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Dyslexia and Policing: Understanding the Impact that Dyslexia has in the Police Service in the England and Wales

Abstract:

Purpose

This article explores the experiences of officers/civilians with dyslexia serving in the police service in England and Wales. Although there has been a growing body of research which has analysed the experiences of offenders and victims with dyslexia, there have been few studies focusing on the experiences of police officers/civilians with this condition. This study employs the social model of disability to conceptualise the experiences of these police officers/civilians from a disability rights perspective.

Design

This applies a quantitative methodology to analyse data on disabling environments experienced by officers/civilians serving in a police service situated in the North of England. The paper collected data from 56 police employees previously diagnosed with dyslexia.

Findings

The findings reveal that a significant number of officers were reluctant to disclose that they had dyslexia to their police service. The choice to disclose was a key concern for officers/civilians, as this was directly linked to their experiences of stigmatisation, as well as the risk of their competences being questioned at work. The analysis presents evidence that, although officers/civilians have legal protections under the *Equality Act* (2010) in the United Kingdom, very few had experienced any form of 'reasonable adjustment' in the workplace.

Originality/value

Drawing on the social model of disability, the article concludes that the police service must improve access to reasonable adjustment, for example, through the use of assistive technologies, to create a more inclusive and supportive working environment for their employees.

Introduction

Over recent years there has been a small but growing body of literature examining the experiences of adults with dyslexia (Bartlett & Moody 2010; Leather *et al.* 2011; Macdonald 2009; Moody 2016; Reid 2010; Skinner & MacGill 2015). Traditionally, research in the field of dyslexia has been dominated by a pathological description of the condition, or the impact that dyslexia has in education (Frith & Frith 1996; Nicolson & Fawcett 1990; Snowling 2000). With reference to research into dyslexia and adulthood, these studies have predominantly focused on the impact that dyslexia has within the workplace (Bartlett & Moody 2010; Fitzgibbon & O'Connor 2002; Reid 2010). However, within this body of literature numerous studies have

moved away from the traditional biomedical perspective of dyslexia and adopted a social model approach to comprehend barriers within employment (Bartlett & Moody 2010; Collinson & Penketh 2010; Hill 2013; Macdonald 2009; Skinner & MacGill 2015). Although there have been numerous studies of dyslexia and employment, very few studies have been conducted exploring how dyslexia affects police officers working in often stressful and complex environments (Hill 2013; Kirby 2016).

This article will commence by discussing disability employment legislation that makes it unlawful to discriminate against disabled people based on their impairment (*Equality Act* 2010; Kirby 2016). The authors will discuss key concepts such as 'reasonable adjustment' and 'disabling barriers' that affect people with dyslexia in the police service (Bartlett & Moody 2010; Hill 2013). The article will reveal that for officers/civilians diagnosed with dyslexia (n = 56) a significant issue arose concerning dyslexia disclosure (Hill 2013). The findings discovered that just under half of officers diagnosed with dyslexia had not informed the police service of their condition, and the reasons given by officers/civilians for not disclosing were due to concerns about stigmatisation and discrimination. The findings will reveal that very few officers/civilians who have disclosed have then received access to support or adjustment in the workplace, and some employees have experienced discrimination. This article concludes by suggesting that, to foster an inclusive working environment within the police service, key barriers must be recognised and removed to allow officers/civilians the ability to achieve their full occupational potential. The authors suggest that by doing this the police service will be compliant with

employment legislation, and this may also improve staff retention and retain valuable occupational experience and skills (Hill 2013; Kirby 2016).

Dyslexia and Employment

Since the 1990s there has been an emergence of government legislation in the United Kingdom aimed at eradicating disability discrimination within the workplace. Policies such as the *Disability Discrimination Act* (1995) and later the *Equality Act* (2010) have made it unlawful to discriminate against people on the grounds of disability. In these acts, the definition of disability incorporates dyslexia as an impairment, resulting in legal protection of the rights of people with this condition. As Bartlett and Moody (2010) state, contemporary social policy has developed a dyslexia-friendly approach intended to reduce any form of disadvantage a person might experience in the workplace due to their impairment. Consequently, it is unlawful for employers to actively discriminate against the selection of candidates, or to end a person's employment, due to issues affected by dyslexia. Therefore, employers have a legal responsibility to make reasonable adjustments in the workplace to create an inclusive working environment for all disabled people (Bartlett & Moody 2010; Moody 2016; Reid 2010).

As stated, research into dyslexia and employment has generally applied a disability rights perspective, which is advocated by the social model of disability (Bartlett & Moody 2010; Moody 2016; Reid 2010). In research by Bartlett and Moody (2010), a significant theme that emerges is anxieties about disclosure. They suggest that people with dyslexia have key concerns about informing their employers for fear of negative or discriminatory attitudes from co-

workers, managers and/or employers. Skinner and MacGill (2015) suggest that supportive or openly discriminatory attitudes of managers/co-workers are central in nurturing either an inclusive or a discriminatory environment, respectively, within the workplace. Disabling attitudes by managers not only negatively impact on the wellbeing of employees with dyslexia, but can also lead to reduced promotion opportunities, or even staff leaving their employment altogether. Therefore, for many adults with dyslexia, the management of stigmatisation becomes the central feature in their decision whether to disclose dyslexia to their employer (Hill 2013; Macdonald 2010; Riddick 2000; Skinner & MacGill 2015).

