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Accommodation through personalisation: ensuring the autistic student has an equal opportunity for success in the PhD viva voce

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ABSTRACT

Despite the viva being an essential component of all PhD and other doctoral qualifications in UK universities, there is little research into their accessibility for autistic students, or the process of adjusting them to individual students' needs. Autistic student voices about the viva are almost completely absent from the literature. This paper is the first to employ a collaborative, ethnographical case study to explore the doctoral viva voce experience of an autistic student, directly from their perspective and from the perspectives of non-autistic academics central to the process. The experiences we share highlight the limitations of 'reasonable accommodation' plans, if they offer only generic support based on a diagnostic label, rather than taking account of the individual needs, and the importance of recognising the unique role that the viva voce holds within doctoral studies. We present a 'reasonable accommodations' discussion document, to facilitate autistic student-centred discussions and ensure the viva process is fair and accessible. We further assert that accommodations should be formally noted within the examination report as to their use and impact.

Introduction

The viva voce, generally shortened to 'viva', is an essential part of every doctoral student's journey in the UK. Whilst a viva is challenging for most students, it can be a significant barrier to success for autistic students if their social, communication and sensory differences are not accommodated. Within this case study, we explore our experiences of constructing and undertaking a viva with/as an autistic student. We do this through first-hand accounts from the student, supervisor and examiner, contextualised within current literature. Research into vivas for autistic students is sparse, so this case study offers novel and important reflections on the trilateral processes of developing good practice.

Theoretical background

Autism in academia

Many autistic students have the potential do well academically and the National Audit Office (2009) recognises university as a desirable option for academically gifted students with AS [Asperger Syndrome]' (Hastwell et al. 2013, 4). The population of postgraduate research (PGR) students within

the UK who disclosed autism at enrolment has more than doubled in the last four years, growing from 220 in 2016 to 525 in 2020 (HESA 2022). This is in stark contrast to post graduate research student numbers generally, which dropped by over 1,000 in the same period, for those students not disclosing a disability. Clearly, this is becoming an increasingly significant population, both in size and in the potential that these new researchers possess. It is in the interest of Higher Education Institutes (HEIs) to ensure the best outcomes to harness and nurture this potential.

Autistic students are, however, at greater risk of failing to graduate due to the challenges associated with higher education (S.K. Kapp, Gantman, and Laugeson 2011; Pinder-Amaker 2014; Newman et al. 2011). Autistic students report having to make extra effort to thrive at university (Gurbuz, Hanley, and Riby 2019) due to academic challenges, such as difficulties with processing speeds, time management and following lectures (MacLeod and Green 2009; Van Hees, Moyson, and Roeyers 2015; Anderson, Carter, and Stephenson 2017) combined with the social demands of university, such as living in halls, making friends and managing social situations (Accardo 2017; Gelbar, Smith, and Reichow 2014; Scott L. J. Jackson et al. 2018).

The autism&uni project (Fabri, Andrews, and Pukki 2016) reported that the main challenges faced by autistic students at university include the social/physical environment and challenges concerning assessment, including the doctoral viva. While Scott and Sedgewick stress the importance of a culture of acceptance, as 'stigmatizing attitudes' leads to 'much greater difficulties' for the autistic student (Scott and Sedgewick 2021, p1).

It is important to note that, because Higher Education Institutions (HEIs) sometimes get it right, and because autistic individuals work hard to face the inherent challenges, an increasing number of autistic doctoral students are completing their studies, contributing greatly to autism research, and transforming the research environment to the benefit of all. In our work with doctoral students, HEIs have the opportunity to nurture the next generation of autism leaders (Foster-Fishman et al. 2007), and to do this effectively, we need to innovate and experiment in our practice, with the courage to challenge our institutional norms.

The viva is a final stage of the doctoral trajectory and requires the student to give an oral defence of their thesis before a panel of examiners. (In United States academia the viva is known as a 'defense'). It is a 'gate-keeping function and … a marker of standards' (The Quality Assurance Agency for Higher Education, 2020, p. 23). Chown et al. state that 'Although national guidelines exist, viva processes vary within and across institutions, rendering processes mysterious, unpredictable and potentially frightening for students' (2016, p. 22).

