RESEARCH

Employability for UK University Students and Graduates on the Autism Spectrum: Mobilities and Materialities

Jonathan Vincent
York St John University, GB
j.vincent1@yorksj.ac.uk

This article examines the transition from higher education to employment for autistic university students and recent graduates. This study has particular significance given that increasing numbers of autistic young people are entering higher education across the globe yet employability outcomes are typically some of the worst of any disabled student group. The article draws on qualitative data from twenty-one semi-structured interviews with autistic students and graduates and sixteen focus groups with 58 community stakeholders, including parents, public servants, university careers advisors and disability support workers. Analysis of these data, through a mobilities paradigm, indicate four themes (1) employment (im)mobilities; (2) inaccessible recruitment processes; (3) embodied materialities and employment; and (4) resourcing employment mobilities. The article makes a significant contribution to the field in arguing that autistic graduates are at a disadvantage in terms of accessing meaningful employment and indicating the human and non-human actors and actants that influence their outcomes.

Keywords: Autism; Employment; Higher Education; Mobilities; Graduates; Students

Introduction

Employment outcomes for autistic university students and graduates are significantly poorer than those of their non-disabled peers. In the UK, data from the Destination of Leavers from Higher Education survey (Office for Students 2018) report that, six months after graduation, those disclosing a disability were less likely to be in full-time employment than non-disabled graduates, which echoes the findings of Nolan and Gleeson (2017) in the Republic of Ireland. Of this group, graduates who disclosed an autistic spectrum condition were the least likely to be in full-time employment and most likely to be unemployed—indeed unemployment figures were actually worse for those with postgraduate qualifications (AGCAS 2019). This has international import given that increasing numbers of autistic students are enrolling in and completing university courses. The Higher Education Statistical Agency (2015) reported a 400% rise of autism spectrum condition disclosures to UK institutions compared to 2003/4 data, and more recently, Chown et al. (2018) reported an average of 55 autistic students per institution, with some catering for up to 200 students. In the United States, studies suggest that up to 45% of the approximately 550,000 autistic children who will be transitioning into adulthood over the next decade are expected to enrol in a university, college, or technical/vocational school (Jackson, Hart & Volkmar 2018). Increased numbers of university students disclosing autism diagnoses have also been reported in Sweden (Adolfsson & Simmeborn-Fleischer 2015), Australia (Hamilton, Stevens & Girdler 2016; Mulder & Cashin 2014), and Canada (Gardiner & Iarocci 2014). However, despite the international trends in autistic participation in higher education, there is a distinct paucity of published research that examines what happens next for this group.

This qualitative study is among the first to examine the experiences of accessing employment for those leaving higher education with an autism diagnosis. It draws on firsthand accounts from 21 semi-structured interviews with autistic students and graduates and 16 focus groups with different stakeholders involved in the process. It is analytically located within the ‘new mobilities paradigm’ (Sheller & Urry 2006) in contending that the capacity to be mobile is more than the physical act of moving between places but relates to ‘how life moves’ (Cresswell 2006: 43) and as such is deeply embedded in individuals’ spatial, cultural, political and economic, social, and personal contexts. The study aims to uncover important insights into how these factors affect autistic graduates’ employment mobilities on exiting higher education and make recommendations for improved practice.

1 The author uses identity-first language (autistic person) rather than person-first (person with autism) in keeping with the language preferences of the autism community in the UK (Kenny et al. 2016).
Autism in relation to employment

Autism is a lifelong neurodevelopmental condition that affects around 1 in 100 people (Brugha et al. 2011). It is frequently associated with communication difficulties and behaviours that can appear fixed and repetitive, both of which can affect social functioning (American Psychiatric Association 2013; Bertilsdotter Rosqvist 2019). However, there is substantial heterogeneity both between and within autistic individuals (Georgiades et al. 2013). While 60% of people with the diagnosis have ‘normal’ or above average intelligence (Chakrabarti & Fombonne 2005), many autistic individuals will have uneven cognitive profiles exemplified by capacities in one area but difficulties in another; for example good long-term memory but poor short-term memory or excellent attention to detail but challenges in attending to the ‘big picture’ (Buckley 2017). Autism is often associated with differences in behavioural flexibility (Simmeborn-Fleischer 2012), emotional regulation, and hypo- or hyper-reactivity to stimuli across all five sensory modalities, which according to Harrison and Hare (2004) can lead to increased levels of emotional discomfort and even physical pain.

It is clear to see how these social, sensory, and communication differences might make accessing and progressing in employment challenging for autistic graduates. Similar experiences are also described by autistic staff in higher education, who report unstable employment and limited opportunities (Milton et al. 2019). However, barriers to employment additionally exist at an environmental level, in terms of society’s labelling of autistic idiosyncrasies as ‘deficits’ or ‘abnormalities’ instead of positive attributes in the workplace (Lorenz et al. 2016; Remington & Fairnie 2017; Van Hees et al. 2014). For example, Janzen (1996: 23) posits the potential benefits of an autistic diagnosis as

An ability to assimilate and remember information quickly and for long periods of time; effective use of visual information; learning and repeating long routines; understanding and using concrete, context-free information and rules; as well as a facility to achieve high levels of concentration on their special interests.