If an individual has made a disclosure to their employer, Bartlett and Moody (2010) and Moody (2016) observe that it is vital that the establishment has a clear understanding of disability legislation and the concept of 'reasonable adjustment'. They suggest that disability/dyslexia awareness training is a vital component of their responsibilities, to give employers the skills needed to make workplace adjustments, such as allowing extra time, access to dictate and text-to-read software, the use of dictaphones, secretarial support, etc. Hence, Moody (2016) and Reid (2010) illustrate the importance of environmental adjustments within the workplace, particularly around access to relevant ICT systems and assistive technologies, since these technologies can help remove significant disabling barriers experienced by people with dyslexia, especially concerning literacy skills. Reid (2010) and Skinner and MacGill (2015) also illustrate the importance of flexible time management in relation to specific work-based duties, which can make the difference between empowerment and disengagement. Therefore, these authors

suggest that in order to create inclusive spaces within the workplace there must be a focus on barrier removal to include dyslexic employees within the contemporary workforce.

Although contemporary policy advocates an inclusive environment, focusing on barrier removal within the workplace, a number of qualitative studies into dyslexia and employment have highlighted the complexity around issues of inclusion and discrimination (see Macdonald 2009; Skinner & MacGill 2015; Tanner 2009). Research by Macdonald (2009) suggests that socioeconomic status impacts on the inclusiveness of a working environment for disabled people, and that middle-class employers are far more effective in barrier removal than their workingclass counterparts. In Macdonald's research on adults with dyslexia, he suggests that although middle-class participants reported experiences of discrimination and stigmatisation, they were far more likely to be in long-term employment and had far better strategies for confronting barriers. Furthermore, this group were most likely to have access to assistive technologies and increased strategies for overcoming literacy difficulties within their professional roles compared with their working-class counterparts. Skinner and MacGill (2015) advance Macdonald's work by illustrating that not only does socio-economics impact on the experience of barriers in the workplace, but so does gender. They illustrated a number of intersectional relationships between socio-economics, gender and dyslexia which significantly disadvantaged participants in their study. Further, Skinner and MacGill (2015) suggest that not only do mothers often experience hostile gendered and disabling working environments, but these women also had to manage their children and family lives. Their occupational experiences were subsequently affected by their impairment, particularly relating to difficulties with short-term memory and literacy skills. Therefore, it was commonplace for women in this study to have experienced aspects of intersectional structural discrimination due to issues of gender, social class and disability.

Models of Disability

From a biomedical perspective, dyslexia is conceptualised as a neurological dysfunction which manifests in difficulties with reading, writing, short-term memory and organisational skills (Snowling 2000). From this perspective, a person with dyslexia is disabled by their pathological limitations, which negatively affect social interactions, resulting in difficulties in education and employment opportunities in adulthood (Macdonald 2009; Macdonald & Deacon 2019). Although the biomedical model is very rarely directly referred to in dyslexia research, scholars such as Campbell (2013), Macdonald (2009) and Pollak (2009) suggest that this is the dominant approach used in defining difficulties experienced by people with dyslexia, particularly in childhood. This can be seen in educational research, where, although the concept of inclusion has dominated professional practice since the 1970s (Cole 2005), expectations about children's abilities and inabilities are dominated by assumptions concerning pathological dysfunction and educational failure.

Yet, over recent years there has been a growing amount of research applying the social model to the study of dyslexia (Collinson & Penketh 2010; Hill 2013; Macdonald 2009; Macdonald & Deacon 2019; Mortimore & Dupree 2008; Riddick 2001; Skinner & MacGill 2015). This perspective has emerged from a constructionist paradigm of disability studies. Scholars such as

Vic Finklestein and Mike Oliver established this approach grounded in their experiences as wheelchair users. As Oliver suggests, the problems he experienced in adult life were not due to the fact that he could not stand up, but rather that built environments and transport systems prevented him from full access to social participation because of disabling environments. The social model presents a direct critique of the biomedical comprehension of disability, which conceptualises biological dysfunction as the key problem associated with disabling factors. Therefore, the social model of disability presents an alternative view which looks towards environmental factors in order to comprehend the difficulties experienced by individuals with a range of impairments, including dyslexia.

From this perspective, difficulties experienced firstly in education and later in the workplace are not due to a dysfunctional pathology, where adults can or cannot do certain normative tasks, but rather due to environmental and attitudinal barriers which exclude and discriminate against people with this condition. From this perspective, dyslexia is conceptualised as a neurological variation and becomes a disability due to structural disabling environments. Therefore, difficulties experienced by individuals with dyslexia exist because of an inaccessible education system and disabling working environments. The social model has significantly influenced contemporary disability legislation, particularly with reference to the concept of 'reasonable adjustment', and gives academics and employers a toolkit to move away from pathological explanations of dysfunction in order to analyse environmental and attitudinal barriers experienced by people with dyslexia, in childhood and adulthood (Beckett & Campbell 2015; Macdonald 2009; Macdonald & Deacon 2019). Therefore, this approach can be applied to

recognise and remove discriminatory systems in order to foster inclusive environments for people with a range of impairments and neurological variations.

Dyslexia and Policing

As the police service is not only a public service but also an employer, it has the same legal responsibilities to its employees as any other non-statutory employer under the Equality Act (2010). Consequently, not only does the police service have to make reasonable adjustments for disabled offenders and victims, it also has a legal obligation to make reasonable adjustments in the workplace for its officers/civilians (Kirby 2016). Although there has been a growing body of research focusing on links between dyslexia and criminality amongst offenders within the criminal justice system (Dåderman et al. 2012; Kirk & Reid, 2001; Macdonald, 2012; Selenius et al. 2006), very few studies have been conducted examining disability discrimination and inclusive employer practices within the police service, or other criminal justice institutions. Although a number of police studies have referred to dyslexia within their research (Kirby 2016; Mawby & Zempi 2016), these studies have not specifically focused on how police employees, and their ability to undertake diverse forms of police work with complex requirements, may be affected by dyslexia. However, these studies do give us a window into the impact of disabling barriers on serving police officers/civilians with dyslexia (see Kirby's 2016; Mawby & Zempi 2016).

