KING'S College LONDON

King's Research Portal

Document Version
Publisher's PDF, also known as Version of record

Link to publication record in King's Research Portal

Citation for published version (APA):
Burton, L., Carss, V., & Twumasi, R. (2022). Listening to Neurodiverse Voices in the Workplace. *Ought: The Journal of Autistic Culture*, *3*(2), 56-79. [11]. https://scholarworks.gvsu.edu/ought/vol3/iss2/11/

Citing this paper
Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights
Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

•Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
•You may not further distribute the material or use it for any profit-making activity or commercial gain
•You may freely distribute the URL identifying the publication in the Research Portal

Take down policy
If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 23. Apr. 2024

[Ought: The Journal of Autistic Culture](https://scholarworks.gvsu.edu/ought)

Volume 3
Issue 2 *Family*

Article 11

May 2022

Listening to Neurodiverse Voices in the Workplace

Lewis Burton
King's College London, lewis.burton@kcl.ac.uk

Vicki Carss
Lexxic, vickicarss@lexxic.com

Ricardo Twumasi
King's College London, ricardo.twumasi@kcl.ac.uk

Follow this and additional works at: https://scholarworks.gvsu.edu/ought

Part of the Industrial and Organizational Psychology Commons

Recommended Citation

Burton, Lewis; Carss, Vicki; and Twumasi, Ricardo (2022) "Listening to Neurodiverse Voices in the Workplace," *Ought: The Journal of Autistic Culture*: Vol. 3: Iss. 2, Article 11.
Available at: https://scholarworks.gvsu.edu/ought/vol3/iss2/11

This Article is brought to you for free and open access by ScholarWorks@GVSU. It has been accepted for inclusion in Ought: The Journal of Autistic Culture by an authorized editor of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

Listening to Neurodiverse Voices in the Workplace

Cover Page Footnote

We would like to thank the 21 participants for their time, thoughts and insights, without which this research would not be possible. The authors would also like to thank Rebecca Wones and Lexxic for their help in planning and recruiting for this research. We would also like to thank Roxanna Paraschiv, Sandra Nielsen and Max Lange for their help reviewing an early draft of this paper and contributing to the Neurodiversity Research Group at King's College London. Funding for payment of participants was provided exclusively through King's College London departmental bench fees. There were no external funding or incentives to declare for this research.

This article is available in Ought: The Journal of Autistic Culture: https://scholarworks.gvsu.edu/ought/vol3/iss2/11

Listening to Neurodiverse Voices in the Workplace

Lewis Burton, Vicki Carss, and Ricardo Twumasi

"We, too, listen to neurodiverse talent."

Building on the Langston Hughes (1926) poem "I, Too," Giwa Onaiwu (2020) touches on an interesting comparison between race and neurodiversity. In this poem, Hughes (1926) yearns for the day he will be treated equally by society. Similarly, in the present day, Giwa Onaiwu (2020) longs for the day neurodiversity is fully embraced and understood by society.

Neurodiversity is an inclusive way of viewing, respecting, and valuing the evolutionary variety and differences in neurological functioning (Jaarsma & Welin, 2012). Neurodiversity has been defined as "atypical" neurological functioning (Lollini, 2018) and encompasses a range of unconventional thinking patterns (Giwa Onaiwu, 2020), including but not limited to: Autism Spectrum Condition (ASC), Developmental Coordination Disorder (DCD), Dyspraxia, Dyslexia, Dyscalculia, and Attention-Deficit Hyperactivity Disorder (ADHD). Traditionally, neurodiversity has been viewed in a negative light. The "medical model" of disability (Olkin, 1999) emphasizes that differences from the human norm are negative flaws that need amelioration (Savulescu & Kahane, 2011). The medical model conceptualizes neurodiversity as abnormal neurological functioning.

However, attitude shifts in the late 1990s meant the emergence of the neurodiversity moment, an activist movement pioneered by Judy Singer, who coined the term *neurodiversity*, with the proposition that neurodiverse minds are not abnormal, instead just variant in nature (Singer, 1999). This caused a shift in the perception of neurodiversity, from a negative outlook to a more empowering and inclusive approach (Jaarsma & Welin, 2012). The neurodiversity movement is underpinned by the social model, which highlights that every individual has impairments, but it is predominantly societal norms and structures which limit individuals' functioning (Chapman, 2019).

Neurodiverse individuals possess skills that are highly beneficial for organizations (Doyle,2020). These include individuals with ADHD having heightened focus (Lesch, 2018), individuals with Dyslexia having heightened ability to think creatively (Reid & Kirk, 2001), individuals with DCD having increased determination to succeed (Walker et al., 2018), and individuals with ASC having the ability to identify complex patterns better than their neurotypical counterparts (Chown & Beavan, 2012), in addition to heightened abstract reasoning and analytical skills (Mottron, 2011). Although these skills are widely acknowledged in the literature, neurodiverse individuals face numerous challenges in an organizational context.

Within job selection, the interview process has been shown to be an issue for neurodiverse individuals, as interviews involve unfamiliar environments and require social skills that individuals with ASC have shown to lack (Chen et al., 2015; Scott et al., 2019). Maras and colleagues (2021) found when the same interview questions are asked to both autistic individuals and Neurotypical individuals, interviewers tend to rate the interviewees with autism lower on ratings of both impressions and quality. Follow-up interviews using more inclusive questions developed from participant feedback led to a significant reduction in differences between the two groups, highlighting the importance of tailoring job selection processes to promote inclusivity.

