruner (1990, p.108). This last point correlates with this author’s promotion of the ‘bi-ability’ model (Valeras, 2010), as detailed below and in Chapter 9 of this thesis. It is argued in this thesis that the ‘bi-ability’ model was formed from the need for individual management of disability/difference (Kanuha, 1999), rather than relying on state intervention and the support of a disability community that often belittles invisible disabilities compared to visible and physical disabilities, deemed to be of greater need (Grewal, Joy, Lewis, Swales & Woodfield, 2002; Watson, 2002; Morris, 1991; Barnes, 2012; Reeve, 2004).

Implications for policy and practice

Neoliberal policies have had a profound effect on educational policy, with the change to a market-led system introduced by UK government, where ‘parental choice’ allows parents to choose 5 schools in their local area. This choice is made in part through the introduction of published result tables in the national press, indicating value-added and examination results, and the publication of OFSTED inspection reports. Whilst this has led to greater choice for students, schools with good results are over-subscribed and those with poor results are under-subscribed, then forced to close or be taken over by non-government owned academy trusts. The rise of a results-based culture in education has meant that many schools, especially academy schools, have sought to reduce the number of students with SEND from applying to their schools, especially those with EHCPs, who are least likely to perform well in academic examinations, which can reflect badly on their school table result placement. Reports of academies using unorthodox and sometimes illegal means to avoid students with SEND have recently been published (Academies Commission, 2013; Office of the Children’s Commissioner, 2014). Norwich & Black (2015) have highlighted the significantly lower rates of SEND and EHCP students in Academy schools, and significantly higher levels of exclusions from Academy schools compared to schools under local authority control.

It could be argued that the ‘bi-ability’ model is neoliberal in its ethos. By its rejection of a ‘disability’ label, it also rejects the need for government funding of support – for
example, the need for the environmental changes in schools/universities/workplace. This model promotes the concept that through hard work, using strengths to overcome weaknesses, career success is possible, and in many ways should be expected. Therefore the role of the ‘individual’ is enhanced over that of ‘society’, and whilst many with ‘invisible’ disabilities may lose out on the collective force for change from the ‘social model of disability’, it offers a means to manage individual circumstances, for example, inflexible working conditions, through the promotion of their strengths over any weaknesses.
Coping strategies developed at school, used in adulthood

This thesis has developed two quantitative studies (Chapters 2 and 3) and a large qualitative study (Chapters 4 to 8) to understand firstly how young people with developmental dyslexia cope at school, and secondly how these coping strategies developed in childhood are further developed into adulthood to form adult coping strategies. Whilst it is assumed that dyslexia only affects those at school, the reality as evidenced in this thesis and by other commentators (for example, Scott, 2004; Threlkeld, 2015) is that the child with dyslexia turns into the adult with dyslexia, with similar literacy difficulties, but with different abilities to modify their environment to mitigate any negative effects.

Chapter 2 points to the coping of a school-aged teenage group of individuals with dyslexia, looking at self-esteem, types of coping and depression. The results indicate that whilst there are different gender sub-groups, this group tends to cope by using emotional and avoidance strategies, resulting in lower social and academic self-esteem. Chapter 3, using a study of siblings with and without dyslexia, attempting to control for family and parental factors, also indicated large differences amongst siblings with dyslexia, with higher emotional and physiological manifestations of stress from higher peer interaction, teacher interaction and academic self-concept sources of stress.

The question can now be posed, using the large study forming Chapters 4 to 8, will one also see such emotional and avoidance strategies with physiological manifestations (for example, nausea, tremors, rapid heartbeat, higher sources of stress)? Chapter 4, investigating the adult dyslexia experience, talks about difficulties regarding a reluctance towards disclosing their dyslexia, along with evidence of dyslexic individuals camouflaging their difficulties in the workplace. Chapter 5 talks about destructive behaviours and possible self-harm, and this again could be related to earlier profiles of emotional- and avoidance-based coping, and choosing a physiological manifestation, for example, ‘I didn’t want to exist’ or ‘I put on a lot of weight as I didn’t want to get into another relationship’. Chapter 6 talks about possible ‘post-traumatic stress disorder’ due to the high anxiety/stress participants felt returning to a school-environment where they had experienced trauma and humiliation, and so choosing to cope with possible future stressful experiences by avoiding such environments, even at the expense of their relationships with their children, as supportive parents. Whilst Chapters 7 and 8 investigate success coming
from traumatic school experiences in the form of ‘post-traumatic growth’, this again reflects the strategies first learnt as a child, as many of those who are successful chose their work environment, support systems and field of work carefully. They knew that by having an awareness of their own strengths and weaknesses, they could select where and when they work best, and use any strengths as a means for success, as reflected in the ‘bi-ability’ model developed in this thesis (Valeras, 2010) - to ‘pass’ where needed to gain access to the workplace, and to use their ‘abilities’ to mitigate any ‘dis-abilities’.

**Implications for policy and practice**

It should be recognised that coping strategies are only needed if the challenges placed in front of young children are perceived to be too great for their self-concept/self-esteem, as capable learners.

One of the current challenges in mainstream schools is the upskilling of teachers so they can differentiate effectively, as required by the latest UK education legislation (Children and Families Act, 2014; Code of Practice, 2015). This requires teachers to plan and deliver differentiated lessons so that ‘all’ pupils, regardless of their abilities and starting points, can access the same curriculum. These different abilities include, for example: gifted and talented; average abilities; low abilities; English as an additional language; pupil premium (those from low-income families); dyslexia; autism spectrum disorder; sight and hearing impairments; etc. This, the author argues as a qualified teacher, is an ‘aspirational’ task even for experienced teachers without additional adult support in the classroom. A teacher faced with up to 30 very different sets of needs is also expected to identify and refer any pupils who are struggling, due to unidentified learning difficulties (compared to those who are defiant), for further investigation. Johnson, Carroll & Bradley’s report (2017) for the UK Department of Education found that only 66% of teachers felt it was their responsibility to report possible SEND of their pupils, suggesting that teachers struggle with understanding their role regarding SEND – giving one possible explanation of why many pupils with SEND are denied the support they need in class (OFSTED, 2010; Scott, 2016). It is therefore unsurprising that many pupils slip through the net – a quiet child is sometimes a blessing to a teacher, but the quiet child is commonly the child camouflaging difficulties, and therefore being misunderstood regarding their barriers to learning. It can be argued that a noisy child is engaged with their learning, but a quiet child is avoiding learning (Scott, 2004; Alexander-Passe, 2015a, 2016a).
Chapters 2 and 3 of this thesis suggest a lack of differentiation by mainstream school teachers has resulted in many school-aged dyslexic teenagers taking defensive positions at home and at school, manifesting in: low self-esteem, especially academic; avoidance of academic tasks in the classroom; use of sport as a coping device (particularly in males); and depression/withdrawal (particularly in girls). Chapters 4, 5, 6 and 8 of this thesis suggest long-term effects from mainstream education, in that the inability of schools to harness the strengths of dyslexic children (diagnosed and undiagnosed) resulted in many individuals choosing withdrawal and survival rather than challenge and reaching one’s potential at school. It is argued by the UK Government and Johnson, Carroll & Bradley (2017) that ‘all’ teachers have a legal responsibility to teach ‘all’ pupils in their classrooms, to develop the skills to differentiate effectively, and to gain the experiences and skills to recognise when a child has SEND in their classroom. The UK Government accepted all the recommendations of the Carter Review (2016), which argued that teacher training has mainly ignored SEND provision in the classroom, resulting in most teachers entering classrooms unprepared, and school senior leaders misunderstanding SEND as a training priority for current staff – a view shared by Johnson, Carroll & Bradley (2017). The UK’s Association of Teachers and Lecturers Union (2016) has also argued that Initial Teacher Training (ITT) has been inadequate regarding SEND, and the level of SEND awareness and identification in schools is generally poor. Carter (2016) noted considerable variability in ITT course content, identifying significant gaps in subject knowledge, behaviour management, assessment and special educational needs. Progress is now being made, with SEND training and the need to differentiate being part of the UK’s teaching standards from 2017–18 (Department of Education, 2016a), impacting on ‘all’ teachers. Placement in SEND schools or units is now recommended during ITT courses for all trainee teachers.

As dyslexics tend to be high/average achievers in some subjects and low achievers in others (Snowling, 2000; Riddick, 2010), this can confuse teachers who commonly believe any disparity is down to attitude, and if a child simply worked harder they would be high achievers in all subjects, as they have evidenced high abilities. When the child struggles in one area, they are berated for poor effort rather than supported, and this causes resentment (Alexander-Passe, 2015a, 2017; Scott, 2004). This faulty perception by teachers is commonly supported when a child brings in perfect homework, concluding that the child is lazy in their classroom. However, when the parent comes in to question their child’s low attainment, they are told that because their child’s homework is perfect it must be due to
poor effort. The explanation could be that the child has either: copied the homework from someone else; spent hours on it; or the parent had helped them extensively (Scott, 2004; Alexander-Passe, 2015a). Alexander-Passe (2015a) argues the child with dyslexia is better served in the long-term by parents who allow them to return to school with incomplete homework (after working for the prescribed 30 minute period). This way teachers will see that ‘even at home with the support of parents’ the results are the same as they experience in the classroom, therefore a referral to the SENCO for further investigations would be prudent.

Results in Chapters 7 and 8 of this thesis suggest that many successful careers of individuals with dyslexia came through the development of non-academic subjects (for example, sports and hobbies). Therefore, the challenge for schools is to identify such strengths early, harness and develop them, so students can gain recognition and build self-esteem as a consequence. Based on this view, vocational options have recently been developed in the UK at the later GCSE and A-level stages of school (Years 9 to 13), allowing many to differently demonstrate their potential in subjects. However, this can be too late for many learners, who have struggled to remain in education and have grown in disaffection. Vocational options are argued by the author to be needed much earlier on, perhaps a return to the concept of technical colleges/schools to develop the skills for the workplace, however this could also be argued to be a form of segregation, which disability advocates may disagree with.

Chapters 7 and 8 of this thesis also investigated the role that parents have in the lowering of the parental and academic stress that many young dyslexics experience. It was noted that parents who praised ‘effort’ and not just ‘achievement’ were supportive of their child’s self-esteem, and recognised their hard work at school despite their results. Ryan (2004) and Riddick (2010) argue that dyslexics can in many cases be working harder than their peers at school, but will have little to show for it (for example, handing in messy work that took them hours to complete, but being berated by the teacher because the work looks ‘rushed’). The effort required to learn with serious barriers (for example, imagine how much harder one would need to work to stand up from the floor with only one arm for balance) means that the child with dyslexia tends not to be ‘lazy’, and this extra effort in spite of limitations should be recognised. However, Scott (2004) and Riddick (2010) note that children can become despondent, helpless (Seligman, 1991, 2011), reluctant to engage, or simply give up if their efforts are unrecognised by parents/teachers (Alexander-
Passe, 2015a). It is argued that parents should praise ‘effort’ and not just ‘achievement’, and that the extra effort such children put into school work should not be under-estimated (Alexander-Passe, 2017).
Understanding the life experiences of individuals with dyslexia

As noted earlier, the child with dyslexia turns into the adult with dyslexia, as dyslexia is a life-long condition with no known cure. Whilst many with dyslexia develop a wide range of coping strategies that become almost automatic, these do not take away from the challenges of the discovery that they are unable to cope with perceived easy tasks that most young children (non-SEND) could easily master, for example, remembering a name and telephone number of someone they had just met, or competently locking a door and remembering they had locked it. The issues of difference, disclosure, labelling, discrimination and stigma are argued, in Chapter 4 of this thesis, to be far-reaching and can be a cause of great stress and anxiety.

Chapter 5 discusses destructive behaviours/self-harm and attempted suicide, which along with the author’s more detailed works (Alexander-Passe, 2010, 2015a) suggest coping as an adult with the effects of dyslexia in society, and society’s perceptions of them as someone who looks ‘normal’ according to society’s rules (see Appendix 4), can mean they can feel a lack of control over their lives and futures. Chapter 1 includes a section on ‘Educational Trauma’, which describes the bullying from both peers and teachers that could be argued to be traumatic and a strong reason to protect themselves from future trauma. This ‘fight or flight’ (Lazarus, 1984; Folkman & Lazarus, 1988) is a recognised coping strategy in situations of perceived danger, with ‘flight’ being argued, in the case of young people with dyslexia, to equate to avoidance. Withdrawal from society and finding other means to escape the social pressures from society (for example, through the means of alcohol and drugs) is perceived by them as a way of coping with the social pressures encountered from peers, family and in the workplace. Chapter 5 also discusses whether dyslexia is a ‘taboo’ subject and a social construct, which could be argued to relate to the social model of disability/dyslexia (Cooper, 2006; Lang, 2001), in that it is the environment that the dyslexic individuals find themselves within that is causing any disability.

Implications for policy and practice

The lack of ‘dyslexia awareness’ in the workplace was highlighted in Chapter 4, indicating a need for dyslexia charity organisations (for example, The British Dyslexia Association and Achievability, etc.) to create a marketing campaign that challenges the public perception of dyslexia. A new global charity, ‘Made by Dyslexia’ (2016), supported
by Sir Richard Branson, is beginning to promote the positive attributes of dyslexics, sometimes controversially to gain media coverage, for example a dyslexic-only sperm bank. Raising such awareness will, it is argued, reduce the stigma of having a different learning style, and this should have a knock-on effect on reducing the discrimination that individuals with dyslexia face when applying for employment. Alexander-Passe (2017) interviewed the founder of a UK employment service for dyslexics for a recent publication, helping non-dyslexic managers/employers understand the nature of dyslexia and put in place suitable accommodations. It also aims to enlighten individuals with dyslexia about ways to overcome the barriers of traditional recruitment processes, highlighting to employers that using application forms alone for initial selection for interview can discriminate against those with dyslexia, as selection based on writing and spelling skills will mean that many suitable candidates are likely to be discounted.
Destructive behaviours used by individuals with dyslexia

Chapters 2 and 3 of this thesis evidence the emotional- and avoidance-based coping strategies used by young children and adults with developmental dyslexia, with Chapter 3 developing this theme amongst siblings of the same family: ‘belonging’ to a family unit, and the ‘under’ and ‘over’ reactions to the experience of dyslexia (Thomson, 1996). Whilst studies of families with dyslexic children are few in number (Osman, 1997, 2006; Dawson, 2006), one can also look at the studies of families where they have similar learning difficulties, along with physical or mental difficulties (Dyson, 1996, 2003; Stoneman, 2005; Hastings, 2014; Trevino, 1979). Research points to similar themes of ‘not belonging’, the need to find a positive role in their families, and being the main focus of parental energies at the cost of parental relationships with any other non-dyslexic/disabled children.

