A Framework for Specialist (Autism) Mentoring in UK Higher Education.

by

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A thesis submitted to the University of Birmingham

for the degree of DOCTOR OF PHILOSOPHY

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October 2022

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Abstract

Universities in the UK have seen a remarkable increase in the number of autistic students. These students can receive funded Specialist (Autism) Mentoring to "remove barriers to learning". A thematic analysis of 264 papers in a systematic review of the autistic experience of higher education, revealed barriers, challenges, and cultures of success that autistic students encounter. Only six papers addressed Specialist (Autism) Mentoring. It is reported to be a valued support, but academic reflection on the profession is scant. This thesis seeks to widen this lacuna through the development of a framework for practitioners by considering, not only the prevalence of mentoring as a support, but by developing grounded theory that may suggest what makes such support effective.

A mixed method iterative project contextualised Specialist (Autism) Mentoring within university contexts, before turning to the more substantial element of developing grounded theory from analysis of diaries, interviews and forums from mentees and mentors.

A Freedom of Information request was made to Student Finance England, UK universities were surveyed for provision data via their Disability Offices. 1:240 UK students are in receipt of Specialist (Autism) Mentoring, but this is only 55% of autistic students. This is provided for by around 660 mentors, with a yearly turnover of 10%. Paucity of centralised data lends these numbers a wide margin of error.

A participatory paradigm was developed in which questions posed by fourteen mentees as autistic hypothesisers became the keystone of the guided diaries that were solicited from mentors at reading weeks and end of terms. Twenty-eight mentors, of whom ten themselves were autistic, kept diaries over the academic year 2020/21. 116 diary entries were gathered over four tranches. Diaries were thematically analysed. Analysis was critiqued and refined both through online interviews with mentees and by an autistic majority forum of master mentors. Autistic and allied mentors reported very similar experiences.

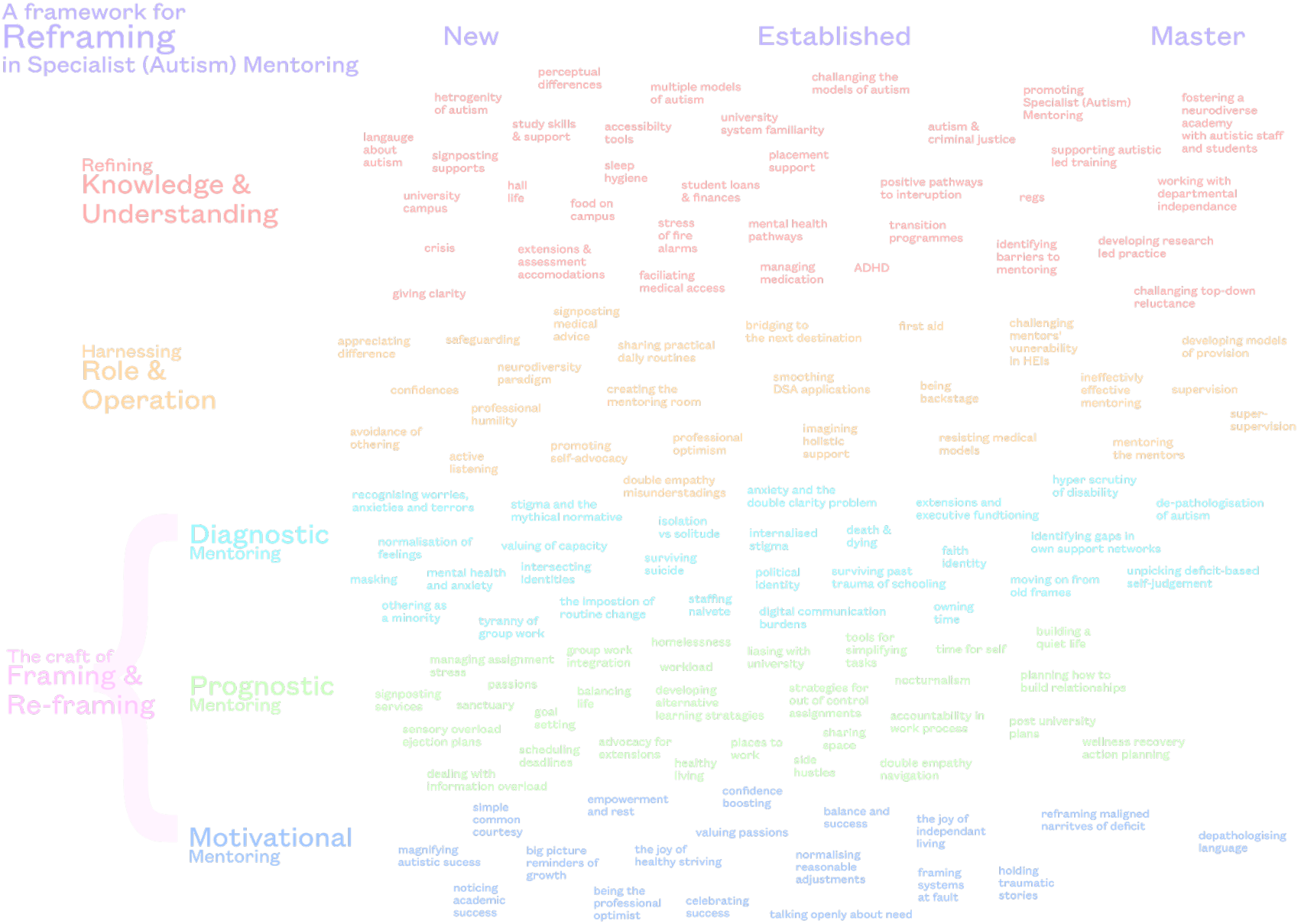
The phenomenon of Specialist (Autism) Mentoring was described as a holistic, backstage negotiation. A process of framing and reframing was identified as a key pillar of mentoring autistic students. This process can be considered through three interleaved domains. The mentoring process permitted students to diagnostically consider structural barriers and challenges. The mentee and mentor together consider the outplay of these structures to develop strategies to ameliorate limitations and promote flourishing university encounters. Finally, the mentor has a particular role in gently encouraging students through being a trusted and steadfast authority.