Lorenz and colleagues (2016) found that 16% of autistic individuals struggled with the application process, specifically interviews and submitting resumes. It has also been proposed that psychometric testing, a common method of job-person fit, limits neurodiverse selection, as this population possesses fewer of the skills required to pass assessments designed for neurotypical individuals (Hewlett et al., 2017). This disadvantage in the job selection process can be applied to almost all neurodiverse individuals, irrespective of condition. For example, individuals with ADHD may be overly talkative in an interview and overstate their qualifications for the job (Adamou et al., 2013), leading to negative perceptions from recruiters and an inability to succeed in the job role.

These challenges for the neurodiverse population can continue into the workplace. For autistic individuals, research has shown that common working conditions such as a noisy environment or the social expectations of a neurotypical-dominated workplace, can lead to employees having to apply

greater mental effort to fit in (Li, 2019), potentially leading to adverse mental health outcomes. Issues like this are common among neurodiverse workers and require specific accommodations to be made on a case-by-case basis. Accommodations can include facilitating awareness among employers and employee social skill training (Griffith et al., 2012). Other common workplace accommodations for neurodiverse individuals include flexibility in the work environment, support from colleagues and supervisors, training, and the use of assistive technology (Doyle, 2020).

Research into the challenges faced by the neurodiverse population within organizations has also highlighted several further issues. Morris and colleagues (2015) found that in their sample of ASC and ADHD participants, over half did not disclose their neurodiversity to their managers, primarily due to fear of judgment and discrimination from colleagues (Santuzzi et al., 2014). This lack of disclosure can result in a lack of accommodations in the workplace and a lack of social support, two facets that are critical for neurodiverse individuals in the workplace, limiting their ability to perform to the desired and expected organizational standard (Doyle, 2020). Career progression and professional development are also seen as barriers for neurodiverse individuals (Sumner & Brown, 2015). In a case study examining neurodiversity at work, career progression was seen to be stunted by various aspects related to their neurodivergence such as the inability to correctly complete tasks at work and the lack of support from employers (Bewley & George, 2016).

Current literature on neurodiversity tends to adopt a homogeneous sample, focusing on one neurodiverse condition which has been formally diagnosed. This reduces the complexity of the phenomenon and neglects individuals who may lack a formal diagnosis. Additionally, it is common for conditions to overlap and be co-occurring (British Dyslexia Association, 2021). Therefore, this study seeks to view neurodiversity as its own entity, regardless of the diagnosed condition. This allows us to broaden our understanding of the wide spectrum of neurodiversity and give voice to those who identify as neurodiverse, not just those who are formally diagnosed. There is also a lack of interpretative phenomenological analysis (IPA; Smith & Osborn, 2008), or studies that view neurodiversity as a holistic concept. Therefore this study aims to build on foundational literature by gathering rich, contextual accounts from neurodiverse individuals to better understand

their experiences in the workplace. This research is in collaboration with Organization L (OL), which empowers neurodivergence in the workplace by creating neuro-inclusive cultures and providing psychological support services, so neurodiverse talent can flourish. The overall aim of this study is to provide insight into what can be done to facilitate greater inclusion both during the recruitment process and in day-to-day work life for neurodiverse individuals.

Methodology

Study Design

A phenomenological approach to research was selected for this study as this methodology seeks to make sense of lived experiences from a first-person perspective (Rodriguez & Smith, 2018). As neurodiversity is a distinct phenomenon, this methodology is optimal, allowing us to generate rich meaningful data that can provide deeper understanding of the contextual experiences of neurodiversity in the workplace. IPA uses pseudonyms to differentiate between participants to keep identity confidential but give a living voice to their experiences.

Participants

Twenty-one Neurodiverse individuals participated in semi-structured interviews (see Table 1 for demographic information). IPA tends to use smaller sample sizes (Noon, 2018), however, this number of participants allowed for us to explore the heterogeneous spectrum of Neurodiversity until we reached theoretical sufficiency (Braun & Clarke, 2021, Dey, 1999). Purposive sampling was used. Participants were asked to respond to a recruitment flyer sent out on LinkedIn by OL. The inclusion criteria for this study involved identifying as Neurodiverse and being either currently employed or previously employed. Out of twenty- one participants, five of these were OL service users.

Materials

The semi-structured interview had four main sections: disclosure, workplace accommodations, the recruitment process, and the services of OL. The semi-structured interview guide consisted of broad, open-ended questions with relevant probes to allow for a free-flowing conversation between the researcher and participants. These four sections allowed the researcher to

guide participants, whilst the relevant probes encouraged participants

Table 1

Table 1: Participants' Demographic Information

Pseudonym	Gender	Age	Neurodiversity
Simone	Female	41	Dyslexia, DCD, Potential ASC
Emma	Female	22	Dyslexia, DCD
Greta	Female	51	Dyslexia, ASC tendencies
Lisa	Female	26	Dyslexia, ASC, ADHD tendencies
Jessica	Female	30	Dyslexia, ADHD
Susan	Female	28	ADHD, DCD, Irlen's disorder
Anne	Female	36	Dyslexia, DCD
Albert	Male	66	Inattentive ADHD, DCD
Temple	Female	31	ADHD, ASC
Richard	Male	30	Inattentive ADHD
Courtney	Female	34	Dyslexia
Florence	Female	48	ADHD, Dyslexia, DCD
Elon	Male	60	Dyscalculia
Erna	Female	40	Dyslexia, ADHD
Eleanor	Female	unknown	ADHD
Jennifer	Female	46	ADHD
Walt	Male	35	Dyslexia, DCD
Emily	Female	39	ASC, PDA, ADHD
Barbara	Female	51	Irlen's disorder
Steve	Male	45	ASC
Valerie	Female	40	Dyslexia, DCD, ADHD

to elaborate on the experiences discussed (Berg, 2001). Additionally, an information sheet was provided to outline the study and a consent form was generated to ensure the participants consented to the conditions of the study. A short questionnaire was also developed to obtain some demographic information from participants (see Table 1). The information sheet and consent form were also audio-recorded for accessibility purposes.