Whilst there is little literature about doctoral vivas generally (C. Jackson and Tinkler 2001), there is even less on vivas for autistic students. It has been written that 'many candidates approach the viva with high levels of anxiety' (Martin 2010, 52). However, autistic anxiety levels are often much higher than for their non-autistic counterparts (Beardon, 2022). Moreover, in addition to anxiety during the viva, autistic students may experience much higher levels of pre-event anxiety, as well as post-event anxiety associated with lengthy rumination (Beardon, 2022). Heightened anxiety may increase sensory sensitivities (S.A. Green and Ben-Sasson 2010), therefore rendering those more problematic during the examination Beardon (2017, 55) wrote that 'compared to a usual sensory experience you might be highly sensitive, or less sensitive, in any or all the ways in which you process (i.e. experience) touch, sights, sounds, smells and tastes'. Such challenges have only relatively recently been formally acknowledged, again, as a central facet of autism, having been added to the diagnostic criteria (D. Green et al. 2016). As such they are important to reflect upon when considering autistic experiences during a viva examination.

The viva, as with all other elements of the doctoral study process, has been devised for individuals without neurological differences, so that an autistic student is likely to be disadvantaged in comparison with their non-autistic peers. In order to counter this disadvantage, a university should make whatever accommodations are necessary for each student. Despite this, in a recent UK survey on research supervision, there was little indication that disability issues formed part of supervisors' concerns and disability accommodations were not mentioned (UK 2022).

Reasonable accommodations

The Americans with Disabilities Act (ADA 1990) adopted the term 'reasonable accommodation', describing that an accommodation must be provided if it is considered reasonable for an organisation to provide it. The Convention on the Rights of Persons with Disabilities requires 'reasonable accommodation' to be made for those with a disability. The Convention defines 'reasonable accommodation' as the

> "necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms." (United Nations 2007)

In the UK, under the Equality Act (2010), there is a duty to protect disabled people from discrimination in the workplace and in wider society, including education, requiring 'reasonable accommodation' for disability known under the Act as 'reasonable adjustments'. Section 6 of this Act states that a person is disabled if they have a physical or mental impairment, and the impairment has a substantial and long-term adverse effect on their ability to do normal day-to-day activities. Autism, in the UK, is classed as a disability under the Equality Act.[1]

Martin (2010) and Chown et al. (2016) have proposed recommendations to ensure that autistic students are examined on academic prowess, not social differences. Their key recommendations were: offering the option of a 'virtual viva' via email, preparing an autistic 'needs assessment' prior to the viva, and ensuring that those involved with an autistic student's viva understand autism sufficiently to appreciate issues specific to the individual. Where the university provides an independent chair (Chown et al. 2016; Park 2003; The Quality Assurance Agency for Higher Education 2020) this can help to ensure that reasonable adjustments are applied correctly. According to Chown et al. (2016), if reasonable adjustments are offered to an autistic student, 'Academic rigour and integrity would not be compromised but the playing field might be flattened' (Chown et al, 2016., p. 22).

Methods

This multi-perspectival case study (Cohen, Manion, and Morrison 2018) was undertaken to focus on the experiences and perceptions of the student, supervisor, and internal examiner, prior to, during and after a PhD viva, within a large redbrick university. It is set within the boundaries of the viva as the subject and accommodations for an autistic student as the object of study. The case study design facilitates the opportunity to understand the lived experiences, thoughts, and emotional responses to the viva process.