One such study by Amanda Kirby (2016) has demonstrated the importance of police services implementing the *Equality Act* with reference to reasonable adjustment for serving police

officers with specific learning disabilities. In her analysis, she emphasises the complex nature in applying the *Equality Act* (2010) within the police service, and offers direction with reference to the importance of identification, disclosure and barrier removal in order to facilitate inclusive practice. Similarly, whilst not focusing directly on dyslexia and employment practices, Mawby and Zempi's (2016) study illustrates the presence of disabling discriminatory attitudes within a police service that obstructs inclusive practice. Consequently, parallels are drawn between the discriminatory experiences encountered by officers/civilians with dyslexia, and officers/civilians who have endured sexist and racist attitudes within the service.

Yet, it is in the work of Andy Hill (2013) where the most comprehensive analysis of the impact of dyslexia on serving police officers has been documented. In Hill's (2013) doctoral research he presents a qualitative analysis of the lived experiences of serving police officers from multiple different police services in England. This study illustrates key issues of structural discrimination that directly impact on police officers. Key disabling barriers are indicated in this research, such as the police service's poor awareness of equality legislation, their ineffective approaches to entrenching assistive technology into regional and national police IT systems, and discriminatory attitudes by junior and senior colleagues within the service.

Hill (2013) identifies four key concepts which define the experiences of police officers with dyslexia. His first concept refers to the formation of 'dyslexia identity' which had been negatively shaped by participants' previous experiences of educational exclusion impacting on self-esteem and self-confidence. Thus, participants would enter the police service constructing

dyslexia from a deficit perspective, which led to some officers attempting to conceal their condition from the organisation (Hill 2013). Hill's second concept refers to issues concerning 'disclosure'. He suggests that officers' own negative views of the condition led to some participants not disclosing dyslexia to the service. Unfortunately when participants did disclose their deficit, their beliefs were confirmed by the police service, as they subsequently experienced negative attitudes from colleagues and senior officers in the service. For these officers, disclosure resulted in discriminatory practices within the police service. Hill's third concept refers to police culture. He proposes police procedures are often rigid in nature, and construct structural barriers relating to 'routine policing activities'. Hill suggests that routine activities, such as the requirement to hand-write statements, significantly disadvantage officers with dyslexia, often leading to perceptions of 'incompetence'. Hill's final concept refers to 'help and support'. This study indicated that the police service offered no reasonable adjustments for officers with dyslexia. Hill's study highlighted how the police service was unable to, or refused to, offer adequate support for officers with dyslexia, which subsequently led to some of his participants leaving the service. Thus, this study illustrated that although the Equality Act (2010) requires the police service to make reasonable adjustments, in reality this was not taken seriously by the organisation.

Hence for Hill, a combination of environmental structural barriers negatively interacted with a dominant police culture that produces disablist practices, disablism and discrimination, and which, in turn, significantly impacts on stress levels, job satisfaction and promotion opportunities for police officers with dyslexia. Hill (2013) concludes by advocating for the

application of the social model into policing practices to confront structural discriminations and remove disabling barriers that officers experience within the contemporary police service. This study extends Hill's (2013) research by statistically analysing the employment experiences of officers/civilians working in the police service. This article will locate and analyse key disabling barriers experienced by serving police officers and police employees who have dyslexia (Bartlett & Moody 2010; Hill 2013). Thus, the data presented in the findings section will apply the social model to analyse quantitative data in order to explore key disabling barriers experienced by people with dyslexia within the police service.

Methodology

The aim of this project was to explore the experiences of people with dyslexia employed by a police service in the North of England. This project was significantly influenced by Hill's (2013) study where 25 police officers were qualitatively interviewed in order to represent the voices of disabled employees within the police organisation. Hill's four concepts, 'dyslexia identity', 'disclosure', 'routine police activities' and 'help and support', were incorporated into the survey design alongside key concepts developed from the work of Macdonald (2009) and Skinner and MacGill (2015) relating to dyslexia diagnosis, coping strategies, assistive technologies and barrier removal. It should be noted that this study applies a Disability Studies perspective where service user voices are central to all forms of data collection and analysis. Therefore, when quantitative research is undertaken, the survey design must be underpinned by the lived experiences of disabled people from primary or secondary sources (see Macdonald & Deacon 2019b). Thus, the study aimed to quantify the lived experiences from the above studies in order

to provide evidence of discriminatory practices, which can then inform future police practices in the UK.

Although this study was significantly influenced by the work of Hill (2013), there were also key theoretical differences between the philosophical underpinnings of our study and Hill's. Hill's research is heavily influenced by the work of David Pollock (2009) from a cultural disability studies perspective, drawing influence from social model writers, alongside the work of radical philosophers such as Michel Foucault. Although Hill's four key concepts are used throughout the data findings, the philosophical justification of this study is motivated by the work of Tom Shakespeare (2015) from a critical realist disability studies perspective, which is in turn influenced by philosophers such as Roy Basker (see Macdonald 2013; Macdonald & Deacon 2019b). Thus, the authors utilise a critical realist philosophy regarding disability and impairment, and this research employs the social model of disability in respect of the data analysis (see Macdonald 2013). The authors apply the social model, which classifies 'disability' as disabling structural barriers and 'impairment' as a biological/neurological variation (Oliver 2009). Thus, the article draws on a post-positivist perspective to develop an interpretative approach, which underpins the survey design and is applied within the findings section.