Data collection
Prior to data collection, four pilot interviews were conducted. Interview style, probes, and interview questions were refined according to the feedback given to the researcher. In total, twenty-one remote interviews were conducted using either Microsoft Teams or Zoom depending on the participant's preference.

Ethics
This study was conducted according to the British Psychological Society (BPS) code of human research ethics (BPS, 2021). This study was also ethically approved by the Psychiatry, Nursing and Midwifery Research Ethics Subcommittee of King's College London (PNM RESC; Reference number: LRU/DP-20/21-22560).

Data analysis
Audio-recorded interviews were transcribed verbatim and uploaded to NVivo (Version 12). Prior to coding, each transcript was re-read multiple times for the researchers to become familiar with the data. Next, an idiographic approach was adopted, analyzing each transcript one by one and generating broad categories to encompass shared meaning (Pietkiewicz & Smith, 2014). Initial descriptive semantic codes were highlighted in NVivo and converted into emerging themes. Finally, these themes were refined and placed into broad superordinate themes for each transcript. This was an iterative process that involved expanding, grouping, and discarding various emergent themes and clustering together themes based on meaning across transcripts to create the final superordinate themes (Smith & Osborn, 2008).

Results

Six superordinate themes were identified from the data (see Table 2). Five themes were identified across all twenty-one participants; one theme was identified in seventeen of the twenty-one transcripts.

Theme One: External Perceptions of Neurodiversity
All participants either directly or indirectly spoke about the impact that external perceptions of neurodiversity have on their life and subsequent work life. These external perceptions of neurodiversity were predominantly negative in nature and tended to present as a barrier for disclosing one's

neurodiversity in the workplace. Eleanor expressed her concerns regarding disclosing to her employer in future: "I'm unsure. That's the thing it's like that hesitancy in case they do have the wrong idea of what it's like." Walt shared a similar concern for inaccurate assumptions of Neurodiversity: " . . it does put me off sometimes disclosing, just because other people have got these ideas about what you can and can't do as soon as you say those words."

Table 2
Final Superordinate Theme Names

Superordinate Theme Name	Transcript Frequency
ExternalPperceptions of Neurodiversity	21/21
Identity Degradation	21/21
Self-Identity	21/21
Organizational Obstacles	21/21
Neurodiversity Empowerment	21/21
Language Regarding Neurodiversity	17/21

Theme Two: Identity Degradation
Another evident theme from all the participants was the identity degradation (Garfinkle, 1956) experienced in general life and at work. The account of Jennifer brings to light some of this degradation experienced because of people's comments: "I have disclosed this [Neurodiversity] at work but the main people are disbelieving I would say. People don't mean badly but they have said things like "oh, but that's just a busy, you've just got busy mind."

This account from Jennifer links to theme one, demonstrating how neurodiverse individuals are stereotyped by others and how these stereotypes lead to feelings of degradation. Identity degradation was prevalent amongst the whole dataset, with Barbara discussing how the complex recruitment process has made her feel: " . . . it just had a huge impact on me to the point where I just decided, I'm not going to apply anymore. I'm not doing this to myself, and I stopped applying for about three years." Jessica also highlighted her self-doubt: "when you look at a job description, you look through the list of what's needed right? . . . it makes you sick, like, have I got that?"

The lack of workplace support also led to a variety of unpleasant feelings, with Jessica coming to terms with the negative comments and the impact these had on her mental health: "[negative comments] gave me high anxiety and low confidence and then I started going through CBT . . . it was completely demotivating and it really affected my confidence long term. It affected my mental health, and it affected my home life as well."

Theme Three: Self-Identity

This superordinate theme encompasses participants sense of identity and knowledge surrounding their neurodiversity. When prompted on the discovery of their neurodiversity, participants highlighted the strong need for diagnosis to facilitate understanding of oneself and limit negative internalizations. Florence mentions the benefits of a diagnosis: "So having a diagnosis . . . yeah it enabled me to understand about myself." The account of Steve looks more in depth about the usefulness of a diagnosis:

> It allowed me to sort of become more aware of myself, be more understanding of myself and my struggles. Before it would be a case of, sometimes I might get really anxious or have periods of depression because I understood I wasn't quite functioning in the way that I could see other people doing. [. . .] having an understanding of it now means that I now accept it, and I can adapt the way I sort of behave and connect with people. So, it's been reaffirming.

Steve also called into question his self-identity and highlighted the need for education of neurodiversity:

> . . . before I was aware of being autistic, my perception of autism from like media and things, I didn't identify with it at all, until I started to read more about it . . . my perception of it was perhaps you couldn't function independently. You know, you had ticks and mumbled. All these things that you see. So that's why I missed it for so many years.

Additionally, the need for self-education is further emphasized by Albert who was diagnosed at "the age of 52." Albert states, "I've worked for 40 something years and a lot of it's been an awful struggle, because I hadn't realized what I was suited for and what I was not suited for and put myself through quite a lot of difficult situations as a result."

Lisa confirms this notion when speaking about accommodations: " . . . they expect us just to be able to do it ourselves and be like, 'oh, well, you clearly know what you need' but often we don't."

Theme Four: Organizational Obstacles

This theme derives from participants describing the struggles they face at work and in the recruitment process. Several participants reported that ambiguity is a main barrier in the recruitment process. Walt highlights the language used in the job advertisement: "They say things like, oh, you need excellent communication skills. What do you actually mean by that, though?"

Steve shifts the focus onto the need for less ambiguity and more clarity in the interview process:

> I guess it's a very clear scenario, what would you do in this situation? These are the parameters within which you can work, you have to do something within this. So, in some sense that was very contained, and I knew exactly what it was, rather than you can do anything, you know, because then my mind just sort of spreads out everywhere and I don't know what they're looking for specifically.