It is thus clear that if such skills and abilities could be harnessed in the right work environment through careful person-job-environment planning (Lorenz & Heinitz 2014) it would be possible for autistic students and graduates to enjoy successful mobilities well beyond university.

Employment mobilities and materialities

Employment for modern university graduates increasingly involves intricate patterns of physical and virtual movement based on complex spatio-temporal arrangements (Dorow, Roseman & Cresswell 2016). More and more it demands non-standard, precarious working arrangements (Formby 2017) grounded in the micro-geographies of household dynamics, the daily commute, and the power-geometries of class, race, gender, dis/ability, and age (Massey 2012). Whilst employment mobilities certainly involve the capacity to secure better work prospects appropriate to levels of skill and qualification, they also go beyond this in constituting a new space of identification and belonging (Robertson et al. 2018).

Mobilities (including employment mobilities) are necessarily diverse and frequently expose inequalities derived from differentials across and within social networks, as well as the political and practical consequences of these. To this end, Cresswell (2010: 21) has theorized a ‘politics of mobility’, averring that they are ‘both productive of such social relations and produced by them’. According to Sheller (2015: 15–16)

Mobility may be considered a universal human right, yet in practice it exists in relation to class, racial, sexual, gendered, and disabling exclusions from public space, from national citizenship, and from the means of mobility at all scales… the unevenness of mobility may take the form of uneven qualities of experience, uneven access to infrastructure, uneven materialities, uneven subjects of mobility, and uneven events of stopping, going, passing, pausing, and waiting.

Here Sheller signals the importance of materiality as a variable of im/mobilities, an area of the literature that Brooks and Waters (2017) assert has been under-emphasised to date. For them, mobilities are unavoidably related to and transformed by materialities—physical spaces, landscapes, technologies, processes, and human bodies—all of which are experienced within multifaceted socio-spatial contexts. Brooks and Waters (2017) map the theoretical disjunctures between historical materialists who emphasise capital circulation and accumulation (Harvey 1996a); material culturalists whose interests lie in how objects, buildings, and other material structures serve as conduits of social meaning (Lawn & Grosvenor 2005); and new materialists who seek to de-centre the human in asserting that non-humans, such as animals or machines, coexist in multiple forms (Fenwick et al. 2012) and must be understood as ‘actants’ in transforming spaces. Thus, mobilities are inextricably linked to the materials and practices of society and are ‘situated within cultures of activity as well as bodily experiences and perceptions’ (Adey 2010: 44).

For Hägerstrand (1985: 324) mobility is necessarily predicated on the fact that ‘in the persistent present stands a living body-subject, endowed with memories, feelings, knowledge, imagination and goals’. In this sense the body is imbued with a host of complex social, psychological, and physiological meanings or an ‘assemblage of bodies, ideas and things’ (Dorow et al. 2017: 12). By recognising the materiality of the body—its physiology and anatomy, functioning,
emotions, comportment, and habits—in relation to mobilities, it is possible to analyse with much greater sensitivity the experiences and use of landscapes, artefacts and buildings, and social practices ‘as encounters between the materialities of our bodies and those particular spaces’ (Brooks & Waters 2017: 18).

Considering mobilities and materialities together in this way provides a useful theoretical framework through which to uncover the intersecting relationships, trajectories, and ‘nodes of power’ (Dorow et al. 2017: 3) involved in the transitions from higher education to employment for autistic graduates.

**Methods**

Given the lack of published research in this area (Cashin 2018; Vincent 2019), an exploratory qualitative design was deemed relevant for uncovering the complex experiences of autistic young people making the transition from education to employment. The paper is based on findings derived from 21 semi-structured interviews with autistic students and recent graduates and 16 focus groups with 58 community stakeholders. This qualitative approach also echoes Adey’s (2010: 18) assertion that mobility and materiality are relational effects or ‘being mobile-with’. Drawing on two data collection methods and respective datasets allowed for a degree of ‘crystallization’ (Ellingson 2008) by creating space for different voices in the postgraduate employment process to be heard.

**Semi-structured interviews**

A total of 21 young autistic adults from across England participated in this phase of the study following a snowballing recruitment process. Of the 21 participants, 15 identified themselves as male and 6 identified as female. In total, 10 of the participants were students within 12 months of completing university (8 Bachelor’s degrees; 2 Masters degrees) and 11 were recent graduates (8 Bachelor’s degrees, 2 postgraduate certificates, 1 PhD). The majority (n = 17) self-reported a diagnosis of Asperger’s syndrome and four self-reported a diagnosis of autism; all but two had received their diagnosis in childhood. Co-occurring diagnoses were self-reported by 8 participants (38%), with 5 identifying depression, 1 identifying an anxiety disorder, 3 identifying dyspraxia, and one identifying a gastrointestinal condition. Two participants disclosed more than one co-occurring diagnoses (see Table 1).