Chapter 5 of this thesis investigates disruptive behaviours/self-harm and attempted suicide, and supporting evidence given to demonstrate themes (a reduced version of that found in Alexander-Passe, 2010, 2015a) suggests a ‘need to belong’, and where this is perceived as too difficult to achieve, the development of strategies to either numb the pain/anxiety experienced (self-harm), or the search for a ‘means’ to remove themselves from the need to fit and belong to their families (attempted suicide).

Evidence in Chapter 5 suggests in some cases there is suicidal ideation relating to the experience of dyslexia at school: ‘during my school years, I would quite often wish I had never been born. I do remember as an early teenager kind of not waiting until I could drive, because I couldn’t wait to get into a car and just drive it into a brick wall’. This suggests that, even as a young person, the wish to escape from both home and school life where they ‘did not fit in’ was great, and the concept of killing themselves reflects the ‘removal of their own pain’ and that of the ‘burden’ they feel they are on their families, again a theme found in Alexander-Passe (2010, 2015) and Scott (2004). This does not discount other social, economic and cultural factors which may also influence a sense of helplessness.

In Chapter 5 an empirical study was made of emotional coping in individuals with dyslexia, along with destructive behaviour/self-harm, depression and attempted suicide; looking at why destructive behaviour/self-harm might be attractive to those with dyslexia. The lack of disclosure (to family, peers and in the workplace) can mean their ‘secret-self’ is separated from their ‘social-self’ (or ‘public-self’), and coping with dyslexia-affected situations (for example, being unable to take a telephone message) can then have
emotional implications (Alexander-Passe, 2010, 2015a, 2017). Links can be made here to Valeras’ (2010) ‘bi-ability’ model: firstly, individuals with dyslexia can reject the notion that they have a disability and see themselves as just ‘different’ to their peers; secondly, those with dyslexia have a ‘secret-self’ that needs to be protected and hidden/camouflaged, which can cause repressed feelings.

This sample indicated that destructive behaviour/self-harm allowed an emotional release, and control where a lack of control was perceived, arguing that self-harm was perceived as a means to prevent suicide by releasing internal tension. Self-harm was frequently found in this sample as a means to ‘regain control over their lives’, and gender differences were indicated, with males tending to predominantly self-harm with alcohol, followed by food and rarely bodily harm; in comparison, females tended to self-harm with food, then bodily harm and lastly alcohol. The depressive group overall predominantly self-harmed with food, then equally between alcohol and bodily harm. Half of the sample had contemplated suicide, but only a quarter had actually attempted it.

The definition of destructive behaviour/self-harm was based on definitions by Mind (2015) and Klonsky (2007), and the author recognises that there is a spectrum to such behaviour, for example, from over-eating as comfort food to over-eating as a bulimia. Scott (2005) notes that these can be cries for help, to gain attention from parents/peers, or as a means to distance themselves from peers. It should be noted that self-harming in the general population is part of an increase in mental health manifestations. Morgan, Webb, Carr et al. (2017) found that in the United Kingdom annual rates of self-harm in 10–19-year-olds was 37 in every 10,000 girls and 12.3 in every 10,000 boys. They note a rise of 68% of self-harm in girls aged 13–16 which was not seen in boys, along with gender differences in the use of self-harming, reflecting the use of food as the primary self-harming route for girls.

Self-harm (Kerr, Muehlenkamp & Turner, 2010) is commonly understood as both a ‘cry for help’ and also an ‘attempt to regain control’ for the individual where they are feeling helpless (Scott, 2004; APA, 2013; Mind, 2015), and in this context is one way those with dyslexia attempt to cope with their helplessness. Again, gender differences are seen in the Chapter 5 study in this thesis suggesting, as with coping at school, that each gender finds different strategies to reflect their individual needs. In the context of those with developmental dyslexia, it is society’s reaction to their inability to function ‘normally’, or according to society’s precepts, rather than their own impairments, that can trigger their
sense of non-belonging from both their peers and their own families, hence reflecting a ‘social model of disability’ concept. The difficulties regarding ‘hidden disabilities’ and the emerging concept of ‘bi-abilities’ brings understanding of the ability to ‘pass’ effectively, deflecting any stigma from society (Goffman, 1963), and these concepts are discussed later in this chapter.

**Implications for policy and practice**

This thesis, in Chapters 3, 4 and 5, supports the need for schools to offer counselling support to all students, especially for those experiencing learning barriers, along with early screening and intervention for literacy difficulties, before these things begin to affect self-worth/self-esteem. Chapter 5 is part of a small but growing body of evidence from research investigating self-harm and attempted suicide with samples of individuals with dyslexia, and offers a means to understand how such adult groups can still be negatively affected by school and their teachers, even when they might be perceived by others as successful (Migden, 1990; Willcutt & Pennington, 2000; Somale, Kondekar, Rathi & Iyer, 2016; Macdonald, Deacon & Merchant, 2016; Wilcockson, Pothos & Fawcett, 2015).

Trevino (1979) suggests that these negative manifestations commonly occur in families where there are two or more siblings close in age/gender, and parents discount having a child with learning disability. It is argued that the increase of tension in families and behavioural manifestations come from unfair comparisons, expecting each sibling to produce the same results at school regardless of any difficulties. This can cause alienation and exclusion, which can lead not only to alienation from siblings and peers, but also to self-enforced alienation (withdrawal), which can be an early indication of depression; self-harming can be a manifestation of this helplessness (Heslop & Macaulay, 2009; Levell, 2007; Richman, 2008). Chapter 4 of this thesis highlights self-harm activities, from primary school age in some cases (Alexander-Passe, 2010, 2015a). Where dyslexia or other SEND is unrecognised at school, and parents are (commonly) unaware of the nature of their child’s difficulties, parents will see any academic difficulty as a result of ‘not enough effort’ or ‘laziness’. They see ‘time and effort’ but not possible SEND as the answer, resulting in situations where home becomes as hostile as school, and many dyslexics withdraw to their bedrooms as safe havens.

Scott (2004) argued that families have been known to read out school reports to wider family, and this can be publicly humiliating for many dyslexics (diagnosed or
undiagnosed). It is argued by this author that parents need to recognise each of their children as individuals, with different strengths and weaknesses, who cope with school differently. Only through this understanding will anxiety and unfair sibling rivalry reduce, and homes can return to the safe supportive haven that many children with dyslexia need in order to cope at school.

The research in this thesis could be of interest to researchers investigating the mental health of school students, as those with SEND can be more susceptible to emotional-based coping, suffering from low self-image based on the pressures at school to attain at the same level as their peers, and also hidden disabilities such as dyslexia are as prevalent as visual difficulties (World Health Organisations, 2010). Such findings regarding the prevalence of hidden disabilities such as dyslexia in the general population, and the research that most dyslexics are not diagnosed at school, with many diagnosed in post-school education, can leave approximately a third being undiagnosed in adulthood (Alexander-Passe, 2017a) – this suggests a reason why many adults with dyslexia could develop mental health issues. The research in this study suggests that the long-term effects of educational neglect regarding mental health manifestations should not be overlooked.
Possible post-traumatic stress disorder (PTSD) in adults returning to school as parents

Dyslexia is a life-long condition with no known cure, as discussed earlier in this thesis. Teacher training for UK mainstream education teachers has been lacking in SEND awareness training, and this has resulted in only a fraction of young people with developmental dyslexia gaining a diagnosis whilst in full-time education, and smaller numbers receiving targeted interventions to overcome their learning difficulties. National Statistics data (2017a, 2017b) support the assumption that diagnosis of SpLD is more likely to happen in secondary schools, and in primary schools there is commonly a misdiagnosis of Speech, Language and Communications (SLCN) difficulties, therefore any interventions provided are unlikely to target the root difficulties.

The results from Chapters 2 and 3 suggest that individuals with a diagnosis of developmental dyslexia manifest emotional coping strategies, and it is argued by the author that such emotional and avoidance difficulties are likely to be greater in those without diagnosis, who use a range of avoidance strategies to mask their difficulties at school. Chapter 5 of this thesis indicates long-term stigma and discrimination in those with developmental dyslexia, with self-disclosure of dyslexia commonly avoided during first dates, and as relationships evolve it become a greater factor (taboo) to avoid, and again ‘avoidance’ was a factor identified in young people with dyslexia (see Chapters 2 and 3). Chapter 6 of this thesis indicates the manifestations of negative coping strategies such as self-harm, depression and attempted suicide, which Chapter 7 suggests may cause post-traumatic stress disorder manifestations to develop. This is also argued by the author, in Alexander-Passe (2012), to affect the development of adult relationships: dating, marriage and parenthood.

Alexander-Passe (2012, 2017b) indicated many adults with dyslexia tended to choose non-dyslexic partners in an attempt to ‘dilute’ any perceived defects in their DNA, and to avoid having any dyslexic children themselves, as the thought of bringing another child into this world who would suffer as they had in mainstream education was too hard to contemplate.

Whilst dyslexia can be diagnosed from as young as 3 years old (Thomson, 1996; Miles & Miles, 1999), mild dyslexia is generally hard to recognise until a child progresses from kinaesthetic-based nursery to literacy-based primary school. When a dyslexic parent
begins to see their own child struggling to read as they did, they begin to feel helpless in helping them. However, protecting their own self-esteem can often mean they will not even disclose to their child that they can’t even read children’s books, and instead rely on a memorised version of the story supported by pictures to be able to read their child a bedtime story (Alexander-Passe, 2012, 2017b). This form of avoidance is again a recurring theme in this thesis.

This section discusses how returning to primary school as a parent returns them again to the environment where they themselves first experienced humiliation and helplessness in failing to learn to read, and seeing their peers quickly overtake them in the learning stakes. Being made again to sit on small chairs, being talked down to by authoritative figures, smelling sickly floor cleaners, seeing mass school food catering, and seeing children’s drawings being put up on walls can be highly stressful, so much so that many do not return for school plays, termly teacher updates and even for their child’s prize days. Avoidance became such a successful coping strategy for them that this was just an extension. These reactions are argued, in Chapter 7 of this thesis, to be a manifestation of ‘post-traumatic stress disorder’.

When or if they brave parent’s evenings to ask why their child, like them, had not gained the skills of reading and spelling, they again feel helpless in preventing their own child from having to experience the same pain they had as children. This is made worse by a non-dyslexic partner questioning why their child might have developed learning difficulties, without realising that their partner is avoiding disclosing that they also struggle, or struggled at school, to read and write effectively. The guilt the dyslexic parent feels can become unbearable and can trigger depression, other mental health manifestations, and relationship difficulties (Alexander-Passe, 2010, 2012; Scott, 2004). Chapter 7 found the symptoms of PTSD experienced were greater when visiting primary schools than secondary school environments, as primary schools had smaller chairs, displayed more children’s work on walls, and there was greater interaction with parents, for example, with school plays and drop-off to/pick-up from school each day. It is also more likely for adults with dyslexia to see their primary school child struggling to attain basic literacy and numeracy, and make links to their own helplessness experienced as a young child. Therefore, as Alexander-Passe (2012) found, they are likely to retell these negative experiences to their child and risk making their child fearful of school, a possible self-perpetuating trauma, ‘self-fulfilling prophecy’ (Merton, 1948) or ‘the Matthew Effect’ (Gladwell, 2008).
The post-traumatic stress disorder (PTSD) as investigated in Chapter 6 is argued to be directly related to traumatic school experiences, and the triggers of sensory memory mean that high anxiety is manifest. The ‘fight or flight’ reaction (Lazarus, 1984; Folkman and Lazarus, 1988), commonly choosing flight in such cases, relates to the avoidance and emotional coping as first found in school-aged dyslexics in this thesis (Chapters 2 and 3).

**Implications for policy and practice**

Possible PTSD in adults with dyslexia starts with the initial trauma at school, and therefore implications for policy and practice must also start with the school, and greater dyslexia awareness for new and current teachers. Early intervention has been mentioned before in this thesis, as this will begin to address the fears of both children with dyslexia and their parents. Alexander-Passe (2012) noted one parent with dyslexia that addressed his PTSD in school environments by seeking a greater involvement with how his child’s school was run by becoming a parent-governor. The change from ‘helplessness and anger’ to ‘empowerment’ meant he was able to give first-hand accounts of the longevity of educational neglect, and importantly offer possible solutions to the school for better student outcomes, especially for pupils with SEND. On each school board of governors, there is a governor with the individual portfolio of SEND and inclusion, and it would be good practice if this role was filled in each school by a parent with SEND experiences, or an expert in the field of SEND who would champion the needs of such pupils.

The recommendation is for schools to offer counselling to assist in emotional coping with feelings of failure, or with being taught at school with SEND which is unidentified, misdiagnosed, or identified but without being offered any meaningful interventions. The need for early identification cannot be stressed enough, along with greater teacher awareness of the long-term trauma that failure in the classroom can bring. NatCen Social Research (2017) indicates the UK government’s policy towards greater mental health, quoting Green, McGinnity, et al. (2004) that ‘it is estimated that one in ten children and young people have a diagnosable mental disorder – the equivalent of three pupils in every classroom across the country’. Interestingly, Green, McGinnity, et al. noted that primary schools tended to rely on parents for referrals of mental health difficulties, and at secondary schools for students to self-referral themselves. They also found that only 15% of the educational institutions they studied had universal mental health screening, with an additional 24% using targeted screening for perceived ‘at risk’ students.
Post-traumatic growth (PTG) – an underlying theme

Trauma

Traumatic events, as defined by the American Psychiatric Association-APA (2015) diagnostic criteria, are events that involve actual or threatened death or serious injury. The response of the person who has been exposed to such a traumatic event can be one of fear, helplessness or horror.

Zoellner & Maercker (2006) comment that post-traumatic stress disorder (PTSD) is a common psychiatric outcome after trauma, characterised by persistent re-experience of the traumatic event in one or more of the following ways: recurrent recollections; recurrent dreams; flashbacks; intense cue-sensitivity; or physiological reactivity. Furthermore, persistent avoidance of internal or external cues associated with the trauma in three or more of the following ways are characteristic of PTSD: avoiding thoughts; avoiding activities; inability to recall; diminished interest; detachment; restricted affect; and sense of foreshortened future. Persistent increased arousal in two or more of the following is the third symptom cluster of PTSD: difficulty sleeping; irritability; difficulty concentrating; hypervigilance; and exaggerated startle response. It is argued by APA that a full symptom picture must be present until at least one month after the trauma. Epidemiological studies have showed, for example, an incidence of PTSD of about 55% after rape, of about 35% after childhood sexual or physical abuse, of about 17% after physical and armed assaults, and of about 7% after severe accidents (Maercker, Michael, et al., 2004). Zoellner & Maercker argue that the growing body of empirical studies reveals that many trauma survivors also experience positive psychological changes after trauma, and many report those positive outcomes following extremely stressful situations, either as a direct result of the event or as a kind of learning that occurred through their efforts to cope with the events.

What is post-traumatic growth (PTG)?