Additionally, many participants enjoyed having the questions prior to an interview in the recruitment process to give their best, most thoughtful responses. Simone states, "I have recently in the last year started asking for questions to be sent to me . . . to organize my thoughts before the interview. That makes a dramatic difference, because of that element of surprise, I can prepare my answer."

Temple also feels the same way: "I am also personally an advocate of questions and tasks being provided beforehand to all applicants so that applicants don't have to then use their working memory."

Sensory issues and environmental barriers were similarly seen across the dataset, impacting individuals' ability to pass the recruitment process and perform to their highest standard in the workplace. Barbara speaks about her sensory struggles in an interview room and her preference for video interviews to control her environment:

> . . . their office is like open plan and then they've got a glass box in the middle of the floor . . . I'm talking to the interviewers and then they've got people walking past. My thought processes have just gone, you know, that they're constantly . . . there was somebody that kept on walking around and coming and making photocopies. I was just like, I just could not focus no matter . . . and then the more you can hear the little voice in your head like, oh, Jesus, what did I just say? What was I saying? I can't remember . . . on top of all of the other stress. So I think actually there's something about video interviewing that's just suitable.

Elon reflects on his dyscalculia and how it limits career prospects:

> It can be really frustrating sometimes, and I do see it as you know, more of a barrier than an actual sort of benefit because, you know, like, career wise, for example, if I want it to go up to a higher grade, where there's quite a lot of reliance on operational data, like MI and stuff like that. I'm kind of stymied. So it does make me feel like I've reached my limit of where I can go with my career because I can't learn my way out of those, those kinds of situations.

Theme Five: Neurodiversity Empowerment

In this theme, participants commented on a range of topics relating to neurodiversity empowerment, including useful workplace accommodations, support, and perspectives. Workplace accommodations were one of the main sources of neurodiversity empowerment for participants. The participants highlighted that there is a need for a supportive workplace culture to facilitate work performance. Eleanor describes support from her colleagues: "The colleagues I've told that kind of work within my department have now volunteered to just always do writing minutes and things like that. So they've kind of stepped in just from conversations with me rather than a formal intervention from the workplace."

Lisa also emphasizes this need for a supportive culture: "Lots of people manage and I managed for decades without it and got through, but it makes it much, much easier to be effective, to be a good colleague, to achieve one's part of what the organization is trying to achieve. Definitely that openness." It was also apparent from the transcripts that support aided openness and disclosure of one's neurodiversity, and that participants felt a higher level

of psychological safety (Kahn, 1990) when this support was available. This is demonstrated by Erna: "I am open on the [neurodiversity] network as well about it just because I think it's good to set an example. Also, the more people talk about it, the more people feel like they can open up and it's important to have a support network."

Many participants tended to disclose their neurodiversity as a way of educating their employers and facilitating behavioral understanding. Richard describes his reasoning for disclosure: "I guess there's a lot of possible unspoken misunderstandings that I want to maybe a lay because I'm not the best at you know, interpreting social cues and all that kind of thing [. . .] I feel in part, it's sort of an explanation in the hope that people will understand and sort of, give me a heads up."

Some participants felt empowered due to the support and help of OL. Valerie described how OL has empowered and supported her to strive towards "occupational success":

> If I didn't have OL I don't think I would have lasted this long you know, through my KPIs dropping and so forth. I think OL allows companies to understand that it's not just about supporting through assistive technology, you know, we've given you that, you know, you've had your training, I think they allow the lines of communication to stay open, so that I can possibly achieve the goals that I set myself or the company says that I should be aiming for.

Theme Six: Language Regarding Neurodiversity

The language regarding neurodiversity is a theme which takes interest in the vocabulary used by participants. Due to the unique and broad sample, the language varied throughout the dataset. Upon being prompted about disclosing her neurodivergence, Simone said, "So, I guess the first pedantic thing I'll say is, I wouldn't use the word *disclose*. So, I would just as an example, I wouldn't disclose my sexuality to my employer, I feel that that's part of my identity."

When speaking about neurodiversity, most individuals who identified with ASC described themselves as having "Autism" (Simone) or being "Autistic" (Emily). The use of the word *disability* was mixed. Some participants

described their neurodivergence as a “disability” (Valerie) or “learning difficulty” (Lisa) while others did not like the use of this word. Courtney outlines her reason for not using “disability” to describe her neurodiversity:“I think the minute you put disability there, I think that’s where you get that feeling of feeling thick because you’re not the same as everybody else”.

Elon also dislikes this “disability” label: “it’s probably because that word disability has changed a little bit, because you’re sort of reluctant to say, oh, I have a disability. It implies a lack of ability.”

Across the transcripts there was no consensus on the appropriate phrasing when describing someone who identifies as neurodivergent. Some participants used the word “neurodiverse” (Albert) whilst some referred to their neurodiversity as a “Superpower” (Florence).

Discussion

Several talking points were derived from the six superordinate themes. The external perceptions of neurodiversity from others seemed to have an impact on participants. These negative perceptions and stereotypes held by employers and colleagues tended to limit participants’ experience at work, as well as making them fearful of disclosing their neurodiversity (Krzeminska et al., 2019). This is in line with the work of Marshall and colleagues (2020) who highlighted that “disability,” whether hidden or not, tends to be seen as a deficit by employers and therefore individuals are reluctant to disclose due to fear of being treated differently (Prince, 2017). These negative perceptions and stereotypes from employers and colleagues were the main reason for a lack of disclosure (Santuzzi et al., 2014).