Participants reported on their firsthand experiences of transitions from eight universities across England. The majority (86%) of students had studied at Post-1992 universities; such a bias is recognised as being a limitation of snowballing techniques (Atkinson & Flint 2001). The majority (57%) had some relevant work experience, and 45% of the graduates were in paid postgraduate employment equivalent to their qualifications.

**Focus groups**

In total, 58 stakeholders participated in the focus groups. Participants were asked how they primarily viewed themselves and HE/FE careers and disability practitioners (21%); public sector workers (19%); autistic adults (17%), including three students and graduates who had taken part in the interview stage, made up the three largest groups. Those with firsthand experience of autism and employment were specifically recruited in order to reflect the ecosystem approach (Nicholas et al. 2018: 264), which considers it ‘inextricably linked with broader community resources, family support, workplace capacity building (e.g., employer, co-workers) and policy’. Two thirds (67%) of the participants were women, and the majority of the participants reported their age to be between 41–50 years, with 74% between 31–60 years of age (see Table 2).

**Procedure**

Participants for both groups were recruited purposively using snowballing techniques, which is recognised as an effective way of accessing the views ‘hard to reach’ groups (Atkinson & Flint 2001). Institutional ethics approval was granted by the researcher’s ethical review board for each stage [RS201554/RS201653], and written informed consent was obtained from each participant prior to data collection. Fourteen of the 21 interviews were conducted face to face, but for 5 participants, for whom this was not possible due to geographical restrictions, interviews were conducted using Skype®. One interview was conducted asynchronously with a participant for whom social communication caused high levels of anxiety. Where spoken, interviews were audio-recorded using a digital voice recorder and transcribed verbatim.

The 16 focus groups took place over a 1-day research event following the interviews and formed part of a larger study into employment practices. Data were collected by the researcher alongside 3 experienced facilitators and were audio recorded. Participants were allocated into 1 of 4 mixed groups of between 12–15 people that rotated around 4 rooms, each with a different research focus; these included finding and applying for jobs, disclosure, sensory needs, and social differences. All data were anonymised to protect the identities of those participating. Pseudonyms were assigned to interviewees given their personal nature; however, more general designation was used for focus group data.

**Analysis**

Following the procedure outlined by Timmermans and Tavory (2012), data were analysed through an abductive process, which sought to generate new theory and insights from the empirical findings against a background of existing sociological theories, in this case related to mobilities and materialities. Such theory-based inferential analysis involves...
Table 1: Characteristics of interview participants.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Sex</th>
<th>Age</th>
<th>Ethnicity</th>
<th>Diagnosis</th>
<th>Final year student</th>
<th>Recent grad</th>
<th>Subject/major</th>
<th>Highest qual: studying/completed</th>
<th>Institution type</th>
<th>Post-graduate employment aspirations</th>
<th>Relevant work exper</th>
<th>In postgrad paid emp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace</td>
<td>F</td>
<td>20</td>
<td>White</td>
<td>Asperger’s syndrome, OCD, Dyspraxia</td>
<td>✔</td>
<td></td>
<td>Business</td>
<td>BA</td>
<td>Post-1992</td>
<td>Business/marketing</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>John</td>
<td>M</td>
<td>20</td>
<td>White</td>
<td>Asperger’s</td>
<td>✔</td>
<td></td>
<td>History</td>
<td>BA</td>
<td>Post-1992</td>
<td>Teaching</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Eliza</td>
<td>F</td>
<td>21</td>
<td>White</td>
<td>Asperger’s syndrome</td>
<td>✔</td>
<td></td>
<td>English Language and Linguistics</td>
<td>BA</td>
<td>Post-1992</td>
<td>University lecturer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tom</td>
<td>M</td>
<td>22</td>
<td>White</td>
<td>Asperger’s syndrome</td>
<td>✔</td>
<td></td>
<td>Creative Writing</td>
<td>MA</td>
<td>Post-1992</td>
<td>Youtube/author</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winston</td>
<td>M</td>
<td>22</td>
<td>White</td>
<td>ASD</td>
<td>✔</td>
<td></td>
<td>History</td>
<td>MA</td>
<td>Post-1992</td>
<td>Museum educator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arthur</td>
<td>M</td>
<td>20</td>
<td>White</td>
<td>Asperger’s syndrome, Depression</td>
<td>✔</td>
<td></td>
<td>Creative Writing</td>
<td>BA</td>
<td>Post-1992</td>
<td>Further studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theo</td>
<td>M</td>
<td>20</td>
<td>White</td>
<td>Asperger’s syndrome, Ataxia</td>
<td>✔</td>
<td></td>
<td>Theology and Religious Studies</td>
<td>BA</td>
<td>Post-1992</td>
<td>Unsure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lewis</td>
<td>M</td>
<td>20</td>
<td>White</td>
<td>Asperger’s syndrome, Depression</td>
<td>✔</td>
<td></td>
<td>Creative Writing</td>
<td>BA</td>
<td>Post-1992</td>
<td>Author/publishing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matthew</td>
<td>M</td>
<td>21</td>
<td>White</td>
<td>Asperger’s syndrome, Anxiety</td>
<td>✔</td>
<td></td>
<td>Youth and Childhood Studies</td>
<td>BA</td>
<td>Post-1992</td>
<td>Unsure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adam</td>
<td>M</td>
<td>21</td>
<td>White</td>
<td>Asperger’s syndrome, dyspraxia, depression</td>
<td>✔</td>
<td></td>
<td>Business</td>
<td>BA</td>
<td>Post-1992</td>
<td>Business/IT</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Robert</td>
<td>M</td>
<td>25</td>
<td>White</td>
<td>Asperger’s syndrome, Depression</td>
<td>✔</td>
<td></td>
<td>Digital media</td>
<td>PGcert</td>
<td>Post-1992</td>
<td>Graphic Design</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Timothy</td>
<td>M</td>
<td>22</td>
<td>White</td>
<td>ASD</td>
<td>✔</td>
<td></td>
<td>Mathematics</td>
<td>BA</td>
<td>Post-1992</td>
<td>Accountancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alice</td>
<td>F</td>
<td>23</td>
<td>White</td>
<td>Asperger’s syndrome</td>
<td>✔</td>
<td></td>
<td>Primary Education</td>
<td>BA</td>
<td>Post-1992</td>
<td>Teacher</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Max</td>
<td>M</td>
<td>22</td>
<td>White</td>
<td>Asperger’s syndrome</td>
<td>✔</td>
<td></td>
<td>Creative Writing and Media</td>
<td>BA</td>
<td>Post-1992</td>
<td>Local government</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