The case study takes the form of a collaborative autoethnography, a development from the traditional single autoethnography through which 'two or more researchers work together to share personal stories and interpret the pooled autoethnographic data' (Lapadat 2017, 589). We are a collaborative team of two autistic, and two non-autistic researchers. By reflecting on a single event from different perspectives and bringing together differing autism knowledge and experiences, from personal to academic, we aim to give primacy to the autistic student's perspective, whilst allowing the perspectives of non-autistic stakeholders to contextualise those experiences and draw out implications for practice (Gallagher 2018). We do not utilise data in the traditional sense, but instead reflect critically on our individual experiences within the context of existing research and knowledge about the phenomenon, thus using 'the public exposition of personal ideas and theories to further knowledge through analysis and dialogue with "others", including the literature' Lake (2015), 679. It is acknowledged that the experiences of the individuals within the study may not be generalisable, however the 'study of an instance in action' (Adelman, Jenkins, and Kemmis 1980) provides us with the foundation upon which to build. As such, reflections shared here 'speak for themselves' (Cohen, Manion, and Morrison 2018, 377). Thereafter, key themes are drawn together and contextualised

within empirical research, thus contributing to the sparse, existing knowledge on how best to make accommodations for autistic students in preparation for their viva.

Narratives

Supervisor's reflections: constructing an autism friendly viva

Park (2003) describes viva practice as a socially constructed activity in which multiple agendas are in play, the cultural practice of which has generally evolved locally and is not transparent to the student. Couched in these terms, it is apparent that this will be a challenging environment for any student, but for those who commonly experience communication barriers and higher levels of anxiety, it can represent insurmountable barriers. We all want the best outcomes for our students, so ensuring these barriers are minimised would seem to be a key responsibility of the academics involved. Perhaps surprisingly, there is relatively little consistency in viva practice (Hartley and Fox 2002), and research indicates that elements commonly understood to be good practice in terms of preparation and outcome, such as mock/practice vivas (Hartley and Fox 2002) happen in only a minority of cases (Share 2016). Student evaluations and quality assurance procedures, now deemed essential within undergraduate, and postgraduate taught, studies, are largely absent within doctoral research procedures (Watts 2012). There seems be a missing link between best practice guidance and actual practice and very little research that considers student experience. This is the case for the whole student population, but it carries additional connotations for disadvantaged students such as those diagnosed autistic. If existing disadvantage is compounded by opaque and inaccessible systems, the lack of current research renders it invisible.

Working with the individual

As a first step, the second supervisor and I tried to hold back from making assumptions about what was needed or wanted. There is some literature suggesting that autistic people benefit from online formats, and this can be true, but it is likely to be different for everyone, and individuals might have different preferences depending on specific circumstances. During the Covid-19 pandemic, for example, autistic individuals appreciated the opportunity to receive virtual support but often expressed a preference for face-to-face meetings (Spain, Mason, and Capp et al. 2021; Pellicano and Stears 2020). It is therefore important to ask rather than assume. D. E. Milton (2014), an autistic academic, refers to the need for non-autistic allies to develop 'interactional expertise', by respecting and learning from autistic collaborators, and this conscious withholding of assumptions is a valuable means of creating a respectful space, through which to learn.

Options for practice are important for all students, and offering different types of practice gave some flexibility to this process. It proved useful to hold a practice viva, in which we paused to explore the implied meaning behind each question, and to discuss what the examiners would be looking for within the response.

An open discussion about personal reactions to stress was an essential part of our preparations, which needed to be handled sensitively. We talked about what might happen in the worst-case scenario and what information should be provided to the viva team.

Minimising communication barriers

Trafford and Leshem (2008) suggest that students should be encouraged to think about viva preparation from the earliest stages of their studies. In practice, this might be overwhelming for some students, but there are elements that can sensitively be introduced as part of the ongoing dialogue. We tried to start thinking early about what information was most important to convey about the viva, and to share this well in advance to allow time for processing of information and

discussion. This was communicated in different ways, by firstly talking and then following up with written bullet points. We also posed some direct questions, to make sure we understood what was wanted. We found it was useful to be a translator of viva jargon. Autistic students may be less aware of implicit norms, and this can cause individuals to put pressure on themselves, aiming for a perfect score that, within the reality of university grading systems, may be only theoretically available. For example, understanding that in our institution and our field, it is most common to pass with corrections, and therefore preparing for that outcome, was important cultural contextualising.