It was also evident that neurodiverse individuals perceived a stereotype threat (Steele & Aronson, 2004) which inspired individuals to succeed in the workplace. Research has shown that a stereotype threat can motivate individuals to succeed in a professional setting as they wish to prove their stereotype wrong (Spencer, Logel & Davis, 2016). However, a stereotype threat can have a severe negative impact on marginalized groups, as this stereotype can cause added pressure and stress, potentially leading to underperformance which reinforces the stereotype (Walton & Spencer, 2009). In this study, it was clear that neurodiverse individuals were reluctant

to disclose, primarily due their perceived stereotype threat, which led to a lack of workplace adjustments, hindering their ability to achieve high work performance.

Participants frequently experienced identity degradation both inside and outside of the workplace. This degradation was triggered by people's perceptions of neurodiversity, the lack of workplace support received, the complex recruitment process, and negative comments from others. Some of the consequences of these external perceptions of neurodiversity made participants feel marginalized, dismissed, and misunderstood by colleagues and employers.

Several participants reported how events in the workplace can lead to mental health issues, highlighting the extent to which this identity degradation can manifest. While the direct cause of this intersectionality between mental health and neurodiversity is not explicitly clear or explored in depth, this could be a consequence of the lack of social support at work (Doyle, 2020). Additionally, the workplace has been seen to be a key factor in influencing mental well-being, specifically the role of interpersonal contact and the ability to utilize one's skill set in the workplace (Harnois & Gabriel, 2000). This may be mediated by the amount of self-esteem one has (Cooper, Smith & Russell, 2017) as potential knockbacks from the recruitment process, employers, and an inability to utilize skills in the workplace may impact neurodiverse individuals' self-esteem and contribute to adverse mental-health outcomes on a case-by-case basis.

Self-identity was seen to impact one's day-to-day life. The importance of a diagnosis was emphasized, enabling participants to understand how they function, and facilitating acceptance of one's true self (Doyle, 2020). A late diagnosis was more common than an early one in our participant sample, which could impact participants' mental health and well-being, as research shows that ASC individuals diagnosed earlier tend to experience greater organizational-based self-esteem and work in more supportive organizations (Johnson & Joshi, 2016). However, due to heterogeneity of this sample, it is unclear if these findings apply to other neurodiversities.

Participants also mentioned the need for self-education surrounding neurodiversity to allow them to find better suited jobs and understand

their own behavior. Participants often displayed negative self-stereotypes surrounding their neurodiversity which prolonged the diagnostic process and led to their neurodiversity being unidentified for some time. This lack of identification manifested negative internalized thoughts and misunderstandings. The misunderstanding of one's self-identity and neurodiversity is of relevance, as this is required to understand which accommodations are needed to facilitate their experience at work. Several participants did not ask for accommodations due to not knowing what would help them.

These findings are in line with Richards, Sang and Marks (2017) who in their study of a public sector organization, found that there was a need for macro level organizational understanding regarding neurodiversity and recommended neurodiversity awareness training for the organization's managers. The importance of this macro-level training was highlighted by individuals in this study, with neurodiversity support-services such as OL seeming to facilitate both understanding of neurodiversity and workplace accommodations through awareness and consultancy. As organizations tend to have inadequate knowledge regarding neurodiversity, some participants felt obliged to disclose their neurodiversity to help educate their employers on why they exhibit specific behaviors.

Regarding workplace accommodations, these were emphasized to be beneficial, improving both efficiency at work and one's work experience. Participants mentioned technological accommodations as highly beneficial. These technological accommodations have been consistently seen throughout the literature as an effective way to boost Neurodiverse workers' productivity and performance (CIPD, 2018). A supportive culture was deemed to be an important accommodation, enabling neurodiverse individuals to excel in their jobs, as this openness was seen to encourage people to share their lived experiences and facilitate disclosure, leading to a higher rate of workplace adjustments. Supportive behaviors are beneficial not just for neurodiverse individuals, but for many marginalized minority groups (Reason et al., 2005).

A key barrier for neurodiverse individuals across the recruitment process and in the workplace was ambiguity. Regarding job advertisements, participants highlighted ambiguous job language and how this caused

unpleasant feelings such as self-doubt. Ambiguous language can be defined as sentences and words which lack clarity and can be perceived to have multiple meanings (Collier & Zhang, 2016). Previous authors have condemned the use of ambiguous language in job postings and suggest organizations should move away from ambiguous language, especially when outlining work requirements, as this can be misinterpreted by neurodiverse individuals (Bewley & George, 2016; Dow, Lund & Douthit, 2020). This ambiguity was also thought to be a problem in the interview process, with participants needing clarity in this process to perform at their best. These results lend support for the use of non-ambiguously worded questions in the interview process for neurodiverse individuals (Maras et al., 2021).

Many participants experience difficulties with sensory stimuli. The work environment tended to exacerbate these sensory issues, causing discomfort to neurodiverse individuals, making it harder to do their job as a result. This standardized environment was seen across all domains, including the interview process and in the workplace. This highlights the lack of understanding organizations have surrounding the effects of the environment on neurodivergent employees and draws upon the person-environment fit theory (Edwards, 2008). This theory states that certain individual characteristics are suitable for certain organizational environments to thrive, with incongruence between the person and the environment leading to negative consequences. In this case, the environment is designed for neurotypicals and neglects those who are neurodivergent, inadvertently increasing stress levels for certain neurodivergent employees. These results are in-line with Li (2019), as it is clear the participants struggled with the environment due to the neurotypical norm.

Additionally, these findings support the social model of disability (Chapman, 2019), as it demonstrates how standardized societal norms at work limit neurodiverse functioning. Participants also felt their career progression was limited from numerous factors at work, such as the inability to do a task due to their neurodivergent characteristics, and limitations placed on them by their managers. These findings are in-line with the work of Bewley and George (2016) who found these two dimensions to be the biggest limiting factors in career progression for neurodiverse employees.