(Contd.)
<table>
<thead>
<tr>
<th>Participant</th>
<th>Sex</th>
<th>Age</th>
<th>Ethnicity</th>
<th>Diagnosis</th>
<th>Final year student</th>
<th>Recent grad</th>
<th>Subject/major</th>
<th>Highest qual: studying/completed</th>
<th>Institution type</th>
<th>Post-graduate employment aspirations</th>
<th>Postgrad paid emp</th>
<th>Relevant work exper</th>
<th>In postgrad paid emp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poppy</td>
<td>F</td>
<td>21</td>
<td>Afro-Carr</td>
<td>Asperger's syndrome</td>
<td>✓</td>
<td></td>
<td>SEN &amp; inclusion</td>
<td>BA</td>
<td>Post-1992</td>
<td>University lecturer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ezra</td>
<td>M</td>
<td>25</td>
<td>White</td>
<td>Asperger's syndrome</td>
<td>✓</td>
<td></td>
<td>Mathematics</td>
<td>PhD</td>
<td>Russell Group</td>
<td>University lecturer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lily</td>
<td>F</td>
<td>22</td>
<td>White</td>
<td>Asperger's syndrome</td>
<td>✓</td>
<td></td>
<td>International Relations &amp; Politics</td>
<td>BA</td>
<td>Russell Group</td>
<td>International NGO</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dave</td>
<td>M</td>
<td>25</td>
<td>White</td>
<td>Asperger's syndrome</td>
<td>✓</td>
<td></td>
<td>Creative Writing</td>
<td>BA</td>
<td>Post-1992</td>
<td>Author</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Izzy</td>
<td>F</td>
<td>22</td>
<td>White</td>
<td>Asperger's syndrome</td>
<td>✓</td>
<td></td>
<td>Creative Writing</td>
<td>BA</td>
<td>Post-1992</td>
<td>Teaching assistant</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Martin</td>
<td>M</td>
<td>26</td>
<td>White</td>
<td>ASD</td>
<td>✓</td>
<td></td>
<td>Education Studies</td>
<td>BA</td>
<td>Post-1992</td>
<td>Teacher</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Kieran</td>
<td>M</td>
<td>26</td>
<td>White</td>
<td>Asperger's syndrome, IBS, dyspraxia, depression</td>
<td>✓</td>
<td></td>
<td>Business</td>
<td>PGCert</td>
<td>Post-1992</td>
<td>University support services</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
a recursive process of double-fitting data and theories’ (Timmermans & Tavory 2012: 179) based on the interplay between cultivated theoretical sensitivity and methodological heuristics. Here it served to expand the initial theoretical assumptions with respect to the transition from higher education to employment for autistic students and graduates through hitherto unexplored findings. Methodologically, this was achieved through the close reading of transcripts, identification of theoretically relevant as well as unanticipated or surprising ‘codes’, which were then assigned to representative statements based on their internal homogeneity (Patton 1990). The software package NVivo-12® was used to aid higher-level thematic abstraction, where codes from both datasets were merged and assessed in relation to other coded extracts and with reference to the theoretical frame identified.