These elements of diagnostic framing, prognostic framing, and motivational framing positions in Specialist (Autism) Mentoring are akin to the frame alignment of social movements. Whilst a neurodiverse paradigm was evident in the autistic majority master mentor forums, mentoring with this model can be adapted to future emancipatory movements. It is posited that the nurturing of advocacy in autistic students challenges the idea of mentoring as inducting into an institutional culture; mentees are being equipped to better the intuitions where they belong.

The Framework for Reframing (p.iii) proposed asks mentors to reflect on five areas: The knowledge and understanding of diverse student experience. Operationalising the mentoring role. The craft of framing and reframing in the three domains; diagnostic mentoring in which students lead in questioning social structures both on campus and beyond; prognostic mentoring in which mentee and mentor develop strategies not simply for surviving, but flourishing; and motivational mentoring, in which the mentor provides gentle affirmation and encouragement throughout mentees' time at university.

Whilst this novel framework was developed for mentoring autistic students, it is suggested that such a schema would have value - as an outworking of autism gain - for mentoring in multiple other educational contacts, and perhaps beyond.

A framework for Reframing in Specialist (Autism) Mentoring



About the Author

Brian is an ESRC funded researcher at ACER, the University of Birmingham's Autism Centre for Education and Research. He is also a Specialist (Autism) Mentor at Royal Holloway, University of London where, for a decade, he has had the pleasure of regular meetings with many brilliant students as they journeyed through their university life.

For fun he keeps bees, as it avoids being interrupted for a few hours.

Dedication

For Cate, Rufus and Douglas;

the best distractions ever.

Acknowledgments

For mentees

A deep debt of thanks is owed to fifty-something mentees over the last decade. It has been a privilege to see you being awesome.

For the mentees and mentors participating

You have been a source of wisdom and insight; this project would be nothing without you all.

For the supervisors

Dr Andrea MacLeod and Professor Karen Guldberg, my thanks for both sage advice and a willingness to listen avidly to ramblings.

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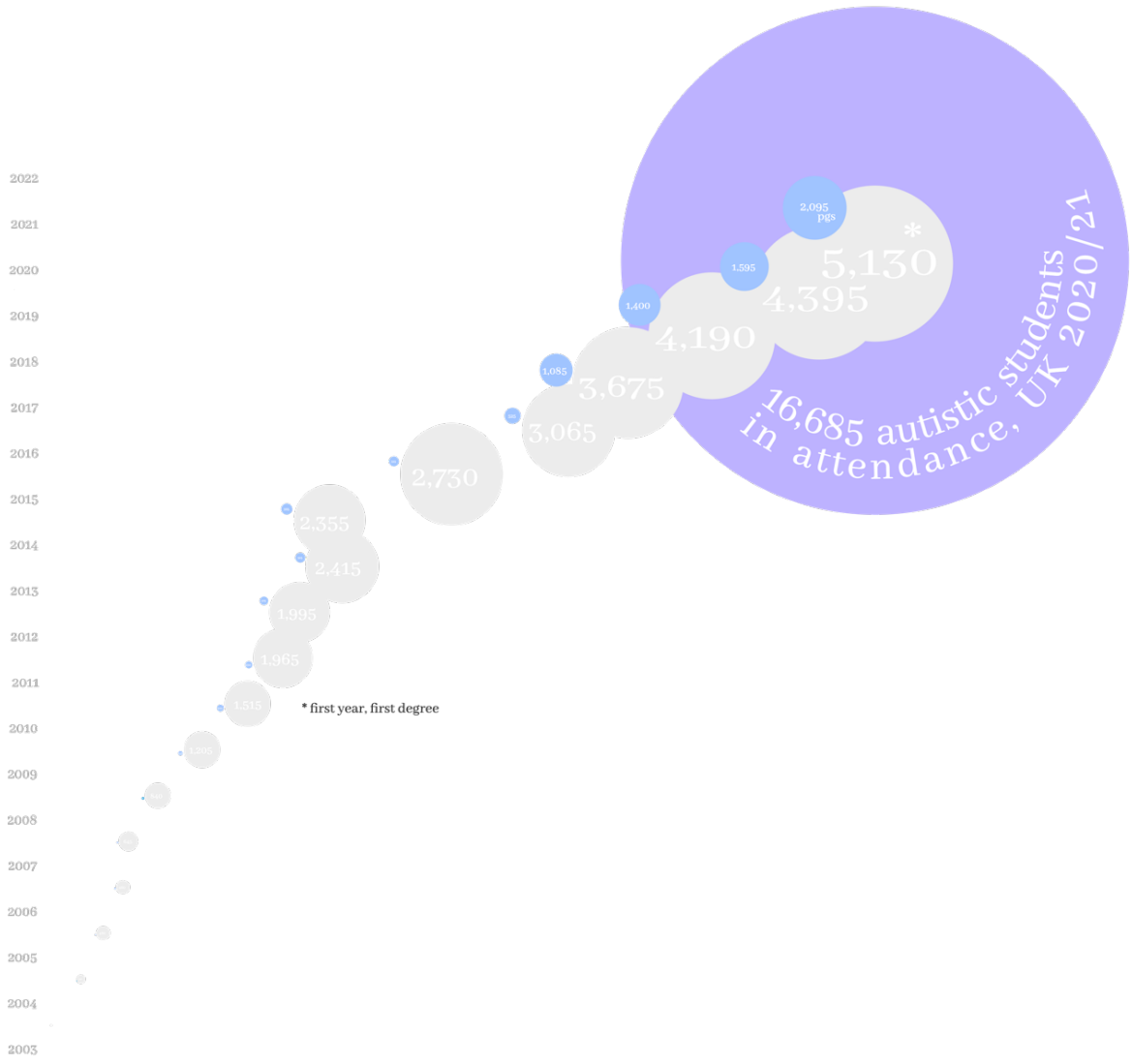
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Introduction