Post-traumatic growth (PTG) refers to positive psychological change experienced as a result of the struggle with adversity/highly challenging life circumstances, to rise to a higher level of functioning (Calhoun & Tedeschi, 2001). This refers to significant challenges to the adaptive resources of the individual, and significant challenges to the way they understand the world, and their place in it. The PTG term was coined by Calhoun & Tedeschi.
in the mid-1990s. According to Tedeschi, 90% of survivors of a trauma report at least one aspect of PTG, and a renewed appreciation for life.

Zoellner & Maercker (2006) argue that there are four main models of PTG to consider: the constructing of meaning (Davis, Nolen-Hoeksema, & Larson, 1998); a meaning-making coping process (Park & Folkman, 1997); an interpretative process (Filipp, 1999); and a form of self-enhancing appraisal or positive illusion (Taylor, 1983).

**History**

The concept that suffering and distress can potentially yield positive change is thousands of years old, and evidence from the ancient histories of the Hebrews, Greeks, and early Christians, along with stories from the books of the Hinduism, Buddhism, Islam and Baha’I faiths support such a view (Tedeschi & Calhoun, 2004). It could be argued that PTG can be seen from many cultural perspectives, but was rarely investigated by psychologists until the 1990s, as the focus had been on mental illness, rather than mental health.

**Causes**

PTG occurs with the attempt to adapt to single or multiple negative circumstances causing high levels of psychological distress, for example, rape, attempted murder, experiencing someone dying, dealing with the death of someone close to you.

Growth is argued to come not from the direct result of the trauma, but rather from the individual’s struggle with the new reality in the aftermath of the trauma. Individuals can either regress and withdraw, or gain growth from new reflection and experience life in a new meaningful way. It is argued that growth takes places more often than psychiatric disorders, however personal distress and growth can co-exist in individuals (Calhoun, Cann & Tedeschi, 2010).

Tedeschi & Calhoun (2004) argue that major life crises typically result in unpleasant psychological reactions. However, PTG happens when attempts are made to adapt to highly negative sets of circumstances that can engender high levels of psychological distress. Tedeschi & Calhoun, after reviewing available literature, argue that growth is more frequent than psychiatric disorders following high levels of trauma, however note that growth and personal distress often co-exist, and stories over the centuries point to growth from distress, for example: in Christianity, after Jesus’s death his disciples, whilst
traumatised, go onto create a powerful new religion; in Islam, Mohammed’s suffering is instrumental to his great work.

Examples of PTG have been documented in those surviving/suffering from:

- Bereavement (Hogan, Morese & Tason, 1996)
- HIV infection (Cadell & Sullivan, 2006)
- Death of a child (Keesee, Currier & Neimeyr, 2008; Znoj & Keller, 2002)
- Heart attacks (Laerum, Johnsen, Smith & Leving, 1987)
- Sexual assault and sexual abuse (Frazier, Conlon & Glaser, 2001)
- Combat (Elder & Clipp, 1989)

It is argued with PTG that it is not a return to baseline levels of activity that defines whether an individual has PTG or not, but the improvement that is experienced, and that it is more common in adolescents and adults than children because PTG implies an established set of values which have been changed through trauma.

The metaphor of a shattered vase is used: imagine that one day you break a vase by accident. You can either try to piece it together to badly re-form the original shape, or you use the pieces to create a beautiful new mosaic. Your reaction may be to bin the pieces and give up, or to try and rebuild in entirety as the original vase – an impossible task as it will still be fractured, vulnerable and prone to break again. But if you take on board that a return to the original will be impossible, and that you need to create a new use for the pieces, then you are more realistic and a new use can be considered.

**Characteristics**

PTG is a relatively new term introduced by the American Psychiatric Association (2015) and Spitzer (2001), but examples of PTG have been documented from the last century, for example: Roosevelt’s renewed empathy when being struck down with Polio and becoming President of the USA; cancer sufferers who have been moved to have a renewed love of life and focus; or Holocaust survivors who have been moved to share their traumatic and life-changing experiences on a worldwide stage. Linley & Joseph (2002) argue that 30–70% of trauma survivors have said they have experienced positive change in one form or another.

The term has been used to trigger new research into understanding the growth gained through trauma and adversity (Calhoun & Tedeschi, 2006) as a related positive psychology stance (Seligman, 2011). It is argued, by Tedeschi & Calhoun (2004) and
Schoulté, Sussman, Tallman, Deb, Cornick & Altmaier (2012), that the following PTG are typical manifestations:

- Positive psychological change (Yalom & Lieberman, 1991)
- Discovery of meaning (Bower, Kemeny, Taylor & Fahey, 1998)
- Positive emotions (Folkman & Moskowitz, 2000)
- Positive reinterpretation (Scheier, Weintaub & Carver, 1986)

Tedeschi & Calhoun define the ‘growth’ part of PTG as coming not as a direct result of the trauma, but from the individual’s struggle with the new reality in the aftermath of trauma. They use the metaphor of an earthquake, in that it is not the shake that causes the psychological trauma, but the effects of the shake in the building – loss of life, the change from predictability to unpredictability of life, and changes to their regular life pattern – which cause the trauma. Wright (1988) suggests that PTG is the consequence of psychological survival to coexist with the trauma. McFarland & Alvaro (2000) argue that most people have positive life changes without a trauma; however, Tedeschi & Calhoun (1996) counter that those who have experienced PTG have higher levels of personal change.

Gunty, Frazier, Tennen, Tomich, Tashiro & Park (2011) and Zoellner & Maercker (2006) question PTG, particularly the weak correlation between the actual and perceived growth, and whether the growth is maybe illusionary, as a way of coping with distress, needs a bit more explanation. Peterson & Seligman (2004), using ‘before and after studies’, have demonstrated that growth does occur, and measures constructed to date rely on biased, non-medical and somewhat biased personal opinion (e.g. The Psychological Well-Being Post Traumatic Changes Questionnaire-PWB-PTCQ by Joseph et al., 2012).

The development of the Post-Traumatic Growth Inventory (PTGI) revealed a five-factor structure of Personal Strength, New Possibilities, Relating to Others, Appreciation of Life, and Spiritual Change (Tedeschi & Calhoun, 1996).

**Theories**

Joseph and Linley (2005) aimed to understand the activity of PTG, by categorising it as person-centred ‘organismic valuing theory’, in that trauma causes a break down in self-structure (personal concepts of themselves and their place around others), and that people are intrinsically motivated towards processing new trauma-related information in ways to maximise their psychological well-being.
Gender and post-traumatic growth (PTG)

Vishnevsky, Cann et al. (2010), and recent research by Akbar & Witruk (2016), suggest that females report greater PTG than males. Tolin & Foa (2006) proposed that women’s increased risk for PTSD is not due to greater rates of exposure to certain types of trauma, but due to other factors, such as differences in cognitive or affective processing of traumatic events. Olff, Langeland et al. (2007) observed that women were more likely than men to experience acute psychological and biological responses to trauma, including intense fear, avoidance, intrusive thoughts, horror, helplessness, panic and anxiety. Vishnevsky, Cann et al. suggest that, given such differences in responses to trauma, it is possible that similar gender differences would exist in post-traumatic growth. For instance, according to the post-traumatic growth model, higher perceived threat may lead to greater upheaval of an individual’s assumptive world, and this pattern sets the stage for greater reports of PTG (Calhoun & Tedeschi, 2006). Based on a meta-analysis of many studies, Vishnevsky, Cann et al. suggested that modest but reliable gender differences exist in post-traumatic growth, but recommend further study in this area.

Critics of post-traumatic growth (PTG)

Zoellner & Maercker (2006) suggest that PTG is open to criticism first as to whether or not psychological adjustment should be considered the absence of psychological distress. Second, PTG can be measured very differently, with some studies relying on interviews while others employ more or less validated PTG instruments. Park (1999) argues that when interviews have been used, the problem of defining what counts as ‘positive’ or ‘growth’ emerges. Third, studied trauma varies widely; some include sudden, relatively short-term traumatic events (such as a plane crash), where others include long-term stressors such as the foreseeable death of a loved one. Zoellner & Maercker argue that adaptation processes can differ widely for each kind of traumatic event, as each event differs from one another, and the perception of benefits or growth may be very different for different kinds of trauma. Studies can also vary in terms of severity of the investigated traumatic incident.

Jones (2010) suggests one of the controversial issues regarding PTG relates to semantics. Some critics of PTG argue that it is not distinct from other salutogenic constructs, such as resilience. These critics suggest that such constructs are covering the
same ground, but simply using different terminology. Tedeschi & Kilmer (2005, p.231) argue that resilience can best be defined as effective coping and adaptation in the face of major life stress, whereas in contrast, PTG goes beyond resilience and is related to people who have not only adjusted to the stressor, but have actually been transformed by their struggles with adversity. Lepore & Revenson (2006) also note that some theorists believe that people who are resilient may actually be less likely to experience PTG, since they are perhaps not as stressed by events as others who are less resilient.

Another issue according to Zoellner & Maercker (2006) is whether PTG is an outcome or a coping strategy. Tedeschi & Calhoun (2006) maintain that PTG is an outcome of an individual’s trauma experience, essentially the growth being an unintentional by-product created through any coping processes of the person. In contrast, Davis, Nolen-Hoeksama & Larson (1998) argue that PTG is an example of meaning-making, in which the individual attempts to adapt to a trauma by attributing growth to the adversity.

In contrast to the above comments, McFarland & Alvaro (2000) suggest that PTG is a ‘motivated positive illusion’, and that perceptions of personal improvement reflect, at least in part, motivated illusions that are designed to help people cope with threatening life experiences. This view is supported by Frazier, Tennen et al. (2009).

**PTG in young individuals with dyslexia**

Alexander-Passe (2010, 2015a) argues that when a dyslexic child enters school, they come with an established set of rules (a belief system and assumptions about themselves in the world, which has guided them successfully to this point) about learning, and believe themselves to be normal learners. Thus, at the point that reading and writing is introduced, there is a realisation that they may or may not be able to develop in the same way as their peers. The first trauma takes place when they see their peers understanding and learning a new language of learning but they are unable to. The second and longer trauma is the ongoing effect on others of their inability to learn as their peers.

**Post-traumatic growth (PTG) used in this thesis**

It is argued that ‘post-traumatic growth’ (PTG) is an underlying theme in this thesis, in that trauma can have both negative and positive manifestations. Some individuals experiencing trauma can be crushed both morally and spiritually by the experience, withdrawing and developing depression as a result (as described in Chapters 5 of this thesis,
by choosing destructive behaviours/self-harming as a means to regain control from feelings of helplessness), whereas others can be uplifted by trauma and motivated to use it as a means of challenge (as described in Chapters 7 and 8 of this thesis). This is argued to be PTG, and those with dyslexia, whilst experiencing humiliation and stigma as children in school and adulthood in the workplace, can be motivated to prove others wrong about them. They are motivated to prove their peers, families and school teachers wrong for not believing in them, and for incorrectly believing that only through success at school would they enjoy success as adults in the workplace.

PTG is used in this thesis to attempt to answer the ‘disability paradox’ (Albrecht & Devlieger, 1999): why many with dyslexia and other reading-based difficulties can be found in UK, US and Swedish prisons (Helen Arkell Centre, 2017; Alexander-Passe, 2016b; Mottram, 2007; Rack, 2005), while many others can be highly successful (Logan, 2009; Alexander-Passe, 2017a). This thesis asks if they each experienced traumatic schooling as children, and what factors affected their different career choices?

Chapter 2 suggests that teenage dyslexic males use task-based coping rather than the emotional and avoidance strategies used by females. It could be argued that they found a means to re-balance their self-esteem through positive action. Chapter 4 points to those with dyslexia choosing selective disclosure to maintain a strong self-image; both could be argued to be a form of rejecting a disability identity and believing that, with the right effort, they can overcome any barrier placed in their way. This is a form of neoliberal rhetoric, and also can be aligned to the ‘bi-ability’ model (Valeras, 2010) as promoted in this thesis.

The concept of ‘post-traumatic growth’ (Tedeschi & Calhoun, 2004; Blore, 2011) was introduced in Chapters 8 and 9 as a means to understand why success can result despite school or other traumatic experiences, creating individuals of high resilience and perseverance, but with a grudge to prove to their parents/peers/teachers that they did, in fact, have value and potential, could contribute positively to society, and were intelligent in their own way. Threlkeld (2015) found, in a similar study of successful adults with dyslexia, that they commonly mention a ‘chip on their shoulders’ to describe the grudge they had against their school teachers. This thesis aimed to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’, and Chapter 8 brings many themes together to begin to answer this question.
Three studies were utilised to understand this question: a qualitative study of N=20 self-categorised successful, diagnosed dyslexic individuals; a qualitative study of N=29 adults with diagnosed dyslexia (N=22 with depressive symptoms and N=7 without), as per Chapters 4 to 7 of this thesis, many degree-educated; and lastly a quantitative study of N=86 adults, N=46 screened as dyslexic through a severity measure to investigate the personality of academically successful and less successful dyslexics. These combined both quantitative and qualitative methodologies, therefore a mixed-methods approach.

The first study, with a self-categorised successful dyslexic sample, used a qualitative semi-structured interview script analysed with IPA (Smith & Osborn, 2008), investigating their childhoods and adulthoods, looking in childhood at family factors, avoidance of tasks at school, and opportunities at school to demonstrate strengths, and in adulthood at the use of assisted technology, motivation for success/self-worth, and grudges from school failure. Specific questions investigated how they dealt with risk and failure. The results indicated that successful traits in individuals with dyslexia were commonly identified in childhood and nurtured by parents. However, avoidance was frequently used to cope at school to protect their self-worth/self-esteem. Success in non-academic hobbies (for example, sailing, art, design, music, wrestling, skiing, poker, stock and share trading) was common, allowing them to demonstrate to themselves and others that they had worth, helping them to avoid learned helplessness in the face of continual failure in the classroom. However, formal diagnosis of their dyslexia was commonly achieved post-school.

As adults with dyslexia, they used assisted technology from an objective awareness of their strengths and weaknesses, helping them to cope with literacy tasks faced (for example, word processing, dictation and document reading software). However, school featured strongly in their motivation to succeed as adults (for example, ‘I wanted to prove all those people wrong about me’), and many indicated grievances against their school teachers, and were motivated to prove they had unrecognised value/self-worth (for example, ‘Looking back to my trauma at school, I always say I have to thank them because I would never have done as good as I have without that experience’), very much reflecting the concept of ‘post-traumatic growth’ (Tedeschi & Calhoun, 2004; Blore, 2011).