We also spent more time than usual, discussing possible scenarios, including the 'nuts & bolts' of who does what in a viva – what happens when everyone first meets, what is the role of the Chairperson, how will the viva begin – these concrete details were useful to cover, as well as the more academic elements such as the questions that the examiners would be likely to ask, and how the feedback and outcome would be presented to the candidate.

Getting the right examiners

Communication between everyone involved was important and we tried to make sure that we selected examiners who would be open to a dialogue in the preparation stages and inclusive in their approach.

Timescales

Evidently, the steps described here take some time – to reflect on what is needed, check it out with the candidate and put it into action requires some flexibility. This is especially important as it might be necessary to take a small step back and retrace, if for example, a practice viva goes badly. This requires communication as a two-way flow of information, checking how it has been processed by both parties – mindful of the 'double empathy' problem (D. E Milton 2012a) – both practically in terms of understanding one another's communication, and emotionally in terms of understanding the triggers for anxiety. For most students, the viva is an unknown shadow hanging over the doctoral process – something not faced until the 11th hour, 'something they endure, rather than enjoy, and something for which they are often quite unprepared' (Park 2003, 48). It makes sense to address this early on – if it is a regular point of discussion from an early stage, then some of these decisions can be made and plans set in motion well in advance.

Examiner's reflections: running an autism friendly viva

Accommodations

Disability matters, doctoral students and the oral examination have been discussed in statutory guidance for the past twenty years and it has long been accepted that all those involved with the viva have a legal duty to consider what might be issues for the candidate and in turn what accommodations need to be made. Examiners are therefore as obliged as any other educationalists to plan accommodations at the viva for doctoral candidates when they could be placed at a substantial disadvantage compared to other people for disability-related reasons.

Lack of guidance

The examiners are beholden to the preparatory work, which is undertaken between the candidate and their supervisors, and especially their disability adviser. Behind the scenes, examiners, who may never have met or interacted with one another, are required to translate this information, and request for accommodations, into a workable *modus operandi*. There is no known research which specifically focusses upon how examiners undertake this process, or how they reach agreement

about what will be sufficient to facilitate a candidate with a disability engaging as fully in their viva as another who is not in need of accommodations.

Good practice (Chown et al. 2016) suggests that examiners respond to the aforementioned liaison in terms of a statement (written and or oral) about how the viva will be conducted and therefore what the candidate is entitled to expect. This should necessarily include the questions to be asked, or at least those aspects of the thesis which will be questioned. It is not standard practice in the UK that a viva has an independent Chairperson, but where one is appointed, such information can be used by them to ensure that the viva is conducted according to what was planned. Candidates can be informed that, if necessary, the Chairperson will intervene on their behalf.

There is always some anticipatory anxiety when preparing for examining in a doctoral viva, and it is more honest to say this is especially true when a candidate is known to need accommodations. Generic plans require interpretation in practice and therefore communication with the candidate's supervisors is essential. As a non-autistic examiner of an autistic doctoral researcher, it was decided there would need to be a specific focus on ensuring an effective environment for the viva. In consultation with the lead supervisor, we discussed how the nature of social interactions would be central to facilitating positive engagement for all in the viva, not only the candidate. There is support for this approach from research – Sheppard et al. (2016) explore how neurotypical individuals can be ineffective at interpreting the behaviour of autistic individuals and this can unwittingly contribute to their social interaction difficulties. As the viva is essentially a relational process, the promotion of effective social interaction and communication is of obvious importance for all concerned, especially the interactions between autistic and non-autistic individuals.

Reports

The Examiners' report following the viva should include notes on the reasonable adjustments that were provided. This is rarely referenced in university viva guidance, but Faraher (2019) (applying Chown et al. 2016) states that such information, ideally in writing, should be provided as soon afterwards as possible. The value of doing so is not only for the candidate, but it also enables postgraduate research services to develop, and quality-assure data on the examination processes for students with disabilities.