Traditionally, disability studies relied entirely on the qualitative experiences of disabled people in order to generate knowledge of disability and disabling environments. However, recent criticisms from both within disability studies and from the broader social sciences have

suggested social model researchers have become over-reliant on qualitative samples to justify their claims that disability results from social organisation, rather than because of an individual functional limitation (Shakespeare 2013). Therefore, there has been a recent movement within the discipline to quantify these lived experiences in order to relate the experiences of disability to a larger sample group. Developing projects with larger and more reliable samples can have a greater influence over social policy formation and the development of professional practice (Macdonald & Deacon 2019b). Thus, the aim of this study is to explore the experiences of dyslexic officers/civilians within the organisation, and to assess whether the level of support received from their police service sufficiently protects them as required under the *Equality Act* (2010) to influence policing structures and cultures within the UK. Founded on the lived experiences of adults with dyslexia that emerged from previous qualitative studies (Hill 2013; Macdonald 2009; Skinner & MacGill 2015), this research employed a quantitative methodology to explore police officers'/civilians' experiences by means of statistical techniques.

The aim of the study was to develop a survey underpinned by social model principles. Thus, rather than defining dyslexia through a deficit perspective, which infers that those who have dyslexia cannot adequately perform policing duties due to the nature of their impairment, the authors adopt a social model approach posing that difficulties experienced by those with dyslexia in conducting police work are caused by environmental barriers in the workplace. Shakespeare's critical realist perspective illustrates how impairment types interact with the social environment and create specific disabling barriers which affect specific impairment groups in different ways. Drawing on this perspective, it was important to incorporate the

impact of impairment (neurological difference, i.e. dyslexia) and the differential experiences of disability (i.e. environmental disabling barriers) in the workplace when designing the survey. Hence, this led to the creation of a survey comprised of 30 questions organised around four key research themes – dyslexia diagnosis, perceived severity, impact of dyslexia on policing, and accessing support – which were developed from the qualitative literature and aimed to represent the experiences of this minority population (Macdonald 2009; 2010; Hill 2013; Skinner & MacGill 2015).

The study recruited participants from a range of different roles within a police service in Northern England. Data was collected by means of an online survey which was conducted independently of the police service by the authors at the University of Sunderland. The survey was sent out to all police staff within the organisation, with the encouragement of senior managers to take part in the research. It should be noted that the research was entirely voluntary, and no identifiable information about employees was collected. The data collection phase took place between September 2017 and January 2018, and produced a sample size of 598 participants, equivalent to 12.3% of the overall police service population (n = 4,859). The majority of participants sampled (n = 337, 56%) did not have dyslexia and did not have any concerns about their literacy skills. However, 261 (44%) participants either had been diagnosed with dyslexia (n = 56), self-identified as having undiagnosed dyslexia (n = 143), or experienced literacy difficulties in the workplace (n = 63). This article will predominantly draw on the sample of participants who have been diagnosed with dyslexia (n = 56) as it is these officers/civilians who are legally protected under the *Equality Act* (2010) as they had been formally identified

with a specific condition which has impacted on their daily working lives. Although the social model would not traditionally focus on specific diagnosis, from an organisational perspective the police have a legal duty under the *Equality Act* (2010) to support those who have been officially defined as 'disabled'. Whilst it is acknowledged that those who self-identify will experience barriers and should also receive support, this paper focuses on participants who have been diagnosed as having dyslexia, since it is this group who are legally entitled to reasonable adjustments within their working environment.

The data was analysed using descriptive statistics in the form of frequency and cross-tabulation tests using SPSS. This was to examine the frequency distribution of cases, in order to identify any single variable analysis or correlations between two or more variables. It should be observed that, because the article utilises data from the smallest sample in the study, the findings in this paper employ a univariate analysis throughout. Therefore the findings present single variable analysis in the form of frequency tables to represent the experiences of police employees diagnosed with dyslexia. From this data analysis, three themes emerged from the univariate data, which were: dyslexia identification; disclosure of dyslexia; and perceptions of dyslexia in employment (Hill 2013; Macdonald 2009).

Social Demographics

As can be viewed in Table 1, the total sample size in this study was 598 police participants. Most officers/civilians, at 56.4% (n = 337), did not report having dyslexia or reduced literacy skills. Yet, 23.9% (n = 143) of the sampled population reported as having self-identified (undiagnosed)

dyslexia. This was followed by 10.4% (n = 62) of police officers/civilians reporting literacy difficulties, but these participants did not conceptualise their difficulties as dyslexia traits. The smallest population, at 9.4%, were participants who had been diagnosed with dyslexia. It is this 9.4% (n = 56) who will be the primary focus of this particular article.

In this population, there was a slight gender bias towards males, with 57.1% males compared with 42.9% females. However, this is much more proportionate to the general population compared to the most recent national data on police officer strength, which currently stands at 71% male and 29% female (Hargreaves *et al.* 2017). When exploring the age ratio of diagnosed participants, the vast majority of this group were in the 25 to 34 age category, at 35.2%. This was closely followed by the 35 to 44 age group, at 33.3%, but this decreased to 22.2% for the 45 to 54 age category. However, it was the 19 to 24 age group, at 3.7%, and the 55 to 64 age group, at 5.6%, who were most underrepresented within this diagnosed population.

With reference to ethnicity, the vast majority of participants, at 98.2%, were from a white ethnic group. Only one officer who had been diagnosed with dyslexia was from a black ethnic background. In general, ethnic minority groups were underrepresented within this sample of police officers and civilians. A partial explanation for this figure may be because the North East of England has one of the lowest ethnic minority populations within England, at 6%, yet ethnic minority groups are underrepresented, at 4.4% within the police service in general (Rowe & Ross 2015). With reference to participants' employment duties, the vast majority of

participants, at 62.5%, were serving police officers. This was followed by department/command police staff, at 37.5% (including PCSOs). Interestingly, there were no senior officers in this study who had been diagnosed with dyslexia.