Identifying Language

The identifying language participants used described themselves varied widely. Two participants used neurodivergent. For instance, Valerie commented: "happy to put in my email signature that I'm neurodivergent." Elon made an insightful point about medicalized language; namely, that he "dislikes disability because it implies a lack of ability." This variety is not unusual in practice because the language used to describe one's neurodivergence tends to be very personal. Historically, Neurodiverse activism led to the preference of person-first language (PFL) instead of identity-first language (IFL). PFL looks beyond one's "label" and seeks to see a person beyond just their condition. For example, "I am a person with Dyslexia" is PFL, whereas IFL seeks to put an identity to a group, for example "I am a Dyslexic person."

It has been argued that "linguistic framing" has an impact on the way individuals are perceived (Reali et al., 2016). Some argue that by framing language in a way that encompasses an identity, for example, the use of "autistic person" (IFL), we can highlight the characteristics of an individual without frowning upon their diagnosis (Vivanti, 2020), contrasting the initial PFL movement in the 1970s. However, this has been challenged by various authors, with Walker (2012) highlighting that IFL reinforces the negative connotations attached to a diagnosis. In this research, there seemed to be no consensus on which person language was preferred by neurodiverse individuals.

Although Elon and others dislike the use of the term *disability* when describing their neurodiversity, it is nevertheless important to acknowledge the power this term gives to neurodiverse individuals in terms of legislation. *Disability* allows neurodiverse individuals to fall under the Equality Act (2010), legally protecting this population from wrongful dismissal at work on discrimination grounds. Therefore, even for those who prefer PFL language, the term can serve a purpose to remind employers of their protective responsibilities for this minority group. Once protective legislation encompasses less discriminatory language and more empowering terms such as *neurodiversity*, we could see the abolition of *disability*.

Practitioner Recommendations

- Employers lack understanding of neurodiversity, leading to negative stigma, stereotypes, and identity degradation of neurodiverse employees. Neurodiversity education workshops should be mandatory for senior staff and hiring staff to reduce cognitive bias.

- An organization that talks openly about neurodiversity leads to an elevated level of psychological safety and increased neurodiversity disclosure.

- Neurodiversity support networks help with self-affirmation and help to combat stereotype threat (Shapiro, Williams & Hambarchyan, 2013).

- Neurodiverse employees lack self-education surrounding their condition, leading to a decrease in subsequent workplace adjustments and performance.

- Employers should be more flexible in the working environment, attending to needs of neurodiverse employees to stop sensory overload and job performance. This can include changes such as working from home, light adjustment and wearing headphones to block out external noise.

- Language in job advertisements can be viewed as discriminatory for those who are neurodivergent, as the ambiguous nature of phrases can lead individuals to ponder over whether they fit the requirements and can deter potential neurodiverse talent from applying.

- Organizations should look to give neurodiverse candidates interview questions in advance to avoid further ambiguity and level the playing field.

Strengths and Limitations

This study's materials were designed with neurodiversity in mind, with the option of audio-recorded information sheet and consent forms for increased accessibility. The heterogeneity of this neurodiverse sample could be seen as a strength of this study, as it addresses a clear need for more representative

studies away from just ASC in the neurodiversity literature. However, some may argue that the heterogeneity of this sample could be seen as a limitation of this study due to the varying specific and unique nature of some results. A way to combat this in future would be to classify neurodivergent individuals by diagnosed condition and compare the specific needs of each group across the dataset. Moreover, interpretative phenomenological analysis has been criticized for being overly reliant on the researcher's interpretation (Brocki & Wearden, 2006), often neglecting participant's true lived experiences.

Future Work

Future work into the lived experience of neurodiversity in the workplace should seek to investigate whether these experiences are generalizable across diverse cultures globally or whether these are specific to the United Kingdom. Adverse mental health outcomes were also found to be commonly co-existent; therefore, future research could seek to highlight the potential explanations as to why neurodiverse individuals experience a high rate of adverse mental health outcomes.

Reflexivity

At the time of data collection, Lewis Burton had a baseline understanding of what each neurodiverse condition entailed but had little experience of the issues neurodivergent individuals may face. This was useful in approaching interviews as open-minded as possible. Burton has had exposure to neurodiverse individuals throughout life and is aware of the media's depictions of neurodiversity. Ricardo Twumasi, as a senior author guiding this work, has a neurodivergent sister, is an uncle to a nephew and niece both with ASC, and was coached by a neurodiverse coach during his athletics career before moving into academia. Finally, Vicki Carss is an Occupational Psychologist who has specialized in neurodiversity for over a decade, supporting thousands of neurodiverse individuals.

A phenomenological approach to research was used to highlight the perspective and first- person lived experience of those with neurodiversity. All interviews were conducted online, allowing participants to be comfortable in their environment and potentially feel in control of the interview and their responses. Participants were asked questions in neutral vocabulary to mitigate any potential offence or labeling of these participants. Although sensitive topics may have elicited negative emotions from participants, the

researcher followed a debrief protocol using their discretion based on the content of the interview (Charmaz, 2006).

Conclusion

Neurodiverse employees tended to be negatively impacted by the inaccurate stereotypes from neurotypical' individuals, causing a range of problems such as a lack of comfort disclosing their neurodiversity, identity degradation and a lack of career progression. Managers and co-workers need education to facilitate workplace accommodations, increase the likelihood of disclosure via a supportive culture and overall enhance neurodiverse employees' experience and performance at work. Self-education was also important to allow individuals to identify their neurodiversity and explain to their employers what workplace accommodations would be beneficial to them.