There has been a remarkable increase in autistic students attending Higher Education Institutions (HEIs) in the UK; from just 60 students disclosing in 2003/04, to 16,685 students in 2020/21 (see Figure 1).

Figure 1
The increase of autistic first year, first degree students attending UK HEIs (HESA, 2021b)



For any student, the experience of university can be one in which of self-discovery is tempered by the new challenges of independence. For autistic students, this experience can be one that encounters some degree of direct and indirect discrimination and marginalisation. That is not to say that they will, the autistic cohort is a remarkably heterogenous group participating in the many uniquely arising transactions of higher education. University is an arena in which a superior perceptual capacity, an attention to nuance, intense interest, a strong disciplined routine, and an ability to go it alone can lead to much success (Beardon, 2021; Brinkert and Remington, 2020; Bogdashina, 2016; Irvine and MacLeod, 2022; Mottron and Bzdok, 2020); but conversely the double empathy problem of fundamental misunderstandings between a minority and a majority with different perceptual frames can isolate, exclude and disable the autistic person (Milton, 2012, 2014b; Chown, 2014). Furthermore, intersectional identities of race, gender, and class compound the othering of being autistic in a disabling world with the historic underdiagnosis of autistic women, the continuing variance of diagnosis by ethnicity, and the frequent intersections of LGBTQ+ autistic people (Botha and Gillespie-Lynch, 2022; Roman-Urrestarazu *et al.*, 2021; Warrier *et al.*, 2020; Weir, Allison and Baron-Cohen, 2021).

For students situated as a minority within a neurodiverse institution it is helpful to reframe and flip the cornerstones of the ICD-11 diagnosis criteria (WHO, 2022). Autistic students may have a way of relating to others that seeks exactly what others are conveying, to listen to words above unreliable non-verbal cues, understand silence when no words are possible, are grounded in their own emotionality, have a desire to share joyous passions, and show a tendency towards a few long and loyal friendships. This disposition sits alongside a sensitivity to the environment in a superior perceptual capacity - that requires both a measure of consistency to endure and the freedom to connect with space and self through movement, (Remington, Swettenham and Lavie, 2012; Brinkert and Remington, 2020). All of this may

serve to distance them from peers and staff who do not – or cannot – take time to understand a differing perceptual frame from their own.

Support for these students is funded by the Disabled Students Allowance (DSA) to engage a Specialist (Autism) Mentor to provide 'highly specialist, specifically tailored, one to one support which helps students address the barriers to learning created by a particular impairment' (DSA-QAG, 2016, p. 56). Despite the DSA take up of autistic students being higher than any other group, there has been comparatively little written on this key pathway to personal and academic flourishing (Disabled Students Commission, 2022). This thesis seeks to build on the small body of literature with a broad ranging mixed method project seeking insight from mentees and mentors, before proposing a reflective framework that will inform Specialist (Autism) Mentoring provision in the UK.

With the limited extent of previous literature on Specialist (Autism) Mentoring, this framework needed a foundation in research questions that spanned the 'conditional matrix' (Strauss and Corbin, 1994, p. 163). Accordingly, this thesis takes a path from the literature on the autistic experience of university to mentoring in particular, and then on through an enquiry into the context of the broad picture, before diving down to the interactional level of the mentoring meeting, and finally taking the accumulated insights back to the community of autistic mentees and mentor practitioners (see Table 1).

Table 1
Research questions by conditional matrix

Research question	Levels
What is the prevalence of Specialist (Autism) Mentoring provision in UK universities?	National and Organisational
What do mentees want to know about mentoring? What is discussed during mentoring sessions? Do mentors hold theories that might explain mentoring?	Interaction
Does the reported experience of mentors resonate with mentees? Is the proposed framework seen as useful by those who may encountered it? What should be foregrounded in a framework for Specialist (Autism) Mentoring provision in HEIs?	Collective

This search is for a framework, not a curriculum; it is not the intent of the following work to dictate what should constitute the content of mentoring practice. Rather, like instructional frameworks found elsewhere in education, it provides a research infused structure that orients practitioners towards both the phenomenon of specialist mentoring and the rich participation of autistic students in university life.

A note about language

Here the language of *autistic person* will be used following the preference of the UK autistic community, whilst maintaining the use of individuals' preferred autism nomenclature (Vivanti, 2020; Botha, Hanlon and Williams, 2021). This approach values the elected identities of participants, whilst honouring the wishes of the wider community (Kenny *et al.*, 2015). Having read older works which were penned in good faith, may I extend my apologies to future readers who will have seen the reimagining of language that carries the continuation of autism advocacy.