Findings

The four themes identified through the analysis of the combined datasets were (1) employment (im)mobilities; (2) inaccessible recruitment processes; (3) embodied materialities and employment; and (4) resourcing employment mobilities.

Employment (im)mobilities

A lack of employment mobility was a strong theme represented throughout the participants’ accounts. They relate experiencing a challenging and precarious job market, intensified on the basis of their diagnoses, which often resulted in personal frustration and despondency.

There is so much competition for jobs and it’s... it’s a lot easier too to have someone that’s got no special needs or additional needs.

(Autistic graduate, focus group)

The EU’s fucked, I’m fucked, the world’s fucked. Help! So much has happened in the last couple of years which has really destabilised my idea about having a stable income, a stable living as a guarantee...I’m a little worried that someone who is autistic and doesn’t fit the ‘box’ will have a harder time getting a commercial job.

(Lewis, autistic student, interviews)

Participants from both phases of the data collection procedure reported extreme challenges related to gaining meaningful employment. A recent graduate, Kieran, stated ‘I think it was about 2000 jobs I applied for before I got my [current] job’. Others also related similar experiences. Max offered, ‘I’ve worked out that by the time I got my current job I’d fired off over 100 applications and had about 10 or 15 interviews out of those in various places’, and Lily concurs, ‘I think since I got back I’ve maybe applied for like seventy...I’m trying to do about five or six applications per day but nothing so far’.

Where autistic students and graduates were eventually successful, frequently the only form of work was within a precarious employment context:

You fall under the radar; so many people just end up going through the unemployed-employed cycle forever.

(Autistic student, focus group)
Two autistic graduates (one with a 2:1 degree in mathematics) reported doing ‘kitchen portering’ at local pubs; other graduates like Izzy were ‘earning some money on the side, being a cashier at Kentucky Fried Chicken’. One careers advisor in the focus groups linked precarious working to the issue of a saturated global graduate market where autistic students were doubly disadvantaged by struggling to gain relevant work experience and placements during their degree programmes:

I think another aspect is how competitive, especially for graduates, the job market is now. In the past you had a degree and that was enough, now you have to have a degree, ideally a work placement year which again is difficult in itself for this group...you can just get something like a bar job but ideally you need graduate job work-experience before you get the graduate job which means it’s even more difficult.

(Careers advisor, focus group)

Whilst there was evidence that some of the participants had been able to gain postgraduate employment, it was generally marked by periods of pausing, waiting, or stopping altogether.

**Inaccessible recruitment processes**

A key barrier to employment mobility for the autistic students and graduates was the recruitment processes involved. The lack of clarity in job adverts was identified as being especially problematic:

One thing is the way job descriptions are written – many companies have a formula and it looks very much the same even if it’s for different jobs. One section in there is specific for the job and everything else is just standard and I think normally you would understand you don’t have to meet all the criteria 100% but if you’re autistic and you read really, really carefully; you can probably exclude yourself from all the jobs because you just can’t meet everything 100%.

(Autistic graduate, focus groups)

Participants in the interviews also described their experiences of job interviews as ‘horrendous’ and ‘nerve-wracking’, especially where it ‘takes some time to figure out what they’re wanting and I might answer the wrong thing to what they’ve asked’ (Poppy). For some, interviews bring out their ‘socially awkward side’ evidenced by ‘saying or doing wrong stuff’ (Winston) or being ‘terrible at selling myself’ (Robert). It is clear, therefore, that alongside a lack of job opportunities, certain processes also create barriers and lead to a sense of frustration.

As part of the recruitment process, many participants reported a lack of confidence in disclosing an autism diagnosis to employers. For some this was due to negative responses that they received:

Literally about a month into it he brought my application form for me upstairs and went what’s this? We know it’s been proven Asperger’s doesn’t exist...he said oh it’s all in your head you’re making it up...

(Autistic graduate, focus groups)

One of the comments [my daughter] got was ‘if we knew you had Asperger’s then we wouldn’t have hired you’ and that’s what was said and she freaked out and started crying... it was just that moment of disclosing something which could potentially be seen as a problem that she was told she was a problem employee.

(Parent/carer, focus groups)

Others, like Grace, who in the in-depth interviews described applying for graduate employment programmes related her rationale for not disclosing her diagnoses:

I’ ve applied for jobs and not disclosed that I’m disabled because if I say I’m disabled they’ll think I’m not worthy... well I am worthy but they’ll think that I can’t do as much because I’m different. A lot of organisations don’t like employing disabled people and don’t like diversity and it could be a form of discrimination against me – they’d rather go for someone who isn’t disabled who has the same qualifications, the same grades...