Social Demographics

Variable Categories	Variable Values	%	n
Sex	Male	57.1	32
	Female	42.9	24
	Total**	100.0	56
Age	19-24	3.7	2
	25-34	35.2	19
	35-44	33.3	18
	45-54	22.2	12
	55-64	5.6	3
	Total*	100.0	54
Police Role	Department/Area Command Police Staff	37.5	21
	Police Officer	62.5	35
	Senior Officer	0	0
	Volunteer	.0	0
	Total**	100.0	56
Ethnic Groups	White	98.2	55
·	Asian	0	0
	Black	1.8	1
	Total**	100.0	56
Dyslexia Diagnosis	Self-identified Dyslexia	23.9	143
	Diagnosed Dyslexia	9.4	56
	Literacy Difficulties	10.4	62
	None	56.4	337
	Total**	100.0	598

^{*}Note: missing response data n = 2

Findings: The Impact of Dyslexia on Organisational Duties

When exploring the impact of disabling barriers associated with dyslexia on policing duties, participants discussed the effect their difficulties had on operational expectations. As Table 2 reveals, the vast majority of participants described experiencing moderate to severe difficulties in their professional roles. Therefore, 43.8% of participants recounted having moderate difficulties, followed by 20.8% reporting significant problems. However, this decreased to only

^{**}Note: missing response data n = 0

2.1% of police participants reporting profound difficulties during their operational duties. As Table 2 displays, 33.4% of participants described experiencing mild or minor difficulties during work.

Impact of Dyslexia Within the Police Service

Severity	%	n	
Minor	16.7	8	
Mild	16.7	8	
Moderate	43.8	21	
Significant	20.8	10	
Profound	2.1	1	
Total*	100.0	48	

*Note: missing response data n = 8

A further analysis was completed to identify which aspects of policing duties were affected by barriers associated with dyslexia traits/literacy difficulties. The three key areas that emerged from participants were responsibilities associated with spelling/writing, short-term memory, and reading. As can be seen in Table 3, spelling had the most significant effect on operational duties for police officers/civilians in this study, with 83.7% of participants reporting moderate to severe difficulties with writing during operational duties. Only 16.3% described writing difficulties having a slight or no effect on their current employment responsibilities. Table 3 also reveals that 61.3% reported having moderate to severe memory difficulties due to expectations concerning recollection. Similar trends can be seen with reference to reading, as 61.2% of police employees described moderate to severe difficulties concerning reading expectations within their employment duties. As shown in Table 3, very few police employees thought that spoken language or organisational difficulties were a barrier within the workplace. Hence, more than half of participants with dyslexia, at 61.2%, did not think they had poor organisational skills, and

81.7% described that spoken language difficulties had either no effect, or only a slight effect, on their professional roles.

Table 3
The Impact that Dyslexia has Within the Workplace

Variable Categories	Variable Values	%	n	
Reading	No effect	12.2	6	
	Slight effect	26.5	13	
	Moderate effect	40.8	20	
	Significant effect	16.3	8	
	Severe effect	4.1	2	
	Total*	100.0	49	
Spelling	No effect	2.0	1	
	Slight effect	14.3	7	
	Moderate effect	30.6	15	
	Significant effect	32.7	16	
	Severe effect	20.4	10	
	Total*	100.0	49	
Memory	No effect	22.4	11	
	Slight effect	16.3	8	
	Moderate effect	32.7	16	
	Significant effect	18.4	9	
	5Severe effect	10.2	5	
	Total*	100.0	49	
Organisation	No effect)	26.5	13	
	Slight effect)	34.7	17	
	Moderate effect)	22.4	11	
	Significant effect)	12.2	6	
	Severe effect)	4.1	2	
	Total*	100.0	49	
Spoken language	No effect	42.9	21	
	Slight effect	38.8	19	
	Moderate effect	14.3	7	
	Significant effect	4.1	2	
	Severe effect	100.0	49	
	Total*	42.9	21	

^{*}Note: missing response data n = 7

Disclosure of Dyslexia

The concept of disclosure has been considerably debated within previous research in the area of dyslexia and employment (Hill 2013; Kirby 2016). For an employee to get access to 'reasonable adjustment' within the workplace they must disclose their impairment to their employer. Thus, for disclosure to take place employees must be confident that this will result in a positive outcome and not lead to discrimination (Bartlett & Moody 2010). When exploring whether

police officers/civilians had informed the police service that they had dyslexia, 52% had disclosed their condition to the organisation. As can be observed in Table 4, although more than half of employees were confident in disclosing their condition to their organisation, a further 37% of officers/civilians were not confident about disclosing dyslexia.

Table 4:

Disclosure			
Informed Organisation	%	n	
Yes	51.8	29	
No	48.2	27	
No Total*	100.0	56	

^{*}Note: missing response data n = 0

When exploring why police employees had decided not to disclose dyslexia to the police service, the two key areas of anxiety that emerged were fears concerning their competency being questioned, and the possible impact of negative perceptions of dyslexia on future promotions. As can be seen in Table 5, 47.1% of employees had decided not to inform the police service, as they felt questions would be asked about their competency in their current employment role. Similarities can be observed with officers/civilians concerned about negative perceptions of dyslexia restricting their future promotion opportunities, as 47.1% of participants described concerns relating to negative stereotypes of dyslexia impacting on promotion. However, slightly fewer employees were concerned about issues of stigma, as only 23.5% of employees reported being worried about experiencing stigmatisation from their colleagues because of their dyslexia. Respectively, only 23.5% of participants were also concerned about experiencing stigmatisation from their organisation. Very few participants, at 5.9%, reported concerns relating to workplace resentment by other colleagues. Hence, police employees within this study were not concerned about resentment due to 'special' treatment relating to issues of disability support.