This brings a secondary consideration. The language of allyship or majority is used for the not-autistic participants to avoid the imposition either of typicality on a neurodiverse cohort of mentors, or a misleading sense of division between dispositions in the neurodiverse academy[1].

Of lesser concern to identity, but as a confounding element in academic work, there is potential confusion in discussing any phenomena within academia. Institutions have their own idiosyncratic vocabulary with regards to universities or colleges, terms or semesters, schools or faculties; never-mind oddities such as bedmakers[2] or battels[3], graces and

[1] Perhaps, rather than neurotypical, we might one day consider the term *neurocomfortable*; those with the privilege - by dint of being a majority - to live without discomfort stemming from their own neurotype.
[2] Do not actually make beds.
[3] Oxford rent, but also covers common rooms… a questionably unfair tax on the unsociable?

graduands, pernoctation[4] or proctors. Furthermore, "college" in the UK can be further education at the age of 16, or an institutional structure of a university at 18, whilst the US "college" from 17 is for a 2-year course that can lead onto a 4-year university course. Footnotes will be used for clarification.

Mentoring as a concept lies within these murky linguistic waters. Specialist (Autism) Mentoring in the UK is a distinct subtype of mentoring that that is funded by regional Student Finance[5] via the Disabled Students Allowance (DSA) (Student Loans Company, 2017). This is provided by experienced autism specialists working in teams alongside newer post-graduate peer and specialist mentors (Lucas and James, 2018). Outside the UK mentoring often functions within a peer mentor model, recruiting post-graduate mentors from psychology or social care departments under the supervision of disability services (Ford, 2009; Hamilton, Stevens and Girdler, 2016; Thompson *et al.*, 2018). Both models occasionally, and successfully, work in tandem with a university led and held social group (Gillespie-Lynch, Bublitz, *et al.*, 2017; Siew *et al.*, 2017).

To confound matters, mentoring is deployed in universities as an instrument for nursing, medic and teaching education, a formative method in the development of early career academics, and a tool for increasing the retention of groups of disadvantaged students (Byrne and Keefe, 2002; Nora and Crisp, 2007; Sundli, 2007; Foote and Solem, 2009). With this complexity in mind, the foundational portion of this thesis will be presented in a chapter that spans conceptualisation of mentoring, mentoring in HE, the experience of autistic university students in a growing body of literature, and culminating with how these autistic experiences intersect on the field of HE autism mentoring.

[4] The duty of some tutors to sleep on campus; sounds hideous.
[5] Student Finance England (SFE), Student Finance Wales (SFW) and Student Award Agency Scotland (SAAS)

A note on positionality

The search for a framework for Specialist (Autism) Mentoring is, undeniably, a reflection of my own position as a Specialist (Autism) Mentor. Over the last decade I have witnessed the emergence of the university specialist mentor from the hazy requests of DSA assessors to become, despite the calcifying auditing trails, a lifeline for many students.

A researcher-practitioner does not necessarily contaminate research with their own experiences of mentoring, rather they bring deeper reflexivity to debate as they 'own up' to interpretations (Cousin, 2010, p. 10). Doing so permits conversations of shared experience among mentoring professionals. Furthermore, a decade of gently meandering mentoring discussions with autistic students as someone who identifies as neurodiverse but not autistic[6], may provide a sense of security and solidarity whilst soliciting insight from autistic students. As a mentor these students remind me of the abiding necessity to democratically construct and reconstruct academic space in a way that resists, through the application of care, the 'present ableist condition of neoliberal academia' (Peruzzo, 2020, p. 32). This application of care as a mentor-researcher is an intentional manifestation of power to critique the ranking and comparative concerns of output-fixated HEIs. I have the privileged position to critically engage with the limits of the systems and institutions with discernment gleaned from the many hours spent talking about university life with autistic students. This informs the academic I am becoming, one concerned about communities of care and belonging that requires 'a philosophical life in which what we are is at one and the same time the historical analysis of the limits that are imposed upon us and an experiment in going beyond them' (Foucault, 1984, p. 50). Such a philosophical life can only exercise power through students' ongoing endorsement of allyship to mobilise just means in the production of knowledge.

[6] Aphantasia – the inability to form mental images. An interesting dynamic working for a population known for its strong use of visual imagery.

Prolegomenon: A historically located thesis

To add to the complexities of conceptualising mentoring there is a layer of texture in the historical moment of this thesis. The search for a framework for Specialist (Autism) Mentoring started in the months before the COVID-19 global pandemic of 2020/21. Whilst times of disruption are fascinating to study, they are not great to live through. The ethics board took six months rather than six weeks to convene, research plans needed baked-in agility, and data collection was reconfigured in emerging online methods.

Guided diaries from mentees and mentors were collected as universities opened up after a frantic summer of restructuring lectures, seminars, labs, and campuses. The context of this research lay in communities where games of bingo were played on HEI communication for phrases like "amid", "a new normal", and the ubiquitous "unprecedented times". In a decade of mentoring, it has been my experience that autistic students are deeply sensitive to shifts in institutional culture. These are students who pointed out the gaps in new departmental procedures for online learning and who took rescued in person Socs[7] with zoom. This is an example of what will later be described as *autism gain*, the value that autistic students bring to their institutions. Sadly, sometimes the good that autistic students bring to their respective institutions is only enacted when a student collapses; like a proverbial canary in a cultural mineshaft. During the coronavirus pandemic many educational and social systems within universities were under immense strain, and some students collapsed. Our autistic students perhaps have a unique place in the reimagining of enduring, post-coronavirus university landscapes. They were among the first to be shaken and so - perhaps - are among the first to rebuild.