Their relationship with ‘risk and failure’ was very interesting as it indicated that they had nothing to lose but everything to gain from taking risks in business, and that they did not fear failure (for example, ‘I think some of it is I’m not afraid to fail, as I have failed so many times before. So I am not frightened of failure’). This turned out to be a USP (unique
selling point) in business, as they were willing to take risks when many would not due to perceived fear of failure. Reflecting on their childhoods, many indicated their parents praised their ‘effort’ and not their ‘achievement’, and they took huge risks at school by camouflaging their difficulties regarding reading and writing, therefore risk taking was developed as a childhood skill. In comparison to Agahi (2015), who also used IPA to investigate N=12 successful adults, with a focus on ‘positive dyslexia’ (Nicolson, 2014), many similar themes were identified: determination, resilience, teamwork, empathy and communication. Interestingly, the topic of overcoming failure was mentioned, and the sense of a ‘chip on the shoulder’ was also a finding by Threlkeld (2015, p.93) and Scott (2004), which links to the concept of ‘post-traumatic growth’, which is a focus of this thesis.

The second study, also qualitative using IPA, investigated successful dyslexics and how they perceived their own success or lack of success. Results indicated that perceptions were based on personal achievements, working to one’s potential, and work–life balance, compared to traditional academic markers of success commonly from university, in the workplace and in school. It could be argued that individuals with dyslexia judged themselves unreasonably, with higher standards than those of their non-dyslexic peers, and setting themselves up for higher chances of failure. Again, the sense of lost potential relates to Chapter 6 and 8 of this thesis.

The third and final study was quantitative in nature, investigating academic success (degree education), personality traits (Eysenck & Wilson, 1991; Eysenck & Eysenck, 1975), and severity of dyslexic traits (Vinegrad, 1994). This study screened for dyslexia rather than using those with a diagnosis, helping to identify probable unidentified/undiagnosed adults with dyslexia in an adult sample. Those displaying 11–17 symptoms of dyslexia were chosen as the ‘dyslexia group’ for investigations, with those displaying 0–5 symptoms classed as the ‘control group’, and those displaying 6–10 or 18+ symptoms being discounted from the investigation to avoid including results from individuals with other learning difficulties, and extreme personality traits from those with severe dyslexia. Profiles were created for academically successful and unsuccessful males and females, allowing a discussion of the traits found in moderately severe dyslexics. Results support and expand existing empirical studies (Kosmos & Kidd, 1991; Tops, Verguts, Callens & Brysbaert, 2013; Agahi, 2015) on personality traits by investigating two scales: emotional instability vs adjustment, and introversion vs extroversion.
Data suggests that degree-educated moderate dyslexics experienced higher levels of anxiety hypochondria and lower self-esteem than controls (a form of emotional coping). Degree-educated individuals with moderate dyslexia (both males and females) were highly resilient, resistant to irrational fears, optimistic, and willing to take risks for success (males only). Moderate individuals with dyslexia without degrees (argued as unsuccessful) were more self-blaming, upset when things went wrong, made hurried decisions in life, were pessimistic/gloomy/depressive (females), and had a low self-opinion of themselves/felt failures (males).

Combining all three studies, ‘self-belief’ and the ‘following of gut’ were important features of successful individuals, with ‘self-doubt’ featuring highly in less-successful individuals, argued as coming from their negative early school and parenting experiences (themes developed further in Alexander-Passe, 2017). What seemed to separate the successful and less-successful individuals with dyslexia were: the level of support from parents as children; how they coped at school with avoiding reading and writing; opportunities to identify strengths/hobbies in childhood; experience of success in childhood; use of assisted technology; seeking to disprove others’ opinion of their worth, which motivated them to prove others wrong; a healthy relationship with risk; not being emotionally charged by failure; and extreme focus on projects/tasks. The relationship with risk and failure could be argued to be an original contribution to the study of individuals with dyslexia.

The concept of ‘post-traumatic growth’ (Blore, 2011) was argued to offer a means to understand how dyslexic individuals could positively use negative school-traumatic experiences (for example, the bullying from teachers and peers, humiliation, lack of diagnosis and interventions, etc.) as a motivating force for post-school success. Whilst not dismissing any trauma, they remaster it in positive terms to prove to themselves and others that they have value to add to society, and that their traumatic school experiences taught them resilience and the positive use of failure in order to achieve in business (Calhoun & Tedeschi, 2001, 2006). Agahi (2015), an advocate of ‘positive dyslexia’ (Nicolson, 2014), supports the author’s hypothesis to ‘how a sense of failure is only a temporary phase and that such thoughts could be used as an opportunity for growth’ (p.93), and several of Agahi’s successful dyslexic research participants noted ‘a chip on the shoulder’ as a motivator for success in adulthood/in the workplace, with a ‘greater desire by the
individual to prove that they were able and determined to achieve and succeed’ (p.93), a view also supported by Threlkeld (2015).

This thesis has developed a journey of discovery, investigating the life/emotional passage from childhood to adulthood with dyslexia. School failure was very evident in most of the studies, and emotional damage was clearly indicated. However, this has not always resulted in helplessness (Seligman, 1991, 2011). Many have achieved career success, and this is argued to also come ‘despite not because’ of their negative experiences at school, from teachers who did not understand their non-academic strengths. Thus a paradox exists: school trauma can be both positive and negative, reflected in Valeras’ ‘bi-ability’ model (2010) and ‘post traumatic growth’ (Blore, 2011), which will be discussed later in this chapter. Many of the studies in this thesis (Chapters 2 to 6) highlighted both the short- and long-term manifestations of school-based trauma, and these suggest that early diagnosis and literacy interventions are not sufficient to support young people with dyslexia in mainstream education, and that counselling support is also advocated. This thesis argues that the long-term effects of such school trauma can lead to self-harm, depression and a reluctance to return to school environments as parents for their own children. However, by understanding the ‘bi-ability’ model and the theory of ‘post-traumatic growth’, this school trauma can be turned into a positive motivation for post-school success, in careers based on the discovery and development of personal strengths.

**Implications for policy and practice**

It could be argued that the ultimate aim for education is to enhance knowledge, and in the case of very young children, school is an environment that should be nurturing for all children so they are more able to integrate with the world when they leave. Moving from nursery to primary and then to secondary school and college/university, the role of the educator is to individually nurture students to recognise and achieve their potential.

As noted earlier, school can be traumatic for many types of learners, and this thesis has focused on individuals with developmental dyslexia. However, throughout this thesis one can read a theme of coping strategies, which may not have always been positive (for example, self-harm, avoidance), but the findings of Chapters 7 and 8 indicate that many of these coping strategies first perceived as negative can in fact have positive outcomes. Self-harming, which can be seen as negative, can also be a means of regaining control in an environment in which they feel helpless. Avoidance again could be seen as negative, and
limiting to their educational opportunities, but can also be seen as a means of retaining an individual’s self-image and self-esteem, by avoiding situations that could remind them that they are struggling in society or a classroom environment (for example, being asked to read aloud in class). It is argued in this thesis that many individuals with developmental dyslexia experience trauma and negative situations at school caused by numerous teachers, but through the development of a range of coping strategies (for example, self-harming and avoidance), they have learnt to be resilient and to gain more control of their lives, to identify and develop talents that no one thought they had, and to use such talents to shape successful post-school careers.

The challenge for parents and educators, and also employers, is to recognise the sparks of talent, the strengths, and the weaknesses, and develop each individual so they can recognise their strengths and weaknesses, and use their strengths to overcome the weaknesses, for example, by using enhanced people and delegating skills to develop potential careers.

Chapters 7 and 8 of this thesis looked at the attributes and career path of adults with dyslexia who had enjoyed success both as children and adults. It indicated that those experiencing success as children tended to find it from hobbies, commonly outside the realms of traditional academic subjects (for example, drama, art, sport or trading). It was argued by Thomson (1996), Morgan & Klein (2003), Scott et al. (1992), Fink (2002), Logan (2009, 2010a) and Alexander-Passe (2017) that successful dyslexics tended to have at least one adult who believed in them (mainly mothers), and who encouraged their talents and hobbies. Thomson & Fink also commented that successful dyslexics tended to be underachievers as children, so it could be argued that they were underachievers because their strengths and weaknesses had been misunderstood, and only academic skills and abilities had been valued by their teachers and parents.

Chapter 8 identified many strengths displayed as children (for example, photography, sailing, drama, art and design, IT programming, business ventures, etc.), and it was argued that these hobbies brought them self-worth. They saw that outside of the classroom they could bring value to society, that school only valued a narrow set of skills, and that they needed to demonstrate their strengths in their own way to their parents, peers and teachers. They also saw that they were able to do many things their peers were unable to do, and this allowed them, post-school, to develop such hobbies into very
successful and profitable business ventures (some even started these at school, for example publishing or trading companies).

It is therefore the challenge of parents and teachers to create opportunities for children with SEND to experiment with a broad range of hobbies, sports and activities in order to identify their own individual profiles of strengths and weaknesses; and when strengths are identified, to develop these in order to bring self-esteem to the child involved, and very importantly to think carefully about choosing possible career paths (and university or other post-school academic choices) by including such strengths in the discussion. It is, however, common for non-academic hobbies to be discounted and excluded from career planning, and guidance is made to follow conventional low-skilled paths which are believed would offer a suitable low-pressured career. It is argued in this thesis that it is these non-academic hobbies and skills that can bring career success, and should be seriously considered when making GCSE, university and career choices.

Both Chapters 7 and 8 focused on successful individuals with dyslexia, noting both the longevity of negative school experiences, and importantly the positivity that their families brought through the identification and nurturing of strengths (commonly seen as hobbies), and in their praise of ‘effort’ rather than ‘achievement’. Motivation for success came from inner-strength and self-belief that they were not stupid and that everyone around them misunderstood them, focusing on what ‘they couldn’t do’ and not on what ‘they could do’. The challenge now is to develop educational programs/policies that will reduce school-trauma, and its effects, and to harness the strengths of young people with dyslexia. However, this creates a dilemma, as the motivation to do well in the samples of individuals with dyslexia in this thesis came from adversity through the school-trauma – so by better supporting children with dyslexia, removing their school-trauma, would we be removing their motivation to do well post-school and to prove others wrong about them?

If one mitigated most school-trauma, would society lose future business entrepreneurs such as Sir Richard Branson, Sir James Dyson and Lord Alan Sugar; sports leaders such as Sir Steve Redgrave and Jackie Stewart; actors such as Tom Cruise and Keira Knightly; film makers and artists such as Steven Spielberg, Walt Disney and Leonardo da Vinci; and US Presidents such as John F. Kennedy and George W. Bush (Helen Arkell Centre, 2017)? This paradox is discussed, as no single agreed stance was found from the research sample in Chapter 8, asking ‘what would they have been without their school-trauma?’
Answers indicated ‘just a housewife like their mother’, but without indication whether this would have been preferred.

Gladwell’s book *David and Goliath* (2014) offers another perspective, based on interviews of many successful dyslexic entrepreneurs in a wide range of fields. He notes they all share negative traumatic childhoods and strived to survive in mainstream education. Each developed coping strategies to mitigate their vulnerability and hardship, be it negotiating with teachers to increase grades, or people skills to get others to do their homework for them, etc. However, he notes that whilst each faced adversity, they had high intelligence, supportive parents and few social-economic challenges. He argues that removing adversity is not the answer (for example, creating truly inclusive schools), but instead increasing support and encouragement to overcome vulnerability, adversity and challenge. Therefore those with dyslexia who are not successful are argued by Gladwell as likely to have lacked supportive parents and to be challenged socially-economically (in addition to their dyslexia), therefore struggling to overcome adversity and challenge with too many additional vulnerabilities, leading to weaker post-school outcomes. He concludes that overcoming adversity and challenge can be good and can bring many advantages to business and innovation, and dyslexics are uniquely positioned, as demonstrated by the number of dyslexic leaders to bring new innovation to the marketplace.
Bi-ability, a new way of understanding those with invisible disabilities and developmental dyslexia

Appendix 4 of this thesis develops the themes of ‘models of disability’, investigating both the ‘medical and social models of disability’ prevalent in today’s society, and this informs the following discussion. This discussion was not included in this conclusion Chapter, Chapter 9 as it may interfere with the thematic nature of this chapter.

Rejecting the ‘social model of disability’

This author rejects the concept of the ‘social model of disability’ for individuals with hidden disabilities/impairments such as dyslexia, due to its description of the disabled self, impaired by society, described in reference to the concept of ‘normality and abnormality’ based on the perceptions of majority society values (Abberley, 1993; Barnes, 2012).

The proposed use in this thesis of the ‘bi-ability’ model is based on a rejection of a disability identity for this group. It is argued that the ‘bi-ability’ is an ‘anti-disability concept’ for those with hidden/invisible disabilities, as they are rejecting the disability society they are often associated with but commonly rejected from due to the hidden nature of their impairments. Through its use of ‘passing’, the ‘bi-ability’ model aims to interact positively with wider society and in the workplace, using a camouflaged identity (Reeve, 2004; McNutty, 2003) to achieve success.

The author notes his own position as an individual with developmental dyslexia, who has sought not only to understand his own relationship with an identity of ‘disability’ given to him by society, but also to understand others like himself who are struggling with such a concept. The ‘bi-ability’ model is the author’s best fit from a number of models which offer an explanation to his experiences in developing several successful careers, based on the promotion of strengths (abilities) and passing/camouflaging in the workplace to mitigate any difficulties (impairments/disabilities).

The following section starts by pulling evidence from Chapters 2 to 8 of this thesis (research chapters), highlighting elements of the bi-ability model (for example, avoidance/camouflaging/passing, feeling different, unique skills-abilities, not fitting into boxes, and the rejection of a disability identity). It then moves through an investigation of: bi-abilities and neurodiversity, the privilege of passing, information management, invisible/hidden disabilities, dyslexia and the life course, to reach a more in-depth
investigation of the ‘bi-ability’ model. It is argued by the author that this proposed model is better suited to individuals with dyslexia as it understands their disengagement with any disability identity, their learning differences (not learning disabilities), and their using their many strengths to be successful in the workplace, re-educating society that dyslexia is a positive and can be valuable to society.

**Bi-ability themes in this thesis**

This thesis develops the identity concept of individuals with developmental dyslexia, one of a range of hidden disabilities. Each chapter of the thesis aims to understand those with dyslexia with different quantitative and qualitative foci.

Chapter 2, investigating coping in teenagers with dyslexia, found avoidance was a common strategy used to camouflage their difficulties, along with task-based or emotional coping to divert attention from their learning difficulties or differences. School can be a hostile environment, and children develop a range of strategies, both positive and negative, to cope with each day being left in an environment that is a threat to their self-image/concept. They recognised that they were different, or learnt differently, from their peers, and sought coping strategies to deal with this identity conflict.

Chapter 3 continues this by again investigating school-aged young people with dyslexia, but attempted to understand the differences ‘within’ families, between siblings with and without dyslexia. It found conflicting imagery between siblings, from different sources of stress, and this manifested in different ways, for example, emotionally and physiologically. This dyslexic sample again recognised that they were different, and this resulted in different coping strategies. Whilst Chapters 2 and 3 provided quantitative evidence, it was felt by the author there was a lack of understanding to support these findings from standardised measures, hence the change by the author from quantitative to a qualitative/mixed methodology.