It is clear from these examples that participants were fearful that disclosure would lead to workplace discrimination and othering attitudes from potential employers and co-workers. Many reported that a lack of inclusive disclosure processes made this all the more challenging:

On the application forms there’s an option for people to say have you got a disability yes or no and I don’t see myself as disabled because I have Asperger’s.

(Autistic graduate, focus groups)
There’s nothing that tells anyone how to go about it like when is it appropriate to bring it up in the interview, how do you bring it up, do you do it light-heartedly, do you do it kind of jokingly, do you do it seriously? When should you? There’s nothing specific I kind of wish there was a little handbook.

(Autistic graduate, focus groups)

The limitations of the recruitment processes and discriminatory attitudes described here clearly impact negatively on autistic participants’ self-concept at a psychic level but also on their postgraduate mobilities at a practical level.

**Embodied materialities and employment**

Participants’ accounts reflected a specifically autistic experience of working and employment, often derived from their cognitive differences. At times these were represented as strengths; for example, participants recognised in themselves dedication, ‘attention to detail’, and the ‘ability to stick at a project’. In particular having a ‘strong working memory’ was considered important for success in employment, specifically where routine activities were part of the job. Just as with the difficulties that autistic people can face, strengths are also contextual, and Alice makes an important point when she suggests:

I’ve got a really good memory but in teaching it doesn’t matter if you know all the kids’ birthdays or can recite the register...but where I am now it’s really useful.

For Alice, being in a work environment that maximises her capabilities is important for developing a more positive self-concept and validating her differences. Grace, a final year business student, indicated an autistic capacity to be organised:

Well people with AS are very organised, with excessive worrying they often get things done. Cause I’m always thinking about work, I’m always thinking I’ve got to do this tomorrow and thinking about what needs to be done, because I’m generally a perfectionist it means that it has to be great, it has to be on point.

However, whilst participants did recognise various strengths as part of their autism diagnoses, there were also difficulties, which they identified specifically with respect to their employment mobilities. For a graduate participant, Ezra, his preferred employment trajectory had to be adjusted on the basis of the high social demands of working in academia:

I planned to stay in an academic study of physics. However, during my time as a PhD student I found academia made demands that I found unfeasible or uncomfortable. These included succinct exposition requirements in papers and conferences, the social etiquette of an academic department, and “networking” at conferences in the hopes of finding a postdoctoral supervisor.

For Ezra, who had a first degree from Oxbridge and a PhD from a Russell Group university, the actual ‘work’ of being a physicist was not the difficulty; rather it was the informal and extemore social interactions that form such an important additional dimension that caused him distress.

The final aspect that participants related was the experience of overwhelming sensory environments. In the interviews, Izzy, Adam, and Eliza all discussed experiencing sensory overloads, where they process sight, sound, touch, et cetera in ways that impact on their employment. For some, information from just one sense was processed all at once, which made it difficult to register and decode others’ speech; a graduate, Izzy, relates how ‘I hear everything at once and then I don’t really hear one of my co-workers talking to me’. Whilst this sensory disconnect might be perceived as a ‘quirk’ by colleagues and easily laughed off, it can also be extremely distressing for the individual, which is more often the case when this develops into a sensory overload. Adam reported how when stress, anxiety, and pressure build he is at risk of a ‘meltdown’, which he described as ‘explosive; it’s nought to rage in like less than thirty seconds – kabumph! It’s like a nuclear bomb going off...screaming, shouting, running around rampaging, bang my head off brick walls, hitting myself...just basically a complete overload of emotion’. Eliza also provides an insightful example of how she experienced a sensory overload whilst working for a large retailer:

Yeah my mood will change dramatically in the space of about a minute. I noticed it – because sometimes you don’t always notice it but you feel the physical evidence of it... I just felt this wave of absolute rage coming over me and was like ’oh dear this isn’t good’. It’s weird because you’re kind of partially conscious of what happening because at that point I was like ’shit I’m going to have a meltdown and it’s going to be on the shop-floor, great...’ I just literally walked past my colleague and said ’I’m having a meltdown I’ll be out in the back, tell the manager’. Because I had like a mini one which didn’t involve any emotion but just like crying and a kind of managed to bottle it back up. I was stressed about having it at work and being embarrassed because even though I shouldn’t be embarrassed about it the people there don’t necessarily understand and so I didn’t want to have that as well as everything else. So I went into the back had the mini meltdown, dried my tears and then went back onto the
shop-floor, my eyes were a bit puffy but I managed to disguise it and managed to do the rest of my shift...It’s a sensory thing in the way that I get a pounding headache but that doesn’t tend to happen until after the big emotional blowout so like I have this huge fit of rage that is followed by absolute exhaustion.

Eliza’s experience provides a vivid description of the psychological, physical, and social distress that high levels of sensory arousal can generate and indicates the need for relevant support and provision for achieving employment mobilities.