[7] Socs, common shortened form of Student Union (SU) Societies in the UK. Societies may also be run by Student Guilds, Student Associations, or Student Bodies depending on geography and quirks of history.

Chapter1

Prior literature

The winding path to Specialist (Autism) Mentoring

Whatever the context, mentoring is not - and perhaps should never be - a straightforward concern. Engagement with a wide corpus of literature permits the development the theoretical sensitivity of the 'conditional matrix' for the development of grounded theory (Strauss and Corbin, 1991, p. 162). To do so, this thesis starts with systematic literature review before progressing to the substantive mixed methods approach of the main body.

The literature review follows a path that allows a focus to be honed from the contexts of autism, university education and mentoring to the specific phenomena of Specialist (Autism) Mentoring in UK HEIs. Firstly, a broader view of the field which mentoring operates requires an encounter with the diverse and fulfilled lives led by autistic students. There is a growing body of literature on the autistic experience of Higher Education that can be systematically mined. Furthermore, it is particularly heartening to map the development of participatory methods as they challenge narratives of deficit and bend the field towards a renewed appreciation of flourishing autistic university students (Irvine and MacLeod, 2022). Secondly, to understand Specialist (Autism) Mentoring, first requires an exploration of a folk understanding of mentoring itself. Here, the concepts of mentoring can be liberated from 'thin and unsatisfying educational management' through first exploring the rich tapestry of mentoring in myth, history and university education (Smith and Alred, 2017, p. 103). Only when the contexts the autistic experience of HE and of mentoring have been laid out should thoughts turn to the specific phenomena of the mentoring of autistic students in higher education.

The field of autism and university

Autism, success and 'a supportive "mentor"' have been entwined at least as far back as Grandin's *Needs of High Functioning Teenagers and Adults with Autism* (1990). Autistic students of this era were seen as the exceptional, rather than the norm. With the advent of legal safeguards enshrining the rights of disabled people, universities in the anglosphere have turned their research apparatus inward (U.S. Department of Labor, 1990; Australian Government, 1992; HM Government, 1995, 2001, 2009; Canadian Human Rights Commission, 2019). The scathing tone of autistic voices collated in the ASPECT consultancy report (Beardon and Edmonds, 2007) provided grist for the subsequent decade of work that led to the more autism-equitable landscape that is emerging in the UK higher education landscape (Robertson and Ne'eman, 2008; MacLeod, Lewis and Robertson, 2014; Van Hees, Moyson and Roeyers, 2015; Hotez *et al.*, 2018; Accardo *et al.*, 2019). This direction of travel is echoed across the globe, with potentially specific regional characteristics that will be considered. In the first instance, this rapid evolution can be mapped through literature reviews, before embarking on a systematic approach to the current English-language corpus for this work.

Existing literature reviews

The autistic experience of university is a relatively newcomer to the field of autism research. In 2012 the literature review, *Intellectually capable but socially excluded?* formulated the emerging potential of autistic university students in terms of the challenges they face and the assets that they bring to an academic community (Chown and Beavan, 2012). Barriers were identified in the social context of traditional learning, particularly in the hurdles of unstructured time, issues with studying parts of the course that are not interesting, and the changeable organisational nature of higher education (Breakey, 2006; Baron-Cohen,

2008). Conversely, autistic strengths such as academic quickness, concentration, fluidity of thought, structural approach to writing, perfectionism and a focus to detail can be a path to success (Janzen, 1996; Happé and Frith, 2010; Gillespie-Lynch *et al.*, 2020).

The *Systematic Review of Articles Describing Experience and Supports of Individuals with Autism Enrolled in College and University Programs* (2014) conducted by Gelbar et al. is cited in over a third of the papers included in this study for the way it identified what was then a fragmented dearth of empirical research on the whole autistic experience of university. The following synthesis will show that we can confidently assert that the research is no longer built on just 35 participants and has attained depth and validity, if not replicability.

In *Students with Autism Spectrum Disorder and the Role of Family in Postsecondary Settings* the authors systematically consider six specific works (Dallas, Ramisch and McGowan, 2015). As this is focused on parental factors supporting students, it is one step removed from the loci of this work; but it does highlight the better outcomes for students if parents are included within the higher education process. Such a collaboration starts with a continuation of practical parental support as students enter university, whilst ensuring that there are support services in place to take gradually this load in all but emergency situations. Ideally this advocacy-for, then becomes an advocacy-by the autistic students themselves.

Only one of the twelve studies caught by Fayette and Bonds' methods review, *A Systematic Literature Review of Qualitative Research Methods for Eliciting the Views of Young People with ASD about Their Educational Experiences* is directly applicable to higher education (2018). This single paper highlights the need for tailored support for autistic students at the transition to university, with mental health issues, and with the challenges of daily living (Van Hees, Moyson and Roeyers, 2015).

With eleven papers specifically regarding the move into higher education rather than the autistic experience of university, *Transition to higher education for students with autism: A systematic literature review* continues the chronicling of the significant mental health

challenges autistic students face, and raises the need for staff understanding of these students (Nuske *et al.*, 2019).