Chapter 4 sought to understand the identity aspect of those with dyslexia, and the resulting themes suggested that they understood they were ‘different’, and their differences or disabilities gave them ‘unique skills’ which they could use to achieve in the workplace, whilst also recognising they might need to work harder than their peers to achieve this. This empowerment that hard work can achieve in a market-led economy reflects earlier neoliberal concepts, along with the fact that they rejected the low self-image or ‘poor me’ rhetoric that many with disabilities can use as a reason for their
disengagement from society and the workplace (Scott, 2004). Disengagement theory was developed by Cumming and Henry (1961) regarding those who are aging and not wishing for their reducing or reduced capabilities to be judged negatively from their social group, so they choose to disengage from their social group to maintain their self-esteem, and adopt new social roles that do not question their crisis of identity or allow them to become demoralised.

Chapter 4 is interesting as it begins to formulate the childhood avoidance/camouflaging strategy with adults with dyslexia, who question their identity as someone with or without disabilities, which is a fundamental concept of the ‘bi-ability’ model (Valeras, 2010). They recognise their strengths and also vulnerabilities, but also the paradox they are faced with in disclosing to family, friends and employers that they lack many perceived basic abilities of society (for example, the abilities to read, write, spell and take messages), but also have some valuable abilities which can bring them career success. They also recognise that inflexible work environments can quickly label individuals, and many choose to ‘pass’ in many situations to avoid difficult conversations about themselves, due to society’s lack of awareness/understanding of those with ‘hidden/invisible disabilities’. Again, ‘passing’ is a fundamental part of the ‘bi-ability’ model, which is argued in this thesis to be more suitable for understanding the dyslexia identity than either the medical or social model of disabilities.

Chapter 7 looks at the perceptions of success in a sample of N=29 adults with dyslexia, finding that their perceptions of success were based on their perceived potential based on their peers and surroundings, and that achieving success had come through stubbornness, hard work, losing the fear of failure and proving oneself despite others’ negativity about them. These could easily be related to the ‘bi-ability’ model, in that resilience and using their strengths to overcome any barriers faced meant they could be successful in the workplace, and also that ‘post-traumatic growth’ (Joseph & Linley, 2005) could also be used to describe their overcoming adversity (stubbornness and failure) to attain success against the perceptions of their family, peers and colleagues.

Chapter 8 used three studies to look at mainstream education’s role in the creation of successful individuals with dyslexia. The first study, an investigation of N=20 individuals with dyslexia who self-define as successful, indicates the overcoming of adversities. As one participant noted, ‘some dyslexics I’ve met have gone to the n’th degree to prove that they are not stupid’ (SDE) and ‘I have to thank them [teachers] because I would never have done
as good as I have without that [negative and traumatic] experience’. This overcoming of childhood perceptions of worthlessness is both a form of ‘post-traumatic growth’ (Joseph, 2012) and a rejection of a disability identity as noted in the ‘bi-ability’ model (Valeras, 2010).

**Bi-abilities and neurodiversity**

A question can be posed: is ‘bi-abilities’ (Valeras, 2010), as discussed earlier in this thesis, the same as ‘neurodiversity’ (Cooper, 2008, 2009, 2011; Pollak, 2009; Walker, 2014), or if not, what are their similarities and differences?

The author argues that whilst ‘neurodiversity’ is very much concerned with embracing disability, and aims to diversify labels so that an individual could be ‘dyslexic with ASD and ADHD traits’, the author argues it is very much centred on the biological (medical) features of disability. Neurodiversity, like the concept of ‘bi-abilities, promotes strengths, but differs from bi-abilities in its biological basis, by combining groups with neurological-based learning difficulties (for example, autism, ADHD, dyslexia and dyspraxia) into a collective political force, with support from the ‘Autism Rights Movement’ (Soloman, 2008; Autistic UK, 2017). Therefore it is argued by the author that the neurodiversity movement is a ‘social’ model concept that aims to deliver environmental change, whereas the ‘bi-ability’ concept rejects the concept and label of ‘disability’. It sees such individuals as neither ‘dis-abled’ nor ‘able-bodied’, as no label currently exists that accurately describes them, and they use a number of strategies to work successfully in many environments, by promoting their ‘able-bodiedness’ where possible to create a sense of ‘normality’ in the workplace. It could be argued that the dyslexia community share many common struggles with the transgender community, in their struggle to educate society to their true identity.

Cooper (2009), West (1991), Logan (2009) and other researchers point to the many advantages that neurodiverse individuals can bring to organisations, such as: creativity, entrepreneurship, political insight, and invention. However, it is argued that a ‘bi-ability’ framework is more relevant when understanding the experience of dyslexia in individuals who crave outward perceptions of ‘normality’, and is relevant to both successful and less-successful individuals with dyslexia (Alexander-Passe, 2017).
The privilege of passing

Passing can be defined in this context as the ability to pass as ‘able-bodied’ even if one is not (Goffman, 1963; Clair, Beatty & MacLein, 2005; Pinder, 1995). Leary (1999) defines ‘passing’ as ‘a cultural performance whereby one member of a defined social group masquerades as another in order to enjoy privileges afforded to the dominant group’ (p.85). This can come through having an invisible disability, sexuality or other invisible difference, for example: being seen as white when they were not, in the case of apartheid in South Africa; as a non-slave in America during the American Civil War; or as Aryan when they were Jewish or Gypsies, in the case of Nazi Germany. Passing as a form of privilege is an argument put forward by those with ‘visible’ disabilities, and concerns the ability of those with ‘invisible’ disabilities to easily pass as ‘able-bodied’, according to society’s precepts. It is argued that the ability to be perceived as able-bodied has allowed many with disabilities to succeed in business (Logan, 2009; Alexander-Passe, 2017), and have access to many services and opportunities (Beatty & Kirby, 2006; Ragins & Cornwall, 2001a; Peltzer, 2014).

Samuels (2003) and Yee (2013) suggest that there are two forms of passing: ‘intentional’ and ‘unintentional’. ‘Intentional’ passing is where individuals are the active participant in their passing, by changing situations that might highlight their disabilities or sexuality, for example: losing homework; getting others to write a phone message for them, claiming they don’t have a pen; saying they have forgotten their glasses so can’t read. It is argued to be camouflaging disabilities in order to be perceived as ‘able-bodied’, as they are actively misleading others about their abilities. The second form, ‘unintentional’ passing, takes place by default when individuals keep quiet and avoid situations that might highlight the fact they can’t read or write, or family situations that might highlight their unlikelihood of having their own children due to being gay, lesbian, or having a medical condition preventing it, for example.

To conclude, Goffman (1963) suggests that because of the great rewards in being considered normal, almost all persons who are in a position to pass will do so on some occasion by intent (p.74), to create ‘a presumption of normalcy’ (Devlin & Pothier, 2006, p.15). Lingsom (2008) tries to expand this by suggesting that ‘invisibility is in part an attribute of an impairment, in part a choice of activity and context, in part concealment of the impaired self and in part social conventions of silence, the untrained eye and the disbelief of the others’ (p.13).
Information management

The author argues that having an invisible disability or sexual preference requires high levels of information management, due to how, why, when and to whom one self-discloses, and remembering who you have and haven’t disclosed to, and what you have said (Alexander-Passe, 2012, 2015a, 2017). Concealing personal information to avoid stigma can also interfere with one’s authentic self-preservation and can have possible mental health implications, according to Creed & Scully (2000). So threats of prejudice and discrimination offer significant reasons for a person with an invisible stigmatised social identity to avoid disclosure in the workplace (Schneider, 1987). As Smart & Wegner note (2000, p.221), ‘concealing a stigma leads to an inner turmoil that is remarkable for its intensity and its capacity for absorbing an individual’s mental life’. Ragins & Cornwall (2001b) found fears associated with the decision to reveal sexual orientation were more damaging/harmful than disclosure itself, with respect to job attitudes and psychological strain. They suggest an inner turmoil regarding the decision to reveal or pass regarding their disability/sexual orientation. The choice could be seen as ‘passing’ or ‘revealing’ (Friskopp & Silverstein, 1995; Schneider, 1987), with a decision made in each situation or to each person, being fully ‘out of the closet’, or being vigilant until they are fully ‘out of the closet’ with their family, friends, work colleagues and employers.

Herek (1996) suggests there are three tactics to passing effectively in society: fabrication, concealment and discretion. Fabrication occurs when a person deliberately provides false information about his or herself to others, creating a new identity through deception; for example, a gay man actively creating a heterosexual identity in the workplace by bringing platonic opposite-sex friends as dates to a workplace function. Concealment involves actively preventing others from acquiring information about themselves, avoiding questions concerning partners, where they went to school or social clubs they are involved with. Finally, discretion occurs when individuals avoid queries about themselves and their activities outside of work or that social circle. Whilst very similar to concealment, discretion occurs when they tend to ‘dodge the issue’ (Woods, 1994) and hide from conversations or situations where questions might be posed about their abilities, academic achievement or personal relationships, perhaps by changing conversations midway to safer territory (Chrobot-Mason, Button & Declimenti, 2001). It is argued that,
no matter which tactic is used, passing requires a person to live a ‘double life’ and adopt different personalities within and outside the workplace (Clair, Beatty & Maclean, 2005).

Regarding the alternative choice of revealing an invisible stigmatised trait (or making an invisible trait visible), the term ‘coming out’ is commonly used (Rothenberg & Scully, 2002). Clair, Beatty & MacLean (2005) suggest three different tactics are commonly used: signalling, normalising and differentiating. Signalling could be argued as the closest to ‘coming out’, in that the individual begins by sending out signals, such as dropping hints, use of specific words, bringing up specific topics for conversation, wearing symbols to represent their difference, or giving clues to their difference. These clues ‘invite speculation ... encouraging their peers to read between the lines’ (Woods, 1994, p.178). It is argued that signalling minimises the risk of explicitly revealing an invisible stigmatised social identity, and provides an interim step to see if it is safe to reveal more (Clair, Beatty & Maclean, 2005). Normalising is a second approach, which involves self-disclosure and then attempting to make any difference seem commonplace or ordinary. It is typical that those who attempt to normalise will try to assimilate into local organisational culture, behave according to the ‘norms’ of the organisation, and may deny that their invisible differences matter or are significant. This allows such individuals to pretend to be living as ‘normal’ an existence as possible (Joachim & Acord, 2000; Royer, 1988), and to preserve an emotional balance, cope with alienation and adjust their expectations to incorporate the limitations of an invisible identity (Royer, 1988). Lastly, differentiating occurs when they highlight their invisible social identity and how it positively differentiates themselves to others around them. It is a means of presenting the newly disclosed invisible social identity as equally valid to others’ social identity, or the organisational normality. This is an effort to change the perceptions and behaviour of groups or organisations that might stigmatisate them, argued to drive change at both the individual and organisational level.

Invisible and hidden disabilities

Individuals without physical barriers, who could be classed as having ‘hidden or invisible impairments’, constantly risk their disability status being publically revealed, forming a basis for any ‘negative psycho-emotional reasons for concealment’ (Thomas, 1999, p.55). Hirsch & Loy (2010) argue that ‘hidden disabilities’ are different from ‘invisible difficulties’, with the former being ‘an impairment causing limitations: not obvious to the naked eye; not easily discerned by others; or not noticeable in one’s speech, behaviour, or mobility’
Reeves (2004) found that those who ‘passed’ by not disclosing their impairments, therefore camouflaging their impairments/disabilities, were often perceived as ‘traitors by others within the disabled people’s movement’ (p.92), as they were actively rejecting their disabled identity (Kanuha, 1999). This suggests there is a perceived ‘hierarchy of impairment’, as explained by Reeve (2004): ‘one of my participants did not feel she was seen as a “real” disabled person because she was not a wheelchair user and did not have one of the “the biggies” like cancer, arthritis, multiple sclerosis or visual impairment. Consequently, her identity as a disabled person was challenged by other disabled people in the organisation’ (p.92).

Grewal, Joy, Lewis, Swales & Woodfield (2002) also identified that just over half of people with impairments surveyed did not identify themselves as disabled. Reasons varied, for example, they did not think they were ill or incapacitated enough to count as disabled, or their health problems were part of an illness or getting older, etc. Negative images they associated with disability caused many to be too embarrassed to identify as disabled, as they felt it was believed to be connected with a physical impairment: typically affecting mobility, was visible, led to dependency, incapacity issues, and was a permanent condition. Participants also dismissed their own impairment as they felt they were mobile and capable, and they saw themselves as being ‘normal’ (Watson, 2002). Whilst the above theories could be argued as focusing on the negative aspects of impairment and disability (oppression in society and its impacts), it is such concepts which are problematic for many with dyslexia, as they question whether they are actually disabled, and therefore reject a disabled identify.

Prince (2017) offers an alternative perspective, that ‘invisible’ disabilities are not the opposite of ‘visible’ disabilities, rather ‘they are interconnected and dynamic: a condition can have characteristics of visibility and invisibility depending on the symptoms and the circumstances’ (p.82). Prince goes on to argue that ‘Invisible disability [was] not a clear-cut clinical category or a distinct social identity. Instead, researchers suggest it is useful to think of visible and invisible disabilities as located along a spectrum of conditions and specific contexts’ (p.81), a view that Mollow (2010) supports. Devlin & Pothier (2006) add that all ‘disabilities range from the highly visible to the highly invisible. Moreover, whether the disability is visible may depend on the context. For example, although a wheelchair is generally a very visible sign of disability, if someone using a wheelchair is seated at a table with others who did not bring their own chairs, the disability may not be obvious to the casual observer (or to someone who
cannot see the wheelchair because they cannot see at all. Many disabilities are not apparent unless specific activities impacted by the disability are being engaged in. For example, in a situation where no one’s speaking, muteness or deafness may not be visible’ (p.15).

Dyslexia and the life course

This thesis argues that Dyslexia is a neurological learning difficulty or difference that presents from 3 years old and is life-long. It affects the ability of individuals to develop the skills to read, write and spell effectively, along with other symptoms including difficulties with short-term memory, organisation, balance and co-ordination (Rose, 2009). Most individuals with dyslexia can develop their literacy skills, but due to phonological or short-term memory difficulties, require sometimes 10 times as many repetitions as those without dyslexia (Snowling, 2000). As there are no visual symptoms linked to dyslexia, it could be argued to be part of the group called ‘invisible disabilities’. However, when those with dyslexia try to read, write and spell as required at school, university and in the workplace, their difficulties present themselves, and this can make them visible and vulnerable to stigma and discrimination.