Student's reflections: being part of an autism friendly viva

The viva was a dark shadow that hung over my PhD journey. It was something that I was acutely aware of, while also being something I knew very little about. As an autistic student, developing and maintaining social relationships do not come easily to me. As a result, I did not have fellow students around me, who I could draw upon to shine a light on the uncertainty of the viva. This is an important context to my experiences – I was reliant upon my supervisors and the university to act as mentors as I had no-one else to fill this void.

Accommodations

I remember meeting with the university-based disability advisor at the beginning of my PhD journey. They listed all the accommodations I may need because I am autistic. Sitting in a room with an unfamiliar person, we were talking about challenges that I had yet to experience. I know the viva was mentioned at this point, but at that early stage I did not know what that meant, so I had no idea what I would need! Three years later it became apparent that such recommendations, however well intentioned, did not reflect who I was as an individual. Furthermore, they outlined provision available to all students, which therefore could not be described as 'reasonable adjustments' (Equality Act 2010). Whilst we used them as a starting point for discussions, the most impactful action undertaken with my supervisors was a discussion, using their knowledge of how a viva works alongside my

knowledge of me and my autism, to develop ideas of what may be needed to ensure a) I was able to turn up for my viva (as my runaway impulse is high with my anxiety) and b) I was able to talk about my work (as my ability to construct verbal sentences is significantly impacted when I am in a stressful situation). This process took a lot of 'to-and-froing' but it was this openness to communication between all parties involved that enabled success. In the end the viva process, with accommodations, was not delivered unto me, I had a voice in it and my voice was heard!

Uncertainty

I find the unpredictable very challenging. The multidimensional impact that the unpredictable nature of the viva had on me should not be underestimated. While there was no way of making the viva wholly predictable, the process of the supervisor acting as a mediator between me as a student, and the examiners as the providers, meant that relatively simple accommodations, as outlined below, could be put in place that were fundamental to allowing me the opportunity to be successful.

Practice

Before any accommodations had been put in place with the examiners, my supervisors offered the opportunity to do a practice viva, which is generally suggested as good preparation (Opitz 2020). Our initial attempt at this, I found very uncomfortable. Pretending the supervisors were examiners was not something I was able to do, which meant that shaping my answers was hard and uncomfortable. As I felt able to share this with my supervisors, and importantly as they listened, we adjusted our approach and had an email conversation around what questions may be asked, their wording and intention, which I found much more fitting with the student-supervisor relationship, and therefore more beneficial.

Location

My supervisors asked me where I would feel comfortable doing my viva. I did not want to do it online as I felt that I needed to be in the university environment to focus my brain solely on my thesis (my brain tends to be easily distracted!). They also offered options for the location – the lead supervisor's room was a 'safe' choice as I knew the room well, so could visualise where I would sit and where others would be. I also knew it was on a quiet corridor, with a window that was not near a public right of way, so sensory sensitivities would be reduced.

Examiners

I was given the opportunity to identify examiners. I did not feel confident doing this, so my supervisors supported me in identifying suitable people based on subject knowledge and personality type, matching my needs. My supervisors made sure I knew who the people were and what they were like as individuals e.g. were they softly spoken? Did they present themselves as friendly? I was given the opportunity to meet them in advance of the viva starting, which I declined, but I appreciated being given that choice.

Questions

The single biggest help for me was the examiners sending me a list of subject areas, on which I would be questioned, before the viva, and that these were structured chronologically. The anxiety I had felt about the many, many possible questions that might be asked made preparing for the viva overwhelming and nigh-on impossible. The identified areas of questioning were not, in practice, any

different to those my supervisors had already suggested from their experience, but the concreteness of knowing instead of guessing reduced my anxieties significantly. I prepared flash cards for each question so I knew that if I struggled to put into words what I was trying to say, I could use these as a crutch to refocus my thoughts. In practice the questions weren't asked in the same way as I had been sent or in the same order. Inevitably, sometimes you give enough of an answer in one question that another is not needed. This did not matter for me, in the moment, because the list had been enough to get me past the barrier that my intolerance of uncertainty would cause and may have prevented me from giving the answers to the questions, which I knew I knew! – or even more, it may have prevented me from even turning up.