Finally, *A Systematic Literature Review of the Experiences and Supports of Students with Autism Spectrum Disorder in Post-Secondary Education*. (Anderson, Stephenson and Carter, 2017), alongside it's update *A Systematic Literature Review of Empirical Research on Postsecondary Students with Autism Spectrum Disorder* (Anderson *et al.*, 2019), consider work that defines and delineates the benefits of a university experience as well as the types of challenges faced and the support available for autistic students. Barriers to accessing support were brought to the fore with the reticence occurring around a formal disclosure of disability. Potentially, a fear of either being stigmatised, or reticence to seek support after the success of secondary school, perhaps leads to disclosure only after crisis (MacLeod and Green, 2009; Van Hees, Moyson and Roeyers, 2015). Poorly envisaged support is its own barrier if it does not match the students' needs and preferences or if it creates a disability-ghetto (Madriaga and Goodley, 2010; Simmeborn Fleischer, 2012; Gelbar, Shefcyk and Reichow, 2015). Good support can flounder if it is not flexible enough to fit in with students' schedules (Blamires and Gee, 2002). Likewise, the sensory environment of campuses can itself be barrier, which is then compounded by having sensory difficulties disregarded by universities (Madriaga, 2010; Hastwell *et al.*, 2012; Knott and Taylor, 2014; Cai and Richdale, 2016). Campus avoidance, in turn, creates secondary barriers rooted in the resultant experiences of isolation which potentially leads to 'learned helplessness' (Pinder-Amaker, 2014, p. 126). Two papers found 26% of students mentioned bullying (Gelbar, Smith and Reichow, 2014; Anderson, Stephenson and Carter, 2017). While this is far from ideal, and the stories are distressing to read, it paints a significantly different picture from the experience of victimisation of autistic school pupils in which 50% report victimisation (Maïano *et al.*, 2016).

Of interest to this study is the finding that mentoring is a highly rated provision (Blamires and Gee, 2002; Knott and Taylor, 2014). It is acknowledged that mentoring might

not be for everyone. Problems arise when mentees are not supported into self-advocacy and remain dependent upon their mentor, or when students feel misunderstood by the very person who is supposed to understand them (Simmeborn Fleischer, 2012; Knott and Taylor, 2014).

Developing a systematic approach to the literature

Having only six extant systematic reviews illustrate the lacuna of research into autism and university, never mind the mentoring of autistic students. A systematic endeavour was required to address the two confounding terrains of the plurality of autism and university, and the specificity of autism mentoring.

To this end, this review will follow Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) to ensure transparency in the recounting of its findings (Liberati *et al.*, 2009; Moher *et al.*, 2009; *PRISMA*, 2015). A more yielding approach to PRISMA is warranted in this work, as a dogmatic following of the protocol may lead to the exclusion of the few early autistic biographies and deliberations on the university experience such as the posthumous handbook of Marc Segar (1997). This lenient approach to literature inclusion breaches a barrier that removes autistic people from the production of autism knowledge. If this makes it a scoping review rather than the strict analytical reporting on the quality of papers, then that is a small price for the inclusion of these voices. If, however, the purpose of PRISMA methodology is to develop a systematic approach to literature review that reduces the potential for unspoken bias; then an explicit acknowledgement of a bias towards inclusion is a welcome step (see PRISMA flow diagram; Appendix, Figure 40).

Databases consulted

The NAS database, Research Autism database, and EBSCO (with nested searches of ERIC and ProQuest) were consulted alongside Google Scholar.

Google Scholar was included despite the opacity of its ranking algorithm (*About Google Scholar*, no date). Saying that, a recent comparison of Google to other publication searches revealed that, not only did Google Scholar outperform World of Science and Scopus, but also uncovered over 55% sources of 'document types other than journal articles' in the domain of Special Education (Martín-Martín *et al.*, 2018). This is a two edged sword, it provides a wider pool of 'grey literature' to reflect upon, with doctoral theses, conference material, and insider autism expertise; but also provides sources from pressure groups which may require more convoluted critical appraisal (Hart, 2001).

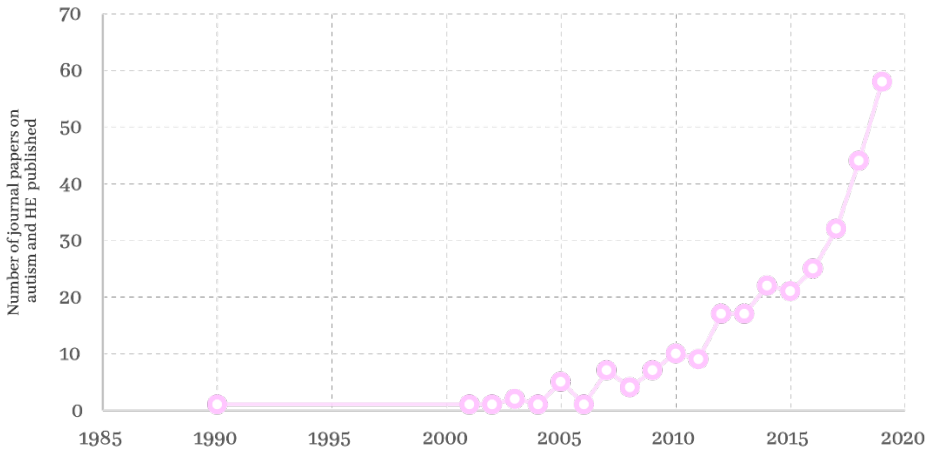
Searches

Comprehensive search strings were developed to reflect the historical progress of language about autism as well as the breadth of both HE and mentoring (see Appendix, Table 24). The long tail of searches was followed to saturation. Of the initial 512 hits, 76 were duplicates. 162 were screened as they investigated provisions for school children or teacher training. 91 papers were excluded for simply sharing good university practice without presenting research. 264 research papers remained to be included in this work (see Appendix, Figure 40).