Table 5: Reasons for not disclosing

Variable Categories	Variable Values	%	n
Fear of stigma from colleagues	Yes	23.5	4
	No	76.5	13
	Total*	100.0	17
Fear of stigma from within the organisation	Yes	23.5	4
	No	76.5	13
	Total*	100.0	17
Fear of competency being questioned	Yes	47.1	8
	No	52.9%	9
	Total*	100.0	17
Fears of a detrimental impact upon prospects of promotion	Yes	47.1%	8
	No	52.9%	9
	Total*	100.0	17
Fear of resentment from colleagues towards special treatment	Yes	5.9%	1
	No	94.1%	16
	Total*	100.0	17

*Note: missing response data n = 10

The study also explored whether there had been any undesirable results of disclosure for officers/civilians who informed their police service. Table 6 reveals that, although many officers have not experienced any adverse treatment after disclosure, a significant number of participants had suffered some negative reactions from their service. As can be observed, 41.4% of respondents suggested that their competency had been questioned after disclosing dyslexia. A lower, yet significant number of respondents expressed the view that disclosing their dyslexia had affected their employment prospects. Interestingly, there may be some evidence to support this claim, as no officer of senior rank reported they had been diagnosed with dyslexia in this study. A further 20.7% of employees reported that they had experienced stigma from colleagues, and stigma within the organisation, after disclosing dyslexia. Additionally, 17.2% reported that they had experienced resentment from other colleagues due to special treatment. Unexpectedly, only 34.5% of respondents reported that they had only experienced positive reactions from senior staff after disclosing dyslexia to the police service.

Table 6: Experiences after disclosing

Variable Categories	Variable Values	%	n
I have experienced only positive reactions	Yes	34.5	10
	No	65.5	19
	Total*	100.0	29
Stigma from colleagues	Yes	20.7	6
	No	79.3	23
	Total*	100.0	29
Stigma from within the organisation	Yes	20.7	6
	No	79.3	23
	Total*	100.0	29
Competency being questioned	Yes	41.4	12
	No	58.6	17
	Total*	100.0	29
Fears of a detrimental impact upon prospects of promotion	Yes	27.6	8
	No	72.4	21
	Total*	100.0	29
Resentment from other colleagues towards special treatment	Yes	17.2	5
- · · ·	No	82.8	24
	Total*	100.0	29

^{*}Note: missing response data n = 0

Workplace Adjustment

A principal reason for disclosing dyslexia to the police service is to receive workplace support (Kirby 2016). This typically comes in the form of extra time, access to assistive technologies, secretarial support, etc. The authors acknowledge that people with dyslexia develop varied and multiple strategies to confront disabling barriers in the workplace. However, evidence suggests that assistive technologies, when used as an alternative reading and writing style for people with dyslexia, can be transformative. Within Macdonald's (2009) research, although he identifies numerous coping strategies adopted by those with dyslexia in adulthood, research participants who had access to and utilised assistive technologies were most successful in overcoming their literacy difficulties in the workplace.

When examining whether officers/civilians with dyslexia had received any support after disclosure took place, the data indicates that very few adjustments were made for participants in the study. As we can see from Table 7, only one participant (1.8%) reported having access to a workplace assessment. Furthermore, an additional two participants (3.6%) reported that reasonable adjustment had been made to their workplace. When exploring workplace support in more depth, the study investigated whether police officers/civilians were using, or had access to, key technologies commonly used by adults with dyslexia. As Table 7 reveals, very few participants had access to any form of assistive technologies within the workplace. The most widely employed form of assistive technologies used by participants, at 14.3%, was an electronic organiser. This was closely followed, at 12.5%, with the use of audio books, to listen to large documents and books. As Table 2 revealed, most difficulties reported by employees related to note taking and writing problems during operational duties. Interestingly, very few participants engaged in assistive technologies that would support their writing within the workplace. Therefore, only 7.1% of police employees used text-to-speech technology to proofread their writing, and only 1.8% used dictate software to assist with their typing and spelling. Additional software technologies, such as mind maps at 7.1% and digital voice recorders at 3.6%, were also used by some employees to support their writing and note taking. Yet Table 7 reveals that only a minority of employees are engaging in, or have access to, assistive technologies to overcome literacy and organisational problems they may experience within the contemporary police service. Thus, this data seems to reveal that, for 96.4% of police officers/civilians in this study, there is no evidence that reasonable adjustments have been made with reference to workbased support within the police service.

Table 7
Reasonable Adjustment and Technology

Variable Categories	Variable Values	%	n
Workplace skills assessment	Yes	1.8	1
	No	98.2	55
	Total*	100	56
Reasonable adjustments to workspace	Yes	3.6	2
	No	96.4	54
	Total*	100	56
Reading aloud technology via a mobile phone/tablet (e.g. IPad, Kindle etc.)	Yes	8.9	5
	No	91.1	51
	Total*	100.0	56
Dictate software via a mobile phone/tablet (e.g. IPad, Kindle etc.)	Yes	1.8	1
	No	98.2	55
	Total*	100.0	56
		200.0	50
Digital voice recorder	Yes	3.6	2
2.8.14.1 10100 10001401	No	96.4	54
	Total*	100.0	56
	10101	100.0	30
Dictate software via PC (e.g. Dragon Dictate)	Yes	0	0
Dictate software via 10 (c.g. Dragon Dictate)	No	100.0	56
	Total*	100.0	56
	10101	100.0	30
Text-to-Speak technology via a PC/Laptop (e.g. Text Help Read/Write Software,	Yes	7.1	4
etc.)	163	7.1	•
cc.,	No	92.9	52
	Total*	100.0	56
	Total	100.0	30
Text enlargement software (e.g. Kindle app, etc.)	Yes	3.6	2
rext changement software (e.g. Kindie app, etc.)	No	96.4	54
	Total*	100.0	56
	Total	100.0	30
Electronic organiser (e.g. Calendar/Reminders)	Yes	14.3	8
Electronic organiser (e.g. Calendar/neminuers)	No	85.7	48
	Total*	100.0	56
	Total	100.0	30
Audiobooks	Yes	12.5	7
Audiobooks	No	87.5	7 49
	Total*	100.0	56
	ıUldi	100.0	30
Mind manning coftware	Voc	7 1	4
Mind-mapping software	Yes	7.1	4
	No	92.9	52
Note:	Total	100.0	56