The viva could have stopped me finishing my PhD journey. There were many aspects that sent my anxiety levels skyrocketing and led me to the point of running away. The generic accommodations offered by the university did not help counter these anxieties and did not fully reflect the barriers. I firmly believe that my success within my viva is rooted in my supervisors asking me, and listening to me, about where I felt the barriers were, then developing individualised solutions that enabled me to have equitable opportunities for success.

Discussion

Post viva reflections

Research has demonstrated that there is little consensus regarding the role and structure of the doctoral viva (C. Jackson and Tinkler 2001) which reflected our own experiences. While university-specific guidelines outlined the key principles of managing a viva, success for us occurred when we used these as a foundation and then worked as a team to personalise the process of identifying barriers and developing solutions. A post-viva period of reflection highlighted that we had all learnt from each other during this process, developing our knowledge and practice. We believe such reflections are not common practice, indeed 'reasonable adjustments' are rarely recorded in a viva report, preventing individual, and indeed institutional, reflections on best practice. It is our belief that normalising post-viva evaluation is fundamental to learning from experiences and improving provision.

Despite research suggesting that viva experiences are often negative (Hartley and Fox 2002; Wallace and Marsh 2001), the processes explored here resulted in a positive experience for all involved, without diminishing the integrity of the examination process (Park 2003). The following explores the lessons learnt from our experiences and our proposals for improved practice in developing accommodations for autistic doctoral students.

Learning from our experiences

Our accounts are grounded in the shared belief that success for an autistic student is nurtured through personalisation. Processes that outline support based on a generic label of autism, rather than a specific understanding of the individual, are problematic. Good practice was developed when generic supports were set aside, and time was given to understand where the viva processes may clash with the student's autistic profile, resulting in accommodations that were targeted and effective. A central finding is that accommodations must be personalised. Whilst universities have, and should have, guidelines on what may be defined as a reasonable adjustment (Equality Act 2010) these should be based on the agreement that diagnosis-based RAs may not match the needs of the individual as there is a diversity among autistic people (Harmsen 2019) and as such each individual can have different responses to the same task (S. Ka, 2019). The *Nothing About Us, Without Us* movement expresses that people with disabilities know what is best for them, and as such, best practice would ensure the autistic person is supported to take an active role in the production of knowledge relating to their needs:

" … right from the start, from the time someone came up with the word 'autism', the condition has been judged from the outside, by its appearances, and not from the inside according to how it is experienced." (Williams 1996, 14)

Upon these foundations, supported by the available literature, we present a Reasonable Accommodations Discussion Document, that can guide personalised discussions about effective practice in university settings (Appendix 1). The authors wish to highlight, based on our reflections here, the isolation that an autistic student may experience, outside of the student-supervisor relationship, and which may impede access to peer-support. R. A. Knight, L. Dipper, and M. Cruice (2018) report the positive use of peer-mentoring to reduce pre-viva anxieties. An innovation such as this one is worthy of exploration alongside 'reasonable adjustment' discussions.

The discussion document presented here is predicated on the expectation that good practice available to all students would also be provided to the autistic student, therefore would not be identified as an accommodation. Planning therefore is needed, in addition to good practice, in the key areas identified in this case study and supported by the wider literature:

- Uncertainty
- Sensory sensitivities
- Impact of anxiety
- Cognitive inflexibility.

In all areas, key elements of the viva are identified, which the authors believe would enable an effective basis for discussion. While important, these should not be viewed as exhaustive. Through discussion, other elements individual to the student may become apparent which should be incorporated, and appropriate strategies developed.