A growing field of study

Many of the scoped articles repeated the refrain that their *raison d'être* was as a response to little prior research into the autistic experience of higher education. This may no longer be as true as it once was. As evident in Figure 2, there has been a significant rise in publications in the past five years.

Figure 2
Increase in publication on autism and higher education over time



It would be fair to say that we are entering a foundational era in the autistic experience of higher education, where a reflection in a body of academic literature is reaching a critical mass worthy of meta-analysis.

A thematic coding of the literature

Bringing qualitative data management techniques into the art of a systematic literature review allows an aggregation of a large sample of literature and the developing of an interpretative framework for that literature (Bazeley and Jackson, 2013). NVivo is a powerful tool in such thematic focused systematic literature reviews with the caveat of a clear semantic tree structure (Di Gregorio, 2000; Johnston, 2006; Beekhuyzen, 2007; Siccama and Penna, 2008; Bandara, Miskon and Fielt, 2011). To ensure this, the 'eight step pedagogy' of O'Neil et al. was followed (2018).

Coding to create a loose theoretical sensitivity

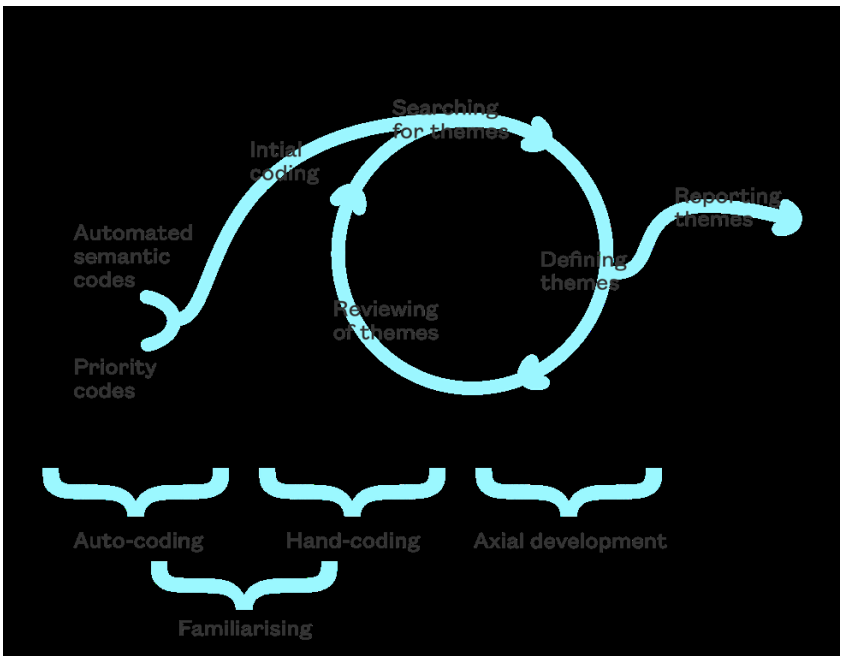
The process of coding themes in a corpus of literature permits existing theories to be held loosely alongside the data as nodes of equal weight. Potentially, this avoids 'unrecognised assumptions' through reviewing salient codes aside from their original (Strauss and Corbin, 1991, p. 48). Axial coding then truncates theories and mixes them in with primary data observations. This is not only a step towards developing grounded theory, it enables autistic participant voices in all the papers to be brought to the foreground (Irvine and MacLeod, 2022). In treating the body of research as a data source in itself, there is potential to allow researchers to lightly eschew adherence to specific paradigms within the research whilst at the same time developing a feel for the broader research context (Glaser, 1998). A systematic theming of literature permits the original words of autistic participants in many studies to be categorised aside from previous researchers' interpretations. In bringing these autistic voices to the foreground it becomes easier to tentatively posit new relationships between concepts whilst choosing to forget – for a while - the strictures of established schemas.

Furthermore, the capacity to perform comparative word searches and auto-sentiment coding can lead to a 'blended reading' allowing researchers to see the reported theories laid bare (Stulpe & Lemke, 2016, cited in Friese, 2016, p. 39). Grounded theory purists may baulk at the technical overlay presented here, but Strauss and Corbin's grounded theory was not originally devised as a strict methodology (Strauss and Corbin, 1994; Heath and Cowley, 2004). Instead, blended reading comes with a warning, due care needs to be taken so that systematic bias is not magnified by any particular heuristic lens. It could be suggested that algorithmic skewing may be apparent in the auto-coding in NVivo of voices of dissent as negative sentiment; to do so is perhaps a disservice to dissent that leads to advocacy and change.

The thematic loops

The literature was coded thematically following a loose iterative process in three entwined phases modelled on that of Braun and Clarke (see Figure 3).

Figure 3
Thematic coding process of literature modelled on Braun & Clarke (2006, 2021)



First, literature was auto coded in NVivo and ranked by coding density. Following this density gradient, literature was thematically coded by hand with priority ascribed to the *in vivo* codes of autistic participants in the studies to provide the cornerstones for defining themes (Irvine and MacLeod, 2022). Memos made in the coding process were themselves coded to link research categories. A descriptive pass of the body of literature was made to categorise the wider body of literature in terms of numbers of participants and theoretical underpinnings. Reviewing the themes led to another pass to code recommendations made for HEIs in previous literature.