^{*}Note: missing data n = 0

Discussion

Dyslexia is estimated to affect between 4% and 8% of the general population (see Peterson & Pennington 2012; Semple & Smyth 2013; Snowling 2000; Snowling & Maughan 2006). This is consistent with the sampled population, as 9.4% of participants in the study were diagnosed with this condition. Although the study's population is consistent with the estimated general

population, an additional 23.9% of participants reported having dyslexia but not having received an official diagnosis. Thus, this data could indicate that far more police employees have dyslexia than are currently diagnosed and are experiencing significant disabling barriers. This finding is consistent with Hill's and Macdonald's results and may reveal a key disabling barrier experienced by many police officers/civilians, which is the lack of assessment and diagnosis. Currently it is not a legal requirement for employers to provide a dyslexic assessment for their employees (Kirby 2016). Yet, the authors propose that to remove this barrier the police organisation should routinely assess all recruits entering the police service, as well as all police employees who are experiencing literacy difficulties, to better support their workforce, enhance well-being and improve service delivery.

When examining whether police employees experienced literacy difficulties in the workplace, the vast majority described having significant issues in this area. Again, similarities can be drawn between Hill's (2013) concept of 'routine policing activities' and Macdonald's (2009) assertion that dyslexia difficulties in adulthood are often negatively conceptualised as resulting from a 'deficit effect', when in fact they are due to discriminatory practices in the workplace. As was discussed, 61.2% of the sample reported moderate to severe reading problems, and 83.7% reported having moderate to severe writing difficulties. Nevertheless, this data should not be interpreted as suggesting that people with dyslexia, due to an impairment effect, are not equipped to work in the police service. As Bartlett & Moody (2010) illustrate within their research, applying a number of simple adjustments, with reference to time management and the introduction of digital and assistive technologies to the workplace, can give dyslexic

employees the tools to engage in advanced literacy skills. In Hill's (2013) study, he suggested that adjustments were made with reference to digital and assistive technologies, but these were often not compatible with police technology and procedures.

When examining this claim within our data findings, the analysis revealed that very few police employees engaged with any form of assistive technologies. Only one officer used dictate software (1.8%), and an additional four officers/civilians used text-to-speak technologies (7.1%) to assist with their literacy skills. Again, only two officers/civilians (3.6%) used a digital voice recorder to assist with their note taking. The most common form of technology used was audio books, as seven officers/civilians (12.5%) reported using this technology to support their reading. Our findings seem to be consistent with Hill's (2013) and Macdonald's (2009) research, as although assistive technologies have the potential to include people with dyslexia in the workplace, there was little evidence to suggest this was occurring for participants in this study. Based on Deacon et al.'s (2019) research, they suggest that having access to assistive technologies is only the first step for inclusion. Staff must also have access to technicians who can support employees in the use and maintenance of these technologies; team leaders/managers must be knowledgeable and supportive of employees with dyslexia; and work-based mentors should have the knowledge to help support staff, particularly when a person's employment role changes within the workplace.

One of the key concepts that developed from Hill's (2013) research is the issue of 'disclosure', and this concept was one of the most substantial findings of this study. As the work of Hill (2013) illustrates, many police officers are reluctant to disclose their dyslexia to the police service because of concerns about disability discrimination within the organisation. This study has revealed that, although the majority of participants disclosed (52%), a significant number of employees (48%) decided not to disclose to their organisation. The key barriers which prevented officers/civilians from disclosing were the fear of a detrimental impact on promotion opportunities, at 47.1%, and the fear that their competency would be questioned, also at 47.1%. An additional 23.5% were fearful of stigmatisation by colleagues and from the organisation. When comparing these concerns with the experiences of police employees who had disclosed dyslexia, there was some reality that underpinned these assumptions. As we can see, 41.4% reported that their competency had been questioned by managers because of issues of dyslexia. An additional 20.7% had experienced stigmatising attitudes from within the organisation by colleagues. Although only 27.6% reported that disclosing dyslexia had a negative impact on promotion, it should be recognised that no senior officer who completed the survey had a diagnosis of dyslexia.

Hill (2013) suggests that disabling attitudes are commonly experienced by officers in the police service. This study does not imply that a disablist culture is endemic within the organisation, but the findings do suggest that fears of discrimination inhibit disclosure, and a significant proportion of officers who did disclose felt that their competence was subsequently questioned, thus indicating some residual cultural disablist attitudes. Nevertheless, as Hill (2013) indicates, a

disablist police culture leads to workplace discrimination following disclosure, and deters respondents from disclosing dyslexia to their police employers, thereby preventing them from receiving reasonable adjustment and organisational support to address any difficulties in conducting their duties that this condition might bring. Reminiscent of police cultural research studies with female and LGBT officers by Loftus (2008) and Jones and Williams (2015), which highlighted the resilience of a heterosexist masculine culture to the diversity reform agenda, and residual discrimination against minority officers within the police service, the findings of this study suggest that a respect for difference with regard to learning disabilities/difficulties is not yet culturally embedded within the police organisational culture.