**Resourcing employment mobilities**

Participants noted the positive role that universities could play in supporting them as they make the practical transition into employment. The Careers Services and Disability Support Services were both highlighted as useful, particularly where they were able to offer guidance that extended understanding of the job sector. For both Robert and Arthur, their respective Careers Services had actually provided internships through which they were able to ‘understand how to work in the real world cause I’d never done that before [and] what I’m actually capable of and what I’m not’ (Robert, interviews). Moreover, where Careers Services and Disability Support Services collaborated in providing autism-specific pre-employment provision, this was recognised as being particularly useful; 6 participants from the 21 had made use of this sort of university-level provision.

I was on the [employment course at the university for students on the autism spectrum], so that was really helpful just for things like building up a CV and that kind of thing which I hadn’t really put much thought into either and then I did speak to Careers and they gave me a mentor as they have a scheme where they have people who have already graduated who can mentor you, so I got somebody who worked for the UN so that was very helpful (Lily, interviews).

Participants also recognised the role that academic staff can play in identifying and negotiating future steps. Eliza, Lewis, and Poppy all drew on the support of their course lecturers to provide additional guidance, for example ‘she would help me if I needed any references or where to look when it came to jobs’ (Poppy, interviews).

However, alongside these positive accounts of institutional support that enabled participants’ successful transition, there were also instances where provision and guidance was lacking. Data from the focus groups emphasised the socio-political context as a significant cause; this was linked to various funding regimes that, according to a careers advisor, meant ‘there’s not enough funding – there’s not enough people to be able to supply everyone or cover everything’. The result according to a disability advisor was that ‘generally speaking, access to good careers advice has suffered’.

Furthermore, participants described how Careers professionals did not always understand the particular needs that they had as autistic students and made an assumption that the same information or approach provided for neurotypical students would also be suitable for them. For Lily, she felt that Careers staff assumed, ‘well you’ve got good grades, you’ve got work experience so you’re employable’, which I thought, yes I’m employable but I don’t know how to get a job’. Even when she was provided with specific support she felt that they bypassed some of the more basic information like ‘this is where you should be looking for jobs or these are the kinds of jobs you should be looking for at this stage’. Poppy had a similar experience towards the end of her degree, where Careers staff ‘basically gave me a long list of websites that I could look at but not tell me what kinds of jobs I might be suitable for or how to apply for them’. Finally, Robert suggests that had Careers staff been more aware of his needs, the transition process could have been more successful:

If I’d had a plan coming in and coming out cause then they could have said, well you should apply for this job even before you leave university then maybe I could have developed it and hopped into another job from there – that could have happened but that didn’t happen for me.

Likewise, Theo suggested that Careers Services must understand that ‘if you have Asperger’s you’re not like everyone else, you can’t just go and get a job wherever, you’d have to have a lot of help’. Such experiences indicate the important role that Careers and Disability Services at universities can play in enabling successful transition but also suggest that where there is a lack of understanding about autism and appropriate training this can in fact be a barrier for many autistic students.

**Discussion**

These data offer new insights into the employment mobilities of autistic university students and graduates. They identify a particular ‘unevenness’ of experience (Sheller 2015), ultimately leading towards disappointing employment outcomes for many, in concurrence with the wider narrative around autistic graduates (AGCAS 2019) and adults more generally in the UK (NAS 2017; Roux et al. 2013). Given that mobilities are inextricably connected to economic, political, and social relations (Adey 2006; Cresswell 2010), the UK post-2008 context, which has been marked by austerity measures and increases in labour market competition (Howie & Campbell 2016; Formby 2017), has exacerbated the unevenness of
mobilities for this group in particular. Data suggest that this socio-political context has led to not only a lack of graduate jobs but a reduction in higher education funding that would support and enable young autistic adults to successfully access these. Significantly however, immobilities in one area—in this case employment—can have negative implications for other types of mobilities (Bissell 2016), and evidence here suggests that mal-employment or unemployment for autistic young people impacts on independent living arrangements and the sustenance of meaningful relationships (Anderson et al. 2016; Hendricks & Wehman 2009).

Social networks played a significant role in autistic students’ and graduates’ postgraduate employment mobilities, both positively and negatively. Higher education staff, including careers advisors, disability support workers, and academic staff, were all recognised as assisting mobilities through signposting, mentoring, and generating work experience opportunities. This relational dimension resonates with the emphasis Finn (2017: 756) places on social networks that are established over time and ‘which sustain, direct, and give emotional context to mobility practices during and after completing university’. However, where support staff were ill-informed about the needs of their autistic students or were under-resourced as a provision their relational role was viewed as less effective. Moreover, employers were at times identified through their practices and/or attitudes as actively obstructing employment mobilities by discriminating against students and graduates who had disclosed their autism diagnoses. As with other studies (Krieger et al. 2012; Ohl et al. 2017), participants related how mistrust and fear of othering attitudes from potential employers and co-workers frequently caused them to not disclose at all, which given their potential needs puts them at a distinct disadvantage with respect to their postgraduate employment outcomes.