Uncertainty

Uncertainty can be problematic for autistic individuals; Intolerance of Uncertainty (Boulter et al., 2014; Jenkinson, Milne, and Thompson 2020) and Predictive Processing (Bervoets, Milton, and Van de Cruys 2021) are two theories that seek to explain why this may be the case. Intolerance of Uncertainty focuses on the emotional responses to uncertainty, such as anxiety, whilst Predictive Processing theory seeks to explain the different cognitive processes that may, or may not, lead to anxiety. This reminder – that autism does not automatically trigger anxiety – reflects the important message that autistic people are different and will respond to the viva differently. For this reason, questions within the Reasonable Accommodations discussion document explore with the student whether uncertainty and anxiety are likely to impact them, since they may not, and in that case an accommodation would not be warranted. In line with the predictive processing theory, for the autistic student who identifies anxieties driven by uncertainty, a 'heightened attention to prediction errors' Bervoets, Milton, and Van de Cruys (2021) may be the cause. This again reinforces the value of pre-viva discussions to provide a more predictable structure, therefore minimising anxiety driven by prediction errors.

Sensory sensitivities

While clinicians tend to focus on the social aspects of autism, autistic adults often highlight their sensory sensitivities. There is a growing recognition of the importance of the autistic voice in research, which contributed to the sensory aspect of autism being reinstated in the fifth edition of the Diagnostic and Statistical Manual, DSM5 (American Psychiatric Association 2013).' The impact of sensory sensitives in higher education is under-researched, however individual accounts and research with children indicate the need to consider how sensory sensitives may negatively impact on the student's ability to achieve. J. Ashburner, J. Ziviani, and S. Rodger (2008), comparing sensory

processing patterns in autistic and non-autistic children, found an association between autistic participants with sensory sensitivities and academic underachievement. Similarly, Howe and Stagg (2016) reported that their participants, of compulsory school age, had sensory sensitivities in at least one sensory domain, with auditory sensitivities reported as the most common challenge. These challenges were seen to have a negative impact on the student's learning experience.

Recent estimates of the prevalence of sensory sensitives in autistic individuals vary from 45% to 96% (Ben-Sasson et al. 2007; Leekam et al. 2007). Furthermore, and importantly to our proposals, such sensitivities can be 'unpredictable from the viewpoint of someone not on the autism spectrum to observe and understand' (D.E. Milton 2012b, 9). This reinforces the case for dialogue and personalisation as the only appropriate ways of providing autistic students with equitable opportunities.

Impact of anxiety

Whilst anxiety can present itself in many ways, for autistic candidates it is important to recognise that anxiety levels may be utterly debilitating (Beardon, 2022). An articulate person might not be able to talk at all or may panic and may not be able to ask for help when they need it most – they might even just not turn up (Bellini 2006; Spain, Sin, and Linder et al. 2018). It is therefore important to recognise that the student may need RAs for behaviours that may not have previously been seen.

Cognitive inflexibility

Cognitive inflexibility is a difficulty in adapting to new situations and thought processes. This sits within the core DSM-5 diagnostic criterion: '*Deficits in developing, maintaining, and understanding relationships' (*American Psychiatric Association 2013). The context behind 'difficulties adjusting behaviour to suit various social contexts' (American Psychiatric Association 2013) has been the basis for many theories. It is outside the remit of this case study to explore these, but we suggest that autistic individuals often report a difficulty in this area, and these difficulties may overlap with previously outlined factors. We highlight autistic perfectionism and social imagination as key elements that may affect the student in their viva. Little research has been undertaken to explore perfectionist thinking in autism. Greenaway and Howlin's study (2010) with adolescent boys suggested that autistic participants reported more perfectionist beliefs than the non-autistic group. Furthermore, that 'cognitive inflexibility was associated with a greater endorsement of these beliefs' (p. 1184). Whilst no research, to the authors' knowledge, has explored the impact of perfectionism on academic attainment, a study undertaken by Gillespie-Lynch et al. (2020) reinforced the increased prevalence of perfectionist thinking in autistic students when compared to their non-autistic counterparts.