As this article focuses on police employees who had been diagnosed with dyslexia, it is important to acknowledge the police service's legal responsibility to their employees. Kirby (2016) reports the police service as an employer is bound by the same legal requirement as commercial employer, to nurture anti-discriminatory practices within their organisation. Therefore, because of the *Equality Act* (2010), the police service must ensure that officers and police employees are not knowingly discriminated against, and that reasonable adjustments are made within the workplace to remove barriers and include disabled people as active employees. Hence, the authors suggest that once an employee discloses dyslexia, a workplace assessment and reasonable adjustment must take place, including the integration of assistive technologies. Once employees have access to assistive technologies, these technologies must work with the police's IT systems, and employees must be supported in using these new technologies within their working environments (Macdonald & Clayton 2013). Yet, data in this study illustrated that

only one participant (1.8%) had received a workplace skills assessment within the organisation after disclosure had taken place. In addition to this, only two participants (3.6%) reported that they had experienced reasonable adjustment within the police service. Again, this is consistent with Hill's (2013) concept of 'help and support', as he reported that very few of his police participants with dyslexia had received any form of support or adjustment within the police service.

Conclusions

As stated, this study advocates for the social model of disability in order to conceptualise the experiences of employees working within the police service. Difficulties experienced by people with dyslexia are not due to a dysfunctional pathology, but because of disabling structural barriers within education, employment and general life (Macdonald 2009; Macdonald & Deacon 2019; Oliver 2009). By drawing on data from this study, the quantitative results reveal key disabling barriers experienced by police employees. These findings support previous studies by Hill (2013) and Macdonald (2009), and demonstrate that: dyslexia may be under-diagnosed; there is a lack of support and reasonable adjustment made within the workforce; there are cultural assumptions concerning what people with dyslexia 'can and cannot do'; and there are some issues concerning stigmatisation experienced by officers/civilians during operational duties. The authors argue that, within the police service, a deficit model dominates perceptions, concerning dyslexia and disability in general. This deficit ideology for some employees has resulted in a person's capability being questioned, with reference to their competence to

perform policing roles based on assumptions regarding officers'/civilians' reading and writing 'inabilities'. Thus, a social model approach offers a framework for achieving inclusion in the police service for disabled people, rather than explaining why individuals with dyslexia are excluded from certain duties based on assumptions about their pathological ability.

Based on our data findings, the authors would suggest that implementing minor adjustments in the workplace can make a significant difference for officers/civilians with dyslexia. Firstly, the police must screen for dyslexia; secondly, a work-based assessment must be implemented, including access to and integration of assistive technologies; and thirdly, on-going support must be offered to employees, particularly when there is a change in a person's working environment. With reference to digital technologies, in the police service where the research was conducted the majority of police staff had access to and used mobile technologies (smart phones and tablet computers). These devices have assistive technologies built in which can assist people with dyslexia to engage with advanced literacy skills, i.e. removing significant barriers in the organisation (Macdonald 2009). However, for digital technologies to be integrated within policing duties, Hill (2013) illustrates that police routine activities, such as writing statements by hand that could now be completed digitally by typing or dictating, must change in the organisation¹. From a social model perspective, people with dyslexia read and write in different ways compared with their non-dyslexic peers. Because of this fact, these officers use different technologies (i.e. technologies which assist reading, or dictate

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¹ However, the authors recognise that wider criminal justice issues may need addressing, for example the convention that only hand-written notes are admissible as evidence in court due to concerns over the editability of digital statements and notes.

technologies), and therefore officers/civilians should be allowed to use these technologies in their daily activities.

The authors argue that once officers/civilians have access to reasonable adjustments, promotion opportunities must not be restricted based on assumptions about how their condition will impact on their ability to perform a senior police role. The removal of disabling barriers in the police service will not only achieve the requirements of the Equality Act (2010), but will also support the integration of these officers/civilian staff with dyslexia into the organisation. As numerous studies suggest, employees with dyslexia have an alternative mindset and bring new skills to the workforce (Bartlett & Moody 2010; Fitzgibbon & O'Connor 2002; Leather et al. 2011). Therefore, this study proposes that if these employees are better supported and valued in the workforce, then they have the potential to improve productivity and service delivery, thus not only leading to greater job satisfaction and sense of value (Johnson 2012), but in turn leading to more innovative and progressive policing across the country (see Hill 2013; Toffalini et al. 2017; White 2007). Further, whilst studies regarding the impact of increased use of information technology on productivity and performance have reported mixed results (Garicano & Heaton 2010), there is the potential for greater use of digital technologies, as part of reasonable adjustment for officers with dyslexia, to further support officer attitudes and the value attached to technology with respect to police work (Chan 2001). Thus, if the police service conceptualise dyslexia as a learning difference, rather than a deficit, this would allow for a perceptual change that may start the process of removing disabling barriers and confronting the hidden cultural stigmatisation of employees within the organisation. Although this article specifically focuses on barriers within the police service, the authors advocate that by applying the social model of disability in the criminal justice system this study has wider theoretical implications concerning disability and equality within a criminological and equality studies context.

Strengths and Limitations

It should be recognised that this study was exploratory in nature and aimed to target a relatively hidden and hard-to-reach community. The survey was conducted online, and although this gave the authors access to a greater number of police officers/civilians, it did not allow us to create a sample frame or randomly select a representative population. Furthermore, the team hoped for a larger sample of participants with diagnosed dyslexia so that the study could produce a more detailed analysis on the intersectional relationships between dyslexia, gender and socioeconomics. However, the police service informed us that our sample was significantly greater than the population that they were aware of with the condition in the service. Although these limitations exist, which may not lead to a precise estimation of the impact of dyslexia in the police service, the data presented some interesting findings that can be used to design a larger confirmatory study. Therefore, a future direction for this research would be to develop a national base survey examining disabling barriers within the police service across England and Wales.

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