Data from across both the in-depth interviews and focus groups indicate that such (im)mobilities were related to deficiencies in procedures and mechanisms involved in the recruitment process, including job adverts, application forms, interview procedures, disclosure policies. Where much of the literature to date has emphasised autistic impairments in relation to employment success (Allen et al. 2012; Burke et al. 2013; García-Villamisar & Hughes 2007) and the social actors involved in employment for autistic adults, including family members (Dudley et al. 2019; Westbrook et al. 2015) or supported employment providers (Nicholas et al. 2015; Wehman et al. 2016), this article draws attention to how non-human objects also function as ‘actants’ in affecting these processes. For autistic students and graduates, as well as other stakeholders in the process, text-based artefacts such as job adverts and application forms generated unevenness of access insofar as they were unclear, misinforming, or, at times, irrelevant to the job. Brooks and Waters (2017) offer a Foucauldian reading in suggesting that such materialities serve to govern individual bodies, where institutions exert power through their practices, policies, and procedures; the implication here that only those that can navigate the unwritten rules of the system need apply, thus limiting the success of many autistic students and graduates.

Finally, there is great value in considering what Büscher et al. (2016: 491) designate as ‘differentially embodied (im)mobilities’ within the context of autistic graduates’ transitions to employment. Whilst there has been criticism within disability studies in emphasising the body or cognitive characteristics as opposed to the social conditions that disable individuals (Oliver 1996), for participants in this study, the embodied experience of being autistic was perceived as significant. They reported how their different ways of thinking and relating had the potential to offer employers additional or different skills, including attention to detail, honesty, the ability to retain facts, and a systematic approach. At the same time, the embodied and affective ways in which autistic participants experienced environments and processed information necessitated increased levels of emotional labour (Hochschild 1983). Participants’ accounts suggest that managing sensory overloads at an embodied level involves ‘deep acting’ where bodies, comportments, and behavioural refinements are altered in order to ‘pass’ for neurotypical in the interview process or employment setting. Thus, the autistic body-subject here matters but ought to be understood as entwined within the wider social and environmental context of the workplace and recruitment processes.

Conclusions
This article makes an original contribution to the field in attempting to uncover, through exploratory firsthand accounts the mobilities and materialities involved in autistic university students’ and graduates’ transition to employment on completion of their studies. The data, derived from the 21 semi-structured interviews and 16 focus groups, reveal significant barriers to graduate level employment precipitated by a socio-economic context that has led to decreases in higher education funding and trained personnel. Employment immobilities were further exacerbated by experiences of employer discrimination towards autistic graduates throughout recruitment processes alongside non-human ‘actants’, such as job adverts, application forms, and interviews that create obstacles for autistic applicants. Finally, the embodied experience of autism was recognised as a factor, both in the additional and useful capacities and skills that these graduates could offer employers and in the additional emotional labour that was required of them in managing social and sensory environments. These findings are significant given the increasing number of autistic young people entering the higher education system around the world (Adolfsson & Simmeborn Fleischer 2015; Gardiner & Iarocci, 2013; Hamilton, Stevens & Girdler 2016; Jackson, Hart & Volkmar 2018) and the wider evidence that suggests mal-employment or unemployment for this population (AGCAS 2019; Lorenz et al. 2016; NAS 2017; Roux et al. 2013; Scott et al. 2017).

To conclude, four main recommendations are identified for the higher education sector. Firstly, at an empirical level, there is a need for more comprehensive international research to fully understand the employment mobilities of autistic graduates entering and exiting higher education. It will be important to examine this population’s academic
outcomes and occupational aspirations in order to assess over time the extent to which they are able to realise these by comparison to their non-autistic peers, as well as the factors that might underpin them. Secondly, whilst an initial attempt has been made here to theorise postgraduate employment for autistic students and graduates broadly based on the ‘new mobilities paradigm’ (Sheller & Urry 2006), there is still much work to do to develop more comprehensive theoretical applications. Based on this study, there is clearly value in further considering the extent to which human, as well as non-human, actants can influence mobilities for this group, which has hitherto been ignored. Thirdly, at a policy level, it is recommended that higher education institutions consider more fully how they can best serve their autistic students and graduates, as well as autistic members of staff. If Jackson, Hart, and Volkmar’s (2018) estimates are accurate that 45% of the approximately 550,000 autistic children in the United States are expected to enrol in a university, college, or technical/vocational school over the next decade, then there is almost a moral imperative for these institutions to put in place strategic planning to ensure that they are supported in achieving postgraduate level employment. Finally, it is recommended that a shift in policy is not simply rhetorical but is translated into improved practice across the higher education sector, including supported work placements, on-going mentoring, better training for careers advisors, and engagement with employers to support them in making postgraduate recruitment processes more autism-inclusive.

Competing Interests
The author has no competing interests to declare.

References


Submitted: 14 June 2019  Accepted: 06 January 2020  Published: 07 February 2020

Copyright: © 2020 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/4.0/.