Scott (2004) and Alexander-Passe (2015, 2017), along with other researchers, and Chapters 2, 3, 4, 7 and 8 of this thesis, have highlighted ‘avoidance’ at school and in the workplace, but the term, concept and understanding of ‘passing’ has only recently begun to be correlated with groups with dyslexia (Threlkeld, 2015). It could be argued that individuals with dyslexia commonly avoid any disability terminology and therefore do not correlate themselves with others with disabilities, for example, not recognising their dyslexia as a disability (Threlkeld, 2015). It could be argued that, along with those with a stammer/speech difficulty, disclosure does not occur by choice, but as a result of their interaction with society, for example at school, university and in the workplace. This author argues that correlating ‘passing’ with ‘avoidance’ offers a greater understanding to the life-long experience of dyslexia, may also offer an explanation to why dyslexia and mental health issues can correlate, as detailed in Chapters 5 and 6 of this thesis, and lastly offers comparisons to others with invisible/hidden difficulties. Avoidance was highlighted in Chapters 2 and 3 of this thesis and is a running theme of the school experiences of many who took part in many of the studies in this thesis.

Chapter 8 investigates ‘the creation of post-school successful and unsuccessful dyslexics’, indicating the development of strengths rather than weaknesses, and through
positively harnessing school-based trauma (argued in this thesis as ‘post-traumatic growth’). Successful dyslexics reject firstly the ‘medical’ model, that they need to be fixed, and secondly the ‘social’ model, that they need to self-disclose a disability to gain environmental allowances (for example, extra time in examinations, technology interventions). Many participants in this thesis (Chapters 4 and 7) reject the notion that they are ‘disabled’ and see any impairments as differences, not disabilities – differences that should be embraced and developed, as many successful dyslexics have done to become leaders in their professions, for example: Sir Richard Branson, music and airline entrepreneur; Sir James Dyson, vacuum entrepreneur; Charles Schwab, stockbroking entrepreneur; Walt Disney, animation studio entrepreneur; Tom Cruise, film actor; and Sir Steven Redgrave, Olympic medal-winning rower.

This thesis aimed to ‘investigate the motivations of why many individuals with developmental dyslexia are successful despite experiencing traumatic schooling’. The many chapters of this thesis have looked at the life course of dyslexia, from negative and traumatic schooling in childhoods (Chapters 2 and 3), discrimination and stigma in the workplace and adulthood (Chapter 4), long-term severe emotional reactions to negative schooling (Chapters 5 and 6), and lastly (Chapters 7 and 8) two studies of adults who have been motivated to achieve post-school success ‘despite and not because’ of their traumatic schooling (argued as ‘post-traumatic growth’). This chapter (Chapter 9) proposed a more advanced means of understanding the dyslexia experience, rejecting both the ‘medical’ and ‘social’ models of disability, as many individuals with dyslexia reject any identify of disability due to their non-literacy-based strengths (bi-ability model).

A new way of understanding dyslexia

Valeras’ (2010) paper, ‘We don’t have a box: Understanding hidden disability identity’, offers a vehicle to increase understanding of those with ‘hidden disabilities’, which dyslexia falls into, along with individuals with diabetes, coeliac disease, juvenile rheumatoid arthritis, polio, epilepsy, etc. Her paper investigates individuals who might appear ‘normal’ but have impairments that affect their lives, investigating six individuals with borderline identities that contradict, interact, inform and implicate each other, as they have the ability to transcend and travel between two worlds – the disabled and the non-disabled. They live on the edge of social, cultural, and political lines and adapt to any situation that they encounter to emphasise or de-emphasise various aspects of their identity.
depending upon the pressures of the social context’ (p.16). Such individuals find ‘disability is a strong word’ and isn’t one they feel encapsulates them, as they are more than a disabled person, as they believe they are able-bodied, and that ‘disability has negative connotations’. Valeras investigated the following 6 themes:

‘I’m more in the middle’ – defines what they are, that they can empathise with both groups equally, and that society’s need for clear demarcation between people with visual markers (perceived as disabled) and people without visible markers (perceived as non-disabled), as a defensive strategy, denies the human frailty that we all have (Davis, 2005). There is a socially perceived stigma towards individuals with physical disabilities as having a greater human weakness (Nussbaum, 2004).

‘We don’t have a box’ – describes that many individuals feel they are an ‘other’, but ‘other’ isn’t featured on application forms, and they have the ability to tick either box if they feel like it anyway, having the ability to ‘pass’ and look normal to those around them. This ability to ‘pass’ can be found in many instances of race, class, gender and sexual orientation (Ginsberg, 1996; Schlossberg, 2001; Leary, 1999).

‘I didn’t want to be different’ – describes how they want to, and do, look ‘normal’, but in their need for accommodations they also need to disclose a disability that they do not recognise as being a part of their identity, and worry that others would question their ‘disability-ness’. The requirement to be alert to the ‘impressions and reactions’ of others means that they are hyper-alert to avoid situations that would highlight any behaviours or situations that might reveal symptoms of disability.

‘Not even consciously, but it’s so hardwired’ – describes how the ability to pass or disclose their ability to others can be both a ‘blessing and a curse’, resulting in a constant private struggle to sustain both a private and public self (Cavet, 1998). This means that such individuals may be reluctant to access accommodations, people, places or situations because they might draw attention to any disability (Cavet, 2000; Fitzgerald, 2000), and at times suffer pain and impairment in order to uphold an identity of the ‘non-disabled’ person.

‘It’s always that elephant in the room’ – could be argued that many are reluctant to disclose any disability to maintain their self-esteem/self-identity, and their needs are constantly forgotten as they have no visual clues to remind others that accommodations might be required. Goffman (1963, p.57) describes the dilemma ‘to display or not to display, to tell or not to tell, to let on or not to let on, to lie or not to lie’. The sharing of
such information means their ‘invisible’ condition becomes ‘visible’ and so does their ‘differentness’ to others.

‘It’s a piece of my identity, but it is not my identity’ – describes the dilemma they experience in having an impairment but not recognising it as a disability; and that such an impairment is only a small part of who they really are. They liken it to wearing glasses, and question ‘are they a person with a disability or a disabled person?’ Many choose the former as it describes ‘a part or piece of their identity, not who they are’ (p.15).

These individuals have flexible identities which, it is argued, cannot be ‘squished into a box … they exist in the spaces between travelling in and out of two juxtaposed identity categories’ (p.16). Valeras, along with Darling (2003), argues that a ‘bi-ability’ exists because such individuals exist in both disabled and non-disabled worlds, and that neither category is a perfect fit.

_The dyslexic experience and hidden disability_

In the case of the dyslexic individuals encapsulated in this thesis, one finds that many reject the notion that they are disabled, and try very hard to camouflage any difficulties in order to promote a sense of ‘normality’ or ‘able-bodiedness’ (Chapter 4). The constant hyper-alertness for situations that might highlight any deficiency is seen as highly stressful, and creates a secondary stress to that of their primary difference/impairment (Chapter 4). Chapters 2 and 3 of this thesis found many school-aged dyslexics recognised that they looked ‘normal’ but were impaired at school (for example, reading, writing and spelling), with emotional manifestations. However, many also recognised strengths (for example, drawing, drama, debating), which can be confusing, as if they were actually disabled they would firstly, according to society’s rules, have a physical indication of disability, and secondly such an impairment would affect most areas of their lives, with no apparent strengths (as discussed in Chapters 7 and 8 of this thesis). This dilemma, or paradox, caused many young dyslexics to question their place in their families and see themselves as being ‘abnormal’, as their parents, siblings and peers do not have these strange selections of strengths and weaknesses (Alexander-Passe, 2017). This causes many dyslexics to question their identity and their ‘otherness’, causing them to isolate themselves as a form of self-protection, some relating to the ‘Spock’ character in _Star Trek_ (Geraghty, 2007; Alexander-Passe, 2010).
Teachers struggle to understand students who can look and act ‘normally/able-bodied’, but struggle in learning settings. Due to demonstrating strengths/focus in many subjects (commonly vocational), teachers commonly believe such students are being lazy and not applying such strengths/focus to most subjects (commonly core subjects of English, Maths and Science requiring high literacy skills). The lack of visual impairment means many such students are also overlooked for diagnosis of underlying difficulties. However, the examination access arrangements (Joint Council of Qualifications, 2016) for formal examinations (GCSE and A-level) adds to this confusion by allowing many students to receive allowances (for example, extra time) without any need for a formal SEND diagnosis (however, requiring below average standardised scores in one or more learning skills, for example reading, writing, spelling, reading comprehension). The allowance of a laptop to overcome handwriting difficulties now does not even require any assessment as long as it could be argued to be a student’s ‘normal way of working’. This demonstrates an ‘other’ group in school who have managed impairments without a diagnosis of disability.

This thesis found that many young dyslexic adults leave school lacking the academic results of their siblings and peers, and their lack of perceived impairment (commonly seen as physical) means they are misunderstood as being lazy or unfocused, rather than as struggling with ‘hidden impairments’. Their ability to look and act ‘normally’ means they can be overlooked as having underlying difficulties. However, they are faced with a dilemma – the application forms they must complete ask about disabilities, with a range of questions: Do you have a disability? Do you believe you have a disability? Do you have a disability covered under UK Equality Act (2010) legislation?

This causes many to question if they actually have a disability, do they believe they have a disability, and what advantages/disadvantages a disclosure might bring? It also poses other questions: Will I have a better chance to get through the pre-interview selection of applications if I disclose or not? At what point should I disclose my dyslexia or difficulties – at the application, in the interview, when offered the role, or after starting the role? (areas also recently researched by Threlkeld, 2015). Many dyslexics, however, according to Alexander-Passe (2015a, 2017), believe most employers would prefer a ‘trouble-free’, non-disabled applicant, and although it is hard to prove, would discriminate by not short-listing such applicants. There are also other situations where, for public service posts, they advertise the two ticks scheme (now renamed ‘Disability Confident’, Department of Work and Pensions, 2016), where if you disclose you are disabled and meet
the minimum required for the post, that you will be guaranteed an interview. However, again dyslexic interview participants noted they were frequently not shortlisted from such applications. As mature adults, many Individuals with dyslexia have developed a sense of their own strengths and weaknesses, and use these to develop careers that are fulfilling, and interestingly do not recognise their dyslexia as a disability but as a learning/working difference. In these situations, using the term disability would be alien to them and might have negative connotations.

To conclude, it is argued that using a ‘model of disability’ (either medical or social) to describe the experiences of many dyslexics and individuals with ‘hidden/invisible disabilities’ may be inappropriate, as such models can be argued to be negative, and deficit models, focusing on what individuals can’t do rather than what they can, or on what environments they can and cannot access. The ‘bi-ability’ model proposed by Valeras (2010) offers an alternative, positive model that many individuals with ‘hidden disabilities/differences’ can relate to, allowing for the conceptualisation of an identity that is both ‘dis-abled’ and ‘able-bodied’, and recognising the internal emotional struggle that comes from sitting in both camps and not truly being comfortable in neither.

Threlkeld (2015) also concludes, in a recent focus group and interview study of dyslexic students at an American College, questioning whether dyslexia was a ‘disability’ or a ‘gift’, that neither the medical nor social model was representative of a modern definition of dyslexia, and he offers a third model for consideration, which he calls the ‘dynamic model’. Threlkeld suggests this also offers (like the bi-ability model) a position of ‘able-bodiedness’, exceptional abilities, the ability to take opportunities where offered, using strengths, and having resilience/rit, noting ‘by starting with the assumption that their disability is just a difference that may give them able-bodied privilege in some settings, or even better, allow them to explain some unique gift or talent, they give themselves more agency and control over their discursive world’ (p.122). He concludes that dyslexia should be seen as a ‘learning difference’ and not a ‘disability’. This author argues that whilst this ‘dynamic model’ is useful, the ‘bi-ability’ model is more comprehensive and offers a means to understand both the successful and less-successful dyslexic individual (with and without gifts or talents).
**Successful dyslexics and ‘bi-abilities’**

Chapter 8 of this thesis investigates the ‘school’s role in creating successful and unsuccessful dyslexics’, and Alexander-Passe (2016a, 2017) recognises that a ‘disability paradox’ exists (Albrecht & Devlieger, 1999): firstly, that many dyslexic adults can be impaired (for example, the lack of literacy skills, etc.) and also experience highly successful workplace careers; secondly, that many adult dyslexics can harness negative school experiences to create post-school success, argued to be a form of ‘post-traumatic growth’ (Calhoun & Tedeschi, 2006; Joseph & Linley, 2005), a view shared by Agahi (2015) with a study of successful adults with dyslexia. The individuals who were successful in their business careers have achieved success by:

- demonstrating strengths that others do not have (many identified in childhood);
- camouflaging their dyslexia to others – passing;
- demonstrating exceptional resilience and motivation;
- developing a healthy attitude towards failure – understanding it as part of a journey towards mastery or success; and
- accepted success coming post-school, and after facing adversary, trauma and negative schooling.

The above is argued to correlate with the ‘bi-ability’ model as they indicate an ability to play to strengths where they exist; some coming from their dyslexia and others from their non-dyslexic abilities. Dyslexia is perceived as being only part of who they are, so their ability to harness the strengths from each part of their personalities means they can bring unique skills and abilities to problems and the workplace. Exceptional resilience and motivation could be argued to come from always being on the lookout (having sensors) for situations that might highlight their difficulties, from the ability to bounce back from setbacks (forced disclosure of difficulties), and from the motivation to avoid such forced disclosure in the future. Interestingly, the ability to see ‘failure as part of a journey to mastery’ is part of their unconscious coping or defence mechanisms developed at school. This links with developing resilience – the ability to play the ‘long-game’ and recognise that they will need longer to gain certain skills, and that knowledge learnt through failure can be as good as or better than that learnt first time. If a machine breaks down a lot there would be no need to develop a better model, so if one always gets things right first time there would be no motivation to question if it’s the ‘best solution for the job’. Lastly, it is argued that an inquisitive mind is more likely to make leaps of faith to solve problems,
asking the ‘what if’ questions. The above themes are developed further in Alexander-Passe (2017), to understand the keys for success in individuals with dyslexia, and the role that parents and schools can play in recognising and nurturing the abilities that can be found in people with dyslexia.
Limitations

This thesis is a collection of quantitative and qualitative studies using small samples to begin a discussion about the experiences of both school-aged children and adults with developmental dyslexia. It does not aim to make generalisations for the whole population of individuals with dyslexia, nor those with other ‘hidden/invisible disabilities’.

The author recognises that the many studies used un-representative, small sample sizes, bringing limitations when making generalisations from the data; however, it was felt that the richness of using many samples across a multitude of studies (quantitative and qualitative) would begin a discussion about the emotional coping of children, teenagers and adults with dyslexia. Each study was seen by the author as starting a developmental stage in a research journey, and each builds upon the previous research studies in understanding the emotional impact of developmental dyslexia.