A wide range of participants tended to experience co-existing mental health challenges, although the extent to which this is caused by the workplace is unclear. It was also clear that there was a need for less standardization and more flexibility in terms of the environment in both the job selection process and at work, as individuals struggled with sensory overload, lending support for the social model of disability (Chapman, 2019). Furthermore, this study provided no evidence for universally accepted language regarding neurodiversity, as this was solely based on individual preference. This study can be used as an insight into potential obstacles experienced in the job recruitment process, encouraging organizations to combat these issues to boost performance, secure neurodiverse talent and enhance neurodiverse employee's well-being.

References

Adamou, M., Arif, M., Asherson, P., Aw, T. C., Bolea, B., Coghill, D., ... & Young, S. (2013). Occupational issues of adults with ADHD. *BMC Psychiatry*, 13(1), 1-7.

Berg, B. L. (2001). *Qualitative research methods for the social sciences*. Boston, MA: Allyn and Bacon.

Bewley, H., & George, A. (2016). *Neurodiversity at work*. London: National Institute of Social and Economic Research.

Braun, V., & Clarke, V. (2021) To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales, *Qualitative Research in Sport, Exercise and Health*, 13(2), 201-216

British Dyslexia Association (2021). *Neurodiversity and co-occurring differences*. https://www.bdadyslexia.org.uk/dyslexia/Neurodiversity-and-co-occurring-differences

British Psychological Society. (2021). *BPS code of human research ethics*. https://www.bps.org.uk/news-and-policy/bps-code-human-research-ethics

Brocki, J. M., & Wearden, A. J. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology and Health*, *21*(1), 87- 108.

Chapman, R. (2019). Neurodiversity theory and its discontents: Autism, schizophrenia, and the social model of disability. In Ş. Tekin & R. Bluhm (Eds.) *The Bloomsbury Companion to Philosophy of Psychiatry* (pp. 371-90).

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Chen, J. L., Leader, G., Sung, C., & Leahy, M. (2015). Trends in employment for individuals with autism spectrum disorder: A review of the research literature. *Journal of Autism and Developmental Disorders*, 2(2), 115-127.

Chown, N., & Beavan, N. (2012). Intellectually capable but socially excluded? A review of the literature and research on students with autism in further education. *Journal of Further and Higher Education*, 36(4), 477-493.

CIPD (2018). *Neurodiversity at work*. https://www.cipd.co.uk/knowledge/fundamentals/relations/diversity/Neurodiversity-work

Collier, D., & Zhang, C. (2016). *Can we reduce bias in the recruiting process and diversify pools of candidates by using different types of words in job descriptions?* https://ecommons.cornell.edu/handle/1813/74363

Cooper, K., Smith, L. G., & Russell, A. (2017). Social identity, self-esteem, and mental health in autism. *European Journal of Social Psychology*, 47(7), 844-854.

Dey, I. 1999. *Grounding grounded theory*. Academic Press.

Dow, M., Lund, B. D., & Douthit, W. K. (2020). Investigating the link between unemployment and disability: Lexically ambiguous words and fixed formulaic sequences in job ads for academic reference librarians. *The International Journal of Information, Diversity, & Inclusion*, 4(1), 42-58.

Doyle, N. (2020). Neurodiversity at work: a biopsychosocial model and the impact on working adults. *British Medical Bulletin*, 135(1), 108.

Edwards, J. R. (2008). 4 person–environment fit in organizations: an assessment of theoretical progress. *Academy of Management Annals*, 2(1), 167-230.

Garfinkel, H. (1956). Conditions of successful degradation ceremonies. *American Journal of Sociology*, 61(5), 420–424.

Giwa Onaiwu, M. (2020) “I, Too, Sing Neurodiversity,” *Ought: The Journal of Autistic Culture*, 2(1), 58-67.

Griffith, G. M., Totsika, V., Nash, S., & Hastings, R. P. (2012). “I just don’t fit anywhere”: support experiences and future support needs of individuals with Asperger syndrome in middle adulthood. *Autism*, *16*(5), 532-546.

Harnois, G., & Gabriel, P. (2000). *Mental health and work: Impact, issues and good practices*. https://ecommons.cornell.edu/handle/1813/76479

Hewlett, K., Cooper, R., Jameson, M. (2017). *Neurodiverse voices: Opening doors to employment*. The Westminister AchieveAbility Commission for Dyslexia and Neurodivergence. https://www.achieveability.org.uk/main/policy/wac-report-is-released-and-presentation-at-bda-conference-2018

Hughes, L. (1926, 2001). I, too. In: Rampersand, A. (Ed.) *The Collected Works of Langston Hughes, Volume 1*. University of Missouri Press.

Jaarsma, P., & Welin, S. (2012). Autism as a natural human variation: Reflections on the claims of the neurodiversity movement. *Health Care Analysis*, 20(1), 20-30.

Johnson, T. D., & Joshi, A. (2016). Dark clouds or silver linings? A stigma threat perspective on the implications of an autism diagnosis for workplace well-being. *Journal of Applied Psychology*, *101*(3), 430.

Krzeminska, A., Austin, R. D., Bruyère, S. M., & Hedley, D. (2019). The advantages and challenges of neurodiversity employment in organizations. *Journal of Management & Organization*, 25(4), 453-463.

Lesch, K. P. (2018). ‘Shine bright like a diamond!’: is research on high-functioning ADHD at last entering the mainstream?. *Journal of Child Psychology and Psychiatry*, 59(3), 191-192.

Li, L. (2019). Celebrating neurodiversity in Irish workplace, enabling support practices and disabling barriers. https://esource.dbs.ie/handle/10788/3896

Lollini, A. (2018). Brain equality: Legal implications of neurodiversity in a comparative perspective. *NYUJ Int’l L. & Pol.*, 51, 69.

Lorenz, T., Frischling, C., Cuadros, R., & Heinitz, K. (2016). Autism and overcoming job barriers: Comparing job-related barriers and possible solutions in and outside of autism- specific employment. *PloS One*, *11*(1), e0147040.