Conducting a thematic review of prior literature about autism and university generated some 948 codes, sitting within 73 subcategories under 7 broad categories of **themes about the autistic experience of HEIs**, **themes from autistic students**, **recommendations for HEIs**, **conceptual contexts of mentoring**. In amongst this context sits the specific phenomena of ***autism mentoring*** at university and within that ***Specialist (Autism) Mentoring in UK HEIs***. Reporting will use the typographic convention of Saldaña for **category**, ***subcategory*** and CODE throughout (2013, p.9).

Mapping previous writings

In the literature surveyed three major epistemological domains were identified; qualitative themes emerging from autistic students' experience through participatory research, themes as a result of the analysis of quantitative data[8], and analytical themes in the form of recommendations for good university practice. Entwined within these three core categories were two ancillary groupings of literature arising specifically in interviews with mentee-mentor dyads within autism mentoring programs, and data coming from parents or other HE staff (see Table 2).

Table 2
Top-level themes arising though axial coding of literature

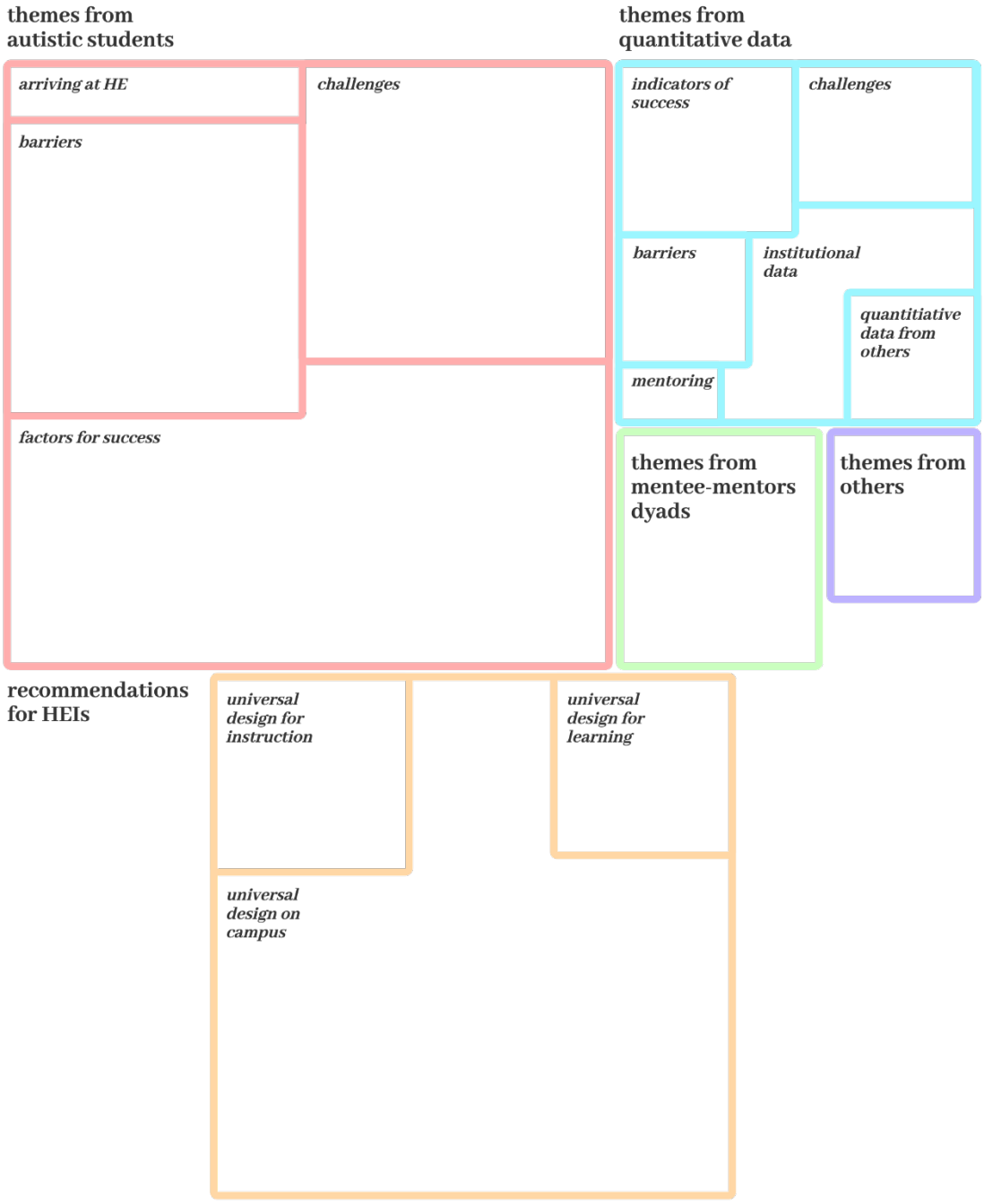
Theme arising though axial coding	Number of papers in which theme is present	Number of references to theme within papers
Themes from autistic students	74	1053
Themes from mentee-mentor dyads	14	136
Themes from others	25	71
Themes from quantitative data	84	376
Recommendation for HEIs	153	781

Each of these themes will be expounded in turn, first considering the reasons given contextualising research in the field through both the historical context of the papers and the quantitative data sought. Then the qualitative themes arriving across the corpus will be presented, finding narratives of success, challenge and barrier. Following this, the recommendations suggested will be considered under the umbrella of universal design.

Reporting of these themes in the literature will use hierarchy maps to represent the occurrence of themes where the size of the themes' enclosing box is in