The author also recognises any unintended female bias in the sample recruited for the main study of N=29 adults with diagnosed developmental dyslexia. The advert contained in Appendices 1 and 2 does not aim for any gender bias, however in the quantitative data from the frequency of themes noted, the data is broken down by gender, therefore allowing comparison of male and females responses. This aimed to remove any unintended/unconscious gender bias. It is therefore argued that even with a balanced sample, the gender differences would still be apparent and be significant. Chapter 9 investigated this perceived gender bias, and found that in the non-depressive sample no gender bias was found; however, in the depressive sample there was a greater female bias, which was argued to reflect the results from Chapter 3, that females choose emotion-talking based therapies, compared to males who tended to choose task-based coping.

The quantitative measures used in Chapters 2 and 3 were chosen through discussion with other researchers in the field about their suitability for the target population, and many have been used with dyslexic populations before. However, the author felt that quantitative measures were not dyslexic-friendly due to their high literacy requirement, and that bias sampling could result in an unrepresentative sample of participants with dyslexia. So a qualitative methodology was proposed for later studies (see Chapters 4 to 8), which are argued by the author to be more dyslexic-friendly, as they do not rely on high literacy or reading comprehension skills for participation. Agahi (2015) also used interpretative phenomenological analysis (IPA) when interviewing successful adults.
with dyslexia, perceiving it as an effective and ‘highly accessible’ (p.69) means to understand the phenomena of dyslexia. However, Willig (2008) notes the limitations to using IPA, including ‘merely talking about an experience may not actually be describing the said experience’, and its reliance on the language use of the research participant. However, unlike other types of qualitative analysis methodology, it does not rely on the actual language being used (for example, discourse analysis), but takes the essence of what is said to form themes. The subsequent creation of quantitative data from the qualitative themes offers an additional means to understand the whole sample in greater depth and to make possible predictions. Lastly, each research chapter covers their limitations individually, and being published in peer-reviewed journals they have each passed their own review process.

The author notes that through his self-disclosure of his own dyslexia, and through giving a snapshot of his educational and career journey to date, in an attempt to put the interview participants at ease, this may have gained different responses than those given to a non-dyslexic interviewer. However, it was felt, after the first few interviews had taken place, that any negative bias projected as part of the IPA process (Smith, 2004) was greatly supplemented by putting participants at ease through projecting a ‘safe space’ in which they could offer data rich explanations; for example, to any descriptive behaviours which they may have withheld from close family members.

The author further recognises that he has an ‘insider view’ (Dwyer & Buckle, 2009; Milligan, 2016) as someone who had experienced negative experiences as school, who had left school with few qualifications, but had enjoyed positive experiences at both university and in the workplace in a variety of professions. Therefore his interpretation and sensitivity to such themes is argued to be enhanced by such an experience. ‘Insider view’ is discussed in more depth in this thesis.

The author also recognises that through the topics chosen to investigate, and his self-disclosure, this may have elicited negative and biased responses from research participants, and the removal of such questions on self-harm may have gained more positive responses.

One of the studies in Chapter 8 makes use of a 20-item dyslexia screening measurement (Vinegrad, 1994) on a sample of adults. Those who scored with 11–17 symptoms were chosen to continue as the ‘dyslexic’ sample, with others scoring 0–5 symptoms as a probable ‘non-dyslexic/control’ sample for comparison, with the rest of the sample discounted. The author is aware of the dangers of using non-standardised
questionnaires, and this can make the results questionable. However, this and other similar measures have recently been used by other researchers in the field for dyslexia screening purposes (Patel, Magnusson, Gomez & Fransson, 2010; Wilcockson & Pothos, 2016; Logan, 2009).

The author recognises that the research project contained in Chapters 4 to 8 was designed to gain a sub-group sample of N=10 depressive, N=10 non-depressive (controls), and N=10 with prior criminal participation (with N=5 males and N=5 females in each sub-group); however, samples of N=22 depressive and N=7 non-depressives were gained, and the research evidence was significant, in that an unknown depressive bias maybe evident in this target group. If the proposed sample had been gained then the study would have had a broader understanding of the links between criminal activity, dyslexia, and school experience.

Chapter 8 contains a sample of diagnosed adult dyslexics who self-disclosed being ‘successful’. To avoid any gender bias, no gender was given for any of the interview quotes. This study was the early analysis of the author’s book (Alexander-Passe, 2017) which was made up of N=27 recruited participants, the gender breakdown of which was females N=13, males N=14, reflecting an aim for non-gender bias.

The author lastly acknowledges that this thesis includes peer-reviewed chapters which denote a gender bias in the recording of highly successful males over that of females. These were unable to be modified for this award. The author’s latest publication on successful dyslexics (Alexander-Passe, 2017) aimed to re-address this bias by noting several successful females in many fields:

- **Scientists** (Carol Greider, Professor Elizabeth Blackburn, Maggie Aderin-Pocock, Salma Hayek);
- **Actors/entertainers** (Whoopi Goldberg, Kiera Knightly, Lindsey Wagner, Holly Willoughby, Jennifer Anderson, Octavia Spencer);
- **Entrepreneurs** (Cath Kidson, Jo Malone, Anita Roddick);
- **Lawyers/activitists** (Erin Brockovich);
- **Sports people** (Bruce/Caitlyn Jenner, Jessica Watson);
- **Musicians** (Cher);
- **Writers** (Sally Gardner, Agatha Christie, Debbie Macomber);
Chapter 8 of this thesis sought to understand less-famous adults with dyslexia, aiming to understand everyday success rather than spectacular media-friendly success, which could be unrealistic for many to attain, and promotes an abnormal perspective of dyslexia. It is argued that less females with dyslexia attain success in business fields due to a known male bias in boardrooms (Verma, 2015; Lord Davies of Abersoch, 2011), however in literary, musical and drama fields there is less gender bias, and female artists can become well-known and successful more easily.
Further studies

The development of ‘post-traumatic growth’ and ‘bi-abilities’ have been main outcomes from this thesis, through the investigation of the research studies and the supervision process. Therefore, as new concepts to the field of dyslexia they are suitable topics for further investigation. The thesis has already developed a peer-reviewed paper on ‘bi-abilities and dyslexia’ and a book on ‘The Successful Dyslexic: Identifying the keys to unlock your potential’ (Alexander-Passe, 2017).

A longitudinal qualitative study is proposed to track emotional coping, school careers, academic success, post-school academic choices, career choices, choice of partner, and life as a parent. A sample of N=12 dyslexia-diagnosed primary school-aged pupils (7–8 years old), from both state schools (N=3 male and N=3 female) and independent schools (N=3 male and N=3 female) would be recruited, and both the child and the parent would be interviewed every 2–3 years to understand their life’s successes/challenges. Firstly, the focus would be on school experiences (inside and outside the classroom, for example, the use of avoidance), parental and peer relationships, and the identification of strengths and weaknesses. Secondly, the focus would later be on how school, parental and peer experiences affected secondary school options, post-school educational options, career options and entering the workplace. Lastly, the focus would shift to how their school, parental and peer experiences have affected their mental health. A baseline using the ‘Strengths and Difficulties Questionnaire’ (SDQ) (Goodman, 1997) would be given to both parents and children. This measure has the advantage of UK normative samples (Meltzer, Gatward, Goodman & Ford, 2000), and of having been used for dyslexic samples before (Terras, Thompson & Minnis, 2009; Snowling, Muter & Carroll, 2007).
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Appendix 1: Dyslexia and Depression (beingdyslexic.com advert)

Hi,

I'm dyslexic & a post graduate researcher at London South Bank University.

I'm seeking diagnosed adult dyslexics (20-60yr olds) for a telephone interview study.

The interviews will take about 45-60 minutes (I will telephone you) and will be used to investigate how adult dyslexics cope (emotionally and behaviourally).

All interviews will be kept confidential (names will be changed) and you will receive a digital copy of any papers or books it is used for.

PLEASE EMAIL ME TO TAKE PART

Neil
alexander-passo@inshands.co.uk

Posted July 2008 (study to take place between July-Sep 2008)

IF IN DOUBT, PLEASE CHECK OUT MY PAST 'PUBLISHED' RESEARCH PROJECTS

http://www.bqreltech..n_56_d_12.shtml
http://www3.interscience..l~18.Selenium~0
http://www3.interscience..520773abstract
Appendix 2: Dyslexia and Success (beingdyselxic.com advert)

Hi All,

I am now researching 'Dyslexia and Success' for a new book project. I was wondering what you think makes a successful dyslexic?

Whilst we can all look to Sir Richard Branson to see he is very successful, and say that he is a successful dyslexic, this ignores the success that many dyslexics enjoy each and every day. Isn’t everyday success much easier for a young dyslexic to aim for and attain?

Please can you take my survey, there is an option to the end of being interviewed for your views.

https://www.surveymonkey.com/r/Dyslexic

I welcome your views on the survey, as well as what YOU think makes a dyslexic successful?

Thank you

Neil Alexander-Passo

http://www.dyslexia-research.com

There is also a twitter feed to go with this research, join the conversation

@DyslexicSuccess
Appendix 3: Dyslexia and Success (surveymonkey webpage)
Appendix 4: Challenging the relevance of the ‘Social Model of Disability’ for those with developmental dyslexia

What is meant by disability?

The World Health Organization’s (1980) International Classification of Disease separates the concepts of Impairment and Disability as follows (p.29):

**Impairment**: Any loss or abnormality of psychological, physiological or anatomical structure or function.

**Disability**: Any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

The two main disability models found in literature are the ‘medical’ and the ‘social’ models. The ‘medical’ model suggests that those with a disability have dysfunctional bodies that require medical intervention to return to society’s concept of ‘normality’ (Finkelstein, 1980). The ‘social’ model suggests that it is the environment that causes disability from the barriers to impairments, and society needs to be modified to be inclusive to all (Oliver, 1996; Barnes, 2003). Interestingly Barnes & Oliver (1993) suggest that the ‘medical’ model was created by non-disabled researchers to understand abnormal populations and the ‘social’ model was created by disabled researchers to make sense of ‘normal’ populations as part of a ‘social oppression theory’, as it is argued that ‘non-disabled researchers have consistently failed to address the question of disability as perceived by disabled people whether young or old’ (p.3). Lemert (1962) and Goffman (1963) talk about disability as a social deviance causing a stigma, mark or blemish to describe a ‘moral inferiority’.

The terms ‘normal’ and ‘abnormal’ are commonly used in a range of subjects, from mathematics, psychology, medicine and measurement. ‘Normal’ in mathematics tends to be numbers forming the average from a range of numbers, therefore ‘abnormal’ numbers are those that significantly fall outside a perceived ‘normal’ range. Standard deviation is used in mathematics and statistics to understand how far away from the ‘average’ or ‘mean’ numbers are, hence one or two standard deviation points. In medicine there are perceived ‘normal’ or common (the most likely) reactions to medicines administered, based on tests of large samples, so ‘abnormal’ reactions are less common and maybe life-threatening but are perceived as statistically infrequent. In psychology, the term ‘normal’ covers how the average person might react to a situation (for example, reactions devoid of
mental illness), and in the case of this thesis, in social science the term ‘normal’ covers the expectations set by society. Individuals are perceived to be ‘normal’ in UK society when they are: male/female, able-bodied, white, heterosexual, will get married and have children, and these are believed to be the default status in the absence of any visual/behavioural cues that would alert people otherwise (Abberley, 1993; Davis, 1995). Goffman (1963) has called these ‘virtual social identities’, however some individuals do not fit into these categories, and are the subject of this investigation. ‘Normal’ as decided by society can change, for example, having a mobile phone or broadband at home was seen as being ‘abnormal’ in the 1990s due to their high cost, but in 2017 the lack of these two technologies is seen as ‘abnormal’ and a sign of poverty. With more women and ethnic minorities gaining access to high calibre 20th century education, they can be found in greater numbers as members of parliament, judges and business leaders. It would now be ‘abnormal’ to perceive women as unable to attain such careers, however until fairly recently they were unable to vote in the UK (1928) or open up a bank account by themselves in their own name (1974) without their husband’s permission (McGee & Moore, 2014). However, Saudi Arabian women are still denied the right to education, employment, health, equality before the law, freedom of movement, and equality in marriage, with only 5% of women working in Saudi Arabia, and women only recently being allowed to drive (Human Rights Watch, 2010). Therefore what would be ‘normal’ in one country can be ‘abnormal’ in another.

Whilst most individuals are able-bodied, many are disabled, and the World Health Organization and The World Bank (2010) estimate that there are presently over a billion disabled individuals in the world’s population, estimated to be 15% of the world’s population (p.261), with an estimated 2.9% having severe disability and 15.3% with moderate or severe disability (p.296). Whilst many disabled individuals have visible markers of their disability (for example, use of a wheelchair or a white stick for blindness), more than half of all disabled individuals are estimated by the report have ‘invisible disabilities’, and – as the name suggests – these individuals have no visible markers to identify them as disabled, and can look ‘normal’ by society’s rules/generalisations (i.e. able-bodied).

Visible disabilities include those with physical disabilities and physical deformities, and equality legislation (Equality Act, 2010) has meant that new buildings should have wheelchair ramps and wider doorways to assist with accessibility and inclusivity. Whilst
individuals with ‘visual-based’ disabilities may sound ‘normal’, when seen face-to-face they are likely to be visually different to the society’s perceptions of ‘normality’. Invisible disabilities (the focus of this thesis) include those with asthma, diabetes, learning difficulties, mental health issues, multiple sclerosis, ME, etc. Whilst the Equality Act (2010) recognises all disabilities, those with invisible disabilities must make their ‘invisible’ disabilities ‘visible’ in order to claim allowances from organisations and employers. This ‘self-disclosure’ will be discussed further later in this chapter.

To conclude, it could be argued that those with ‘invisible’ disabilities face pressure to ‘come out’ or ‘self-disclose’ with possibly stigmatised attributes in order to gain allowances under equality legislation, so making themselves vulnerable to possible stigmatisation or discrimination. Also, there are many other groups in society with difference to the perception of ‘normality’ who can face stigma or discrimination when they ‘self-disclose’ their differences.

**Impairment vs disability**

The WHO’s International Classification of Disease (WHO, 1980) suggests that impairment and disability are different. ‘Impairment’ is defined as loss or abnormality of psychological, physiological or anatomical structure or function, but these do not always inhibit individuals (for example, short stature, hair loss, skin blemishes) and can vary according to historical data, culture and social variability. Weeks (1991) argues that homosexuality was once seen as a psychological abnormality, and Barnes (2012) suggests it was once perceived as a severe impairment that needed intervention according to the ‘medical model of disability’, but now it is seen within the range of ‘normality’ and is accepted by society, with any association of mental illness, disability or impairment vanishing. The term ‘normal’ was described in the last section (see p.246 in the section entitled ‘What is meant by disability’), and denotes a term that is widely used but rarely defined because it can vary according to its use, the most problematic for this thesis being in social science/society, where time and location are variables.

The Union of Physically Impaired Against Segregation (1976, p4) argued that ‘Disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from society. Disabled people are therefore an oppressed group in society’. Hunt (1966b, p.146) adds to this that ‘the problem of disability lies not only in the impairment of function and its effects on us individually, but more
importantly in our relationship with normal people’, so again suggesting disability is controlled by the values of society, not by the impairment itself.