Maras, K., Norris, J. E., Nicholson, J., Heasman, B., Remington, A., & Crane, L. (2021). Ameliorating the disadvantage for autistic job seekers: An initial evaluation of adapted employment interview questions. *Autism*, 25(4), 1060-1075.

Marshall, J. E., Fearon, C., Highwood, M., & Warden, K. (2020). “What should I say to my employer… if anything?”-My disability disclosure dilemma. *International Journal of Educational Management*, 34(7).

Morris, M. R., Begel, A., & Wiedermann, B. (2015, October). Understanding the challenges faced by neurodiverse software engineering employees: Towards a more inclusive and productive technical workforce. In *Proceedings of the 17th International* ACM SIGACCESS *Conference on Computers & Accessibility* (pp. 173-184).

Mottron, L. (2011). The power of autism. *Nature*, 479(7371), 33-35.

Noon, E. J. (2018). Interpretive phenomenological analysis: An appropriate methodology for educational research. *Journal of Perspectives in Applied Academic Practice*, 6(1).

Olkin, R. (1999). *What psychotherapists should know about disability*. Guilford Press.

Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological Journal*, 20(1), 7-14.

Prince, M. J. (2017). Persons with invisible disabilities and workplace accommodation: Findings from a scoping literature review. *Journal of Vocational Rehabilitation*, 46(1), 75-86.

Reali, F., Soriano, T., & Rodríguez, D. (2016). How we think about depression: The role of linguistic framing. *Revista Latinoamericana de Psicología*, 48(2), 127–136.

Reason, R. D., Millar, E. A. R., & Scales, T. C. (2005). Toward a model of racial justice ally development. *Journal of College Student Development*, 46, 530–546.

Reid, G., & Kirk, J. (2001). *Dyslexia in adults: Education and employment*. Wiley.

Richards, J., Sang, K., & Marks, A. (2017). *Identifying line management support and neurodiversity training needs for network rail*. https://researchportal.hw.ac.uk/en/publications/6c83944a-1307-4766-b149-e95b70126004

Rodriguez, A., & Smith, J. (2018). Phenomenology as a healthcare research method. *Evidence-Based Nursing*, 21(4), 96-98..

Santuzzi, A. M., Waltz, P. R., Finkelstein, L. M., & Rupp, D. E. (2014). Invisible disabilities: Unique challenges for employees and organizations. *Industrial and Organizational Psychology*, 7(2), 204-219.

Savulescu, J., & Kahane, G. (2011). Disability: a welfarist approach. *Clinical Ethics*, 6(1), 45-51.

Scott, M., Milbourn, B., Falkmer, M., Black, M., Bölte, S., Halladay, A., ... & Girdler, S. (2019). Factors impacting employment for people with autism spectrum disorder: A scoping review. *Autism*, 23(4), 869-901.

Shapiro, J. R., Williams, A. M., & Hambarchyan, M. (2013). Are all interventions created equal? A multi-threat approach to tailoring stereotype threat interventions. *Journal of Personality and Social Psychology*, 104(2), 277.

Singer, J. (1999). Why can't you be normal for once in your life? From a 'problem with no name' to the emergence of a new category of difference. In M. Corker & S. French (Eds.), *Disability discourse* (pp. 59–67). Open UP.

Smith, J.A. & Osborn, M. (2008) Interpretative phenomenological analysis. In J.A. Smith (Ed.) *Qualitative Psychology: A Practical Guide to Research Methods* (pp. 53-80). Sage.

Spencer, S. J., Logel, C., & Davies, P. G. (2016). Stereotype threat. *Annual Review of Psychology*, 67, 415-437.

Steele, C. M., & Aronson, J. A. (2004). Stereotype Threat Does Not Live by Steele and Aronson (1995) Alone. *American Psychologist*, 59(1), 47–48.

Sumner, K. E., & Brown, T. J. (2015). Neurodiversity and human resource management: Employer challenges for applicants and employees with learning disabilities. *The Psychologist-Manager Journal*, 18(2), 77.

Vivanti, G. (2020). Ask the editor: What is the most appropriate way to talk about individuals with a diagnosis of autism? *Journal of Autism and Developmental Disorders*, 50(2), 691–693. https://doi. org/10.1007/s10803-019-04280-x.

Walker, E., Shaw, S. C., Price, J., Reed, M., & Anderson, J. (2018). Dyspraxia in clinical education: a review. *The Clinical Teacher*, 15(2), 98-103.

Walker, N. (Ed.). (2012). *Loud hands: Autistic people, speaking*. The Autistic Press.

Walton, G. M., & Spencer, S. J. (2009). Latent ability: Grades and test scores systematically underestimate the intellectual ability of negatively stereotyped students. *Psychological Science*, 20(9), 1132-1139.

Lewis Burton is a Qualitative Healthcare Researcher. He has an undergraduate and post-graduate background in Psychology, focusing primarily on both Social and Organizational Psychology. His research interests also indude behavioral change, accessibility, and neurodiversity.

Vicki Carss is a Chartered Occupational Psychologist with a special interest in neurodiversity and mental health at work. She is adept at educating leaders, HR and Line Managers on the importance of understanding both the strengths and challenges of neurodiversity to empower neurodiverse talent and achieve organisztional change. Vicki is registered with the Health and Care Professions Council {HCPC) and is a Chartered member of the British Psychological Society (BPS). She is also currently the Chair for the Division of Occupational Psychology in Scotland.

Ricardo Twusami is a lecturer at King's College London within the lnstitute of Psychiatry, Psychology and Neuroscience. His PhD research related to the impact of legislative change on the aging workforce and equality at work. His research interests also include equality, age discrimination, gerontology, behavioral change, workplace health promotion, artificial intelligence, and machine learning.