Like perfectionism, there is little evidence on the impact of reduced social imagination on the viva. There has however been consistent evidence, when researching children, that autistic individuals often show reduced involvement in symbolic play (Hobson et al. 2013; Beyer and Gammeltoft 2000). One explanation for this may lie in a cognitive inflexibility to imagine alternative scenarios. While no documentation states that a practice viva is a necessary element of a good viva, it is often used by universities to prepare a student for what to expect. Viewed alongside the necessity to plan for uncertainties, it may be a natural assumption that practice vivas should be an essential component of preparation for an autistic student. However, we reinforce this may not be the case for every autistic student, and an openness to flexibility in this approach will be beneficial.

Conclusion

The document presented here, based on our reflections, contextualised with current evidence, is the first to take a multi-perspective approach to the viva voce experience for an autistic student. It is

intended as a starting point for non-autism specialists to consider accommodations that might render the process more accessible. It is our belief that, wherever possible, students should feel empowered by any process involving them, rather than passive recipients of support. Where possible therefore, the document should be made freely available to students, for their own consideration. Should the student feel confident to initiate the dialogue, which we acknowledge not all autistic students will, they can begin the viva conversation at a time appropriate to their needs.

We recognise that this case study is temporally and institutionally contextual (Hitchcock and Hughes 1995), and propose that larger-scale research is needed, and indeed intended, to explore viva experiences of autistic doctoral students. To facilitate further research, and the sharing of good practice, we suggest accommodations enacted within a doctoral viva should be recorded within the examiner's report as standard practice. This would allow HEIs to track the impact of accommodations on students' achievements, embed students' equality rights within mainstream processes and render doctoral processes for all students with accommodations more transparent, maximising the potential for best outcomes for all autistic, and indeed disabled, doctoral students. In this way, the academy will be better able to meet its obligation to nurture researchers of the future from neurodivergent and disabled communities.

Note

1. Many autistic individuals do not regard themselves as being disabled or as having a 'mental impairment'. Nevertheless, because UK law classes autism as a disability, they may be entitled to reasonable adjustments.

Disclosure statement

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Appendix

Reasonable Accommodations Discussion Document: Autistic Student

Autism does not affect everyone the same way. The purpose of this form is to provide supervisors (with or without prior knowledge of autism) a basis for planning personalised reasonable accommodations, above and beyond those provided for all students. While these options are provided as a baseline for discussion, in all planning the student is the expert in themselves, therefore time should always be given to allowing them to share their anxieties and create individualised reasonable accommodations to ensure they have the same opportunity for success as their non-autistic peers. The outcome of this planning must always be shared with both examiners and chairperson of the Viva and recorded in the examiner's report following viva completion.

Does the student have difficulty adapting to different situations?

Yes

No

Is the student an autistic perfectionist?

Examiners should be made aware that all required alterations to the thesis may be viewed as failure and affect the student's mental health. Wording of such therefore should be considered carefully and balanced with the positives of the work. Supervisors to plan in advance for this and reinforce in any follow up meetings.

Does the student find it difficult to role play?

Alternatives to the commonly used practice viva should be considered, such as an email based discussion on possible questions and how they could be answered.

Does the student find it difficult to transition between activities?

The student should be given the opportunity to meet the supervisors immediately prior to the viva to 'bridge the gap' between free time and the viva itself.

Does anxiety significantly affect the student's ability to achieve their potential?

Yes

No

Is the student unable to talk **at all** in stressful situations?

The student should be offered alternatives to the oral viva such as via email or instant messaging system.

Does the student find it difficult to articulate themselves effectively when stressed?

The student should be allow to use visual prompts and have a structure to have breaks to give thinking time. This may need prompting by the chair on the student's behalf.

Does the student find it difficult to process verbal information when stressed?

The student should be offered a list of questions in advance that the examiners will ask of them. The supervisor should go through this with the student to clarify any words/questions the student is unclear on.

The chair should make the student aware that they can ask for clarification at any time. Examiners to use unambiguous language.

The student to be made aware that all feedback at the end of the viva will be recorded on their behalf by their supervisor. Follow up meeting to be organised with the student and their supervisors so review feedback and plan necessary adjustments to thesis.