Anastasiou & Kauffman (2011) argue that whilst using a singular term ‘disability’ is valuable for advocacy groups struggling for the rights of people with disabilities (Oliver & Zarb, 1989; Shakespeare, 1993), it is a problematic category for scientific purposes as it ‘constitutes a very abstract and general concept ... and does not allow theorists to communicate with each other with clarity as it conceals the heterogeneity of various disabling conditions’ (p.375), a view supported by Danermark & Coniavitis Gellerstendt (2004), covering conditions such as hearing impairments, physical disabilities, blindness, autism, traumatic brain injury, etc. Shakespeare & Watson (2002) in Anastasiou & Kauffman (2011) agree that the idea of a single ‘unified disability’ can allow critical differences between many disabilities to be ignored, and enormous variability amongst disabilities to be denied. Therefore they question the suitability of using a single term or model to describe the unique requirements of many different types of individuals who face different disabling barriers in society.

Therefore, when talking about ‘impairments’ which can be biological in essence (for example, a loss of a limb or a developmental neurological disorder), it is society that will judge if these impairments are ‘normal’ or ‘abnormal’, and decide if ‘inclusive’ allowances can be made to reduce or remove any disability that may be present. In many situations no/few allowances are needed as many impairments have minimal or no impact on performance (for example, poor eyesight corrected with the use of glasses, a visual/kinaesthetic art lesson which is dyslexic-friendly, or a debate for a dyslexic or visually-impaired individual). The challenge faced by society is to make all environments inclusive, so that barriers are reduced/eliminated, and that impairments do not become disabilities – only differences in learning or functioning.

The models in more depth

Whilst over-simplifying the subject, the ‘medical’ model perceives dyslexia, like other impairments, to be a deficit, requiring medical interventions to be fixed and then returned to society. This over-medicalisation of disability through defining disability through a person’s impaired body/mind can be argued as ‘oppressive’ and based on ‘abnormal functioning’ and the physical inability to perform tasks (Finkelstein, 1980; Barnes, 1992; Oliver, 2009). Goffman (1963) argues that, due to the ‘medical’ model of
disability, many with impairments try to hide their impairments as much as they possibly can to avoid being stigmatised (for having an abnormality), as the mark of stigma will highlight any difference they have to others in society.

This was very much a Victorian ideal that created the need for homes for the mentally ill (sanatoriums), and the concept of sending sick relatives away to the countryside or the seaside to be cured before returning to society. UK educational policy is very much based on the need of intervention for any child with a special educational need, rather than reviewing the environment the child learns in to see whether it is that which is disabling (Hearne & Stone, 1995; Amesbury, 2007).

Conditions that are developmental and medicalised are often reliant upon professional experts and others to provide therapeutic and social support. As impairments are presented as the root cause of disability in the ‘medical’ model, Barnes (2012) argued that logic dictates they must be eradicated, minimised or ‘cured’, and this rhetoric was used to campaign for the sterilisation of those with intellectual difficulties (Pfeffer, 1994; Davis, 1995). Where ‘cures’ are ineffective, which is more often than not the case, people labelled as ‘disabled’ can be viewed as economically and socially inadequate, and in need of ‘long-term expensive care’ (Stone, 1994; Wolfensberger, 1989; Albrecht, 1992; Oliver, 1990).

Alternatively, the ‘social’ model talks about differences (not deficits), which ‘separates out disabling barriers from impairment (not being able to walk or see or having difficulty learning’), according to Morris (2000, p.1). Priestley (2003) argues that most people experience illness at various stages of the life course, so impairment is a common occurrence, often due to health, environmental, or social causes, for example age, smoking, pollution or diet, etc. Barnes (2012) suggests that how people deal with impairment, whatever its cause or severity, is determined in many ways by their access to a range of social and material resources. Macdonald (2009a) believes such barriers can be class-based, in that impairments in middle-class individuals are commonly mitigated through access to software and family support, whereas working-class individuals have greater barriers/impairments due to a lack of access to services and family support, resulting in greater disability. If the impairment does not cause any barrier (may be easily mitigated, by use of glasses etc.), then it does not become a disability. The ‘social’ model, according to Oliver (1996), is not based on ‘individual limitations, of whatever kind, which are the cause of the problem but society’s failure to provide appropriate services and adequately
ensure the needs of disabled people are fully taken into account in its social organisation’ (p.4).

Beckett & Campbell (2015) argue that the ‘social’ model should be understood as an ‘oppositional device’, born out of the resistance by disability activists (Hunt, 1972; Holmes, 2007), and as a political force for change to society’s perceptions of disability and disabled people. Whilst the movement has many loyal advocates (Oliver, 2013; Tregaskis, 2002) there are calls for it to be reclaimed, revised, rectified (Allan, 2010) and even abandoned (Shakespeare & Watson, 2001) due to its believed emphasis on access to physical space for those with physical barriers, over those with other forms of disabilities (for example, mental illness or learning disabilities).

Interestingly, Barnes (1991) argues that humans are perceived as flexible and alterable, while the physical and social environment are assumed to be fixed and unalterable. However, looking at historical data, humans have always moulded their environment to suit their needs rather than the other way round. So the ‘medical’ model of disability, which requires people with impairments to be treated, changed, improved and made normal again, flies in the face of reality. The ‘social’ model, as advocated by UPIAS (1976), Finkelstein (1980) and Oliver (1990), has been criticised for excluding important dimensions of disabled people’s lived experience and knowledge, with Shakespeare & Watson (2002) arguing that the ‘social’ model is outdated as it was created in the 1970s, and 30 plus years later society has developed, albeit that ‘by arguing against the social model we are not denying that for much of the time the priority remains to analyse and campaign against social barriers, merely that we require a more sophisticated approach to disability’ (p.24). They offer three reasons why it is outdated. (1) Impairment and disability are not dichotomous, but describe different places on a continuum, or different aspects of a single experience. (2) Disability should not be reduced to a medical condition. It should not be overlaid with negative cultural meanings. Neither should it be reduced to an outcome of social barriers alone, however important these might be in people’s lives. (3) Intervention at physical, psychological, environmental and socio-political levels is the key to progressive change, yet one cannot be a substitute for the other. Social change remains the most expedient measure to remove the problems presented by impairment and its consequences. Lastly, arguing that any ‘failure to follow a social model line, or join with the disability movement, may be less of a failure of particular individuals, and more a limitation of the model or movement itself’ (p.25). Lang (2001), Crow (1996),
Morris (1991) and Hughes & Patterson (1997) argue that the ‘social’ model has focused on social change over that of the experience of those with disabilities, and ‘denies’ the physical and emotional pain and suffering experienced by disabled people in their daily lives. The call for the ‘social’ model to be reconceptualised to incorporate a ‘sociology of impairment’, or a ‘bio-psycho-social’ conception (Michailakis, 1997) begins such a discussion.

Anastasiou & Kauffman (2011) offer a different perspective on the ‘social’ model, or as they describe it, the ‘social constructionist approach’. They argue that the ‘writings of Abberley, Barnes, Oliver and Finkelstein, all individuals with [physical] disabilities…use their personal experiences to construct propositions that they generalise to all individuals’ (p.368). Barnes (2003) argues that the main criticism of mainstream disability research is that it is conducted by researchers without disabilities, however Anastasiou & Kauffman (2011) argue that Abberley, Barnes, Oliver and Finkelstein advocated the ‘social’ model for all disabilities based on the needs of those with physical needs. Oliver (2000) has since conceded that his views are ‘not always based on direct personal experience … [but] based solely on general sociological analysis’ (Anastasiou & Kauffman, 2011, p.379).

Grewal, Joy, Lewis, Swales & Woodfield (2002) identified that just over half of people with impairments surveyed did not identify themselves as disabled. Reasons varied: they did not think they were ill or incapacitated enough to count as disabled, or their health problems were part of an illness or getting older. The negative images they associated with disability caused many to be too embarrassed to identify as disabled, as they felt it was believed to be connected with a physical impairment: typically affecting mobility, was visible, led to dependency, had associated incapacity issues, and was a permanent condition. They also dismissed their own impairment as they felt they were mobile and capable, and they saw themselves being ‘normal/able-bodied’ (Watson, 2002).

Watson (2002) found that, in some individuals with the same impairment, one classed themselves as disabled and the other didn’t, and when asked a reason why, the one that classed themselves as disabled was claiming disability allowances so felt validated to use the label. Morris (1991) suggests that those who have impairments but deny their disability are ‘passing’ as able-bodied, and are commonly seen as traitors to the disabled people’s movement. However, Kanuha (1999) argues that it might not be that they are actively rejecting a disability identity but simply attempting to reduce their experience of psycho-emotional disablism at that time and place.
More recently, Barnes (2012) argued that there is a ‘social model impairment–disability dichotomy’, which does not deny that some impairments limit people’s ability to function independently, and that disabled people have illnesses at various points in their lives and that appropriate medical interventions are sometimes necessary. Therefore the promoters of the ‘social’ model need to accept that the ‘medical’ model is also valid, and that while environments can be improved to increase accessibility there is also a need for the medicalisation and treatment of some impairments, for example, asthma, diabetes, brittle bone disease, etc. This could be called the ‘bio-social’ model of disability, which recognises both biological and social barriers (Riddick, 2010).

Alternatively, Reeve (2004) argues that a ‘psycho-emotional model of disability’ offers a more sophisticated tool for understanding the breadth of experiences from disability and any associated issues of disability identity. Lang (2001) suggests the ‘social’ model ‘should not be considered as a monolithic entity, but rather as a cluster of approaches to the understanding of the notion of disablement’ (p.2), therefore offering a means to include a number of theories to create a political platform to secure the ‘rights of disabled people in society’.

Lastly, several researchers now indicate that social variables such as social class, gender and ethnicity affect disabling barriers (Thomas, 2002; Hernandez, 2005; Macdonald, 2009a, b). Macdonald (2009b) found with adults with dyslexia that middle-class groups had greater access to support services and technologies, improved educational chances and financial considerations from their families, than working-class groups. It is argued that this leads to greater barriers for working-class dyslexic adults ‘gaining’ employment (for example with interview procedures), than retaining employment. Therefore, according to Nicolson (2015), Logan (2010a, b), Pino and Mortari (2014), Riddick (2001), MacDonald (2009b) the label of dyslexia can offer both positive perceptions when it is identified with positive strengths (e.g. creativity, people skills) or negative perceptions when discussing related difficulties (e.g. lack of employment or imprisonment).

**The social model of dyslexia**

The ‘social model of dyslexia’ is a new theoretical theory based on the ‘social model of disability’ (Cooper, 2006, 2009, a; Riddick, 2010; Mortimore & Dupree, 2008) to align ‘dyslexia studies’ with that of ‘disability studies’ (Barton, 2006; Oliver, 2009; Barnes & Mercer, 2010). They argue that, whilst the barriers faced by individuals with dyslexia are
‘biological’ in nature, it is society’s constructs that cause any disability or barriers. Advocates suggest that whilst any diagnosis is important to individuals redefining their personal identity, it is the support offered to counter negativity in society that is more important (Macdonald, 2010a; Riddick, 2010). Based on this, McNulty (2003) and Riddick (2010) suggested the lack of support, late diagnosis and long-term unemployment prospects lead many with dyslexia into criminal activity. Oliver (2009) supports this view, claiming that employment for disabled individuals does not just entail adjustments for the individual in the workplace but changes in social understanding/stereotypes, education and culture. Cooper (2006) argues that dyslexia is an ‘experience that arises out of natural human diversity on the one hand and a world on the other where the early learning of literacy, and good personal organisation and working memory is mistakenly used as a marker or intelligence. The problem here is seeing difference incorrectly as deficit’ (p.1).

Elliot (2005) supports the notion that dyslexia is a ‘social construct’, despite having a genetic and neurological basis, but he also argues that there is little difference in the educational interventions for those labelled ‘dyslexic’ to those labelled ‘poor readers’, however parents actively attempt to have their children labelled as dyslexic because of the stereotype that dyslexic individuals are exceptionally bright. However, Riddick (2000) and Macdonald (2009b) comment that labelling in education is essentially negative as it becomes attached to the whole identity, rather than positively perceived as just one part of a person’s constructed-self, and parents are encouraged to see difficulties as medically rather than socially constructed. Macdonald (2013), in another study, suggests that the social model of disability steers us to understand dyslexia as both a ‘social construct’ as well as a ‘neurological difference’. Danermark (2001) helps to understand this dichotomy, with Macdonald suggesting that whilst ‘biology shapes the embodied experience, …it is how the embodied experience is defined, excluded, segregated and is rejected by society that constructs disabling barriers and shapes the fundamental experiences of disability’ (Macdonald, 2013, p.64). Shakespeare (2006) believes that dyslexia can be understood through ontology (the study of reality) and epistemology (the study of knowledge), so understanding that dyslexia is lived through both the embodied experience of impairment and also the discriminatory forces of disability understood through the social model of disability. Macdonald (2009b) argues that whilst there is a biological ontology to dyslexia, there are also social implications from social interpretations which have caused
discrimination and exclusion for many with dyslexia, and therefore advocates a ‘bio-social model of disability’.

Dyslexia has long been argued by Tim Miles to be ‘medical in origin but educational in treatment’ (Miles & Miles, 1999), and as UK educational policy is based on the ‘medical’ model of disability, the author argues that to leave diagnosis and treatment in the hands of professionals who may not truly understand the barriers faced, who maybe blinkered by the need for educational treatment (for example, gaining literacy and numeracy skills), may dismiss possible invisible secondary needs of the whole child (the emotional manifestations of educational failure). Macdonald (2009a) argues that middle-class dyslexic groups can be advantaged over working-class dyslexic groups through their ability to access support services (family, specialist teaching, technology, etc.) and through their ability to develop coping strategies to survive in the workplace through educational advantage and greater access to financial support from family. This means working-class dyslexic groups may experience greater barriers gaining employment through misunderstanding the interview process and having problems accessing suitable support (for example, use of technology for grammar/spell checking), a view also supported by Vernon (1999).

In conclusion, Amesbury (2007) suggests that the debates regarding dyslexia fall into two areas: firstly, the diagnostic label which relates to the ‘medical’ model and dyslexia being a disability; and secondly, seeing dyslexia as a learning difference rather than a deficit that needs to be fixed, so that strengths and abilities are promoted (West, 1997; Cooper, 2009), which is more in tune with the ‘social’ model of disability. The promotion of strengths and positive role models (such as Sir Richard Branson, Lord Alan Sugar and Sir James Dyson, etc.) has been important to changing the perceptions of dyslexia in the public eye from something to hide and be ashamed of, to something to be proud of and to promote as a sign of creativity and entrepreneurial skills (Logan, 2009; Agahi, 2015; Threlkeld, 2015; Made by Dyslexia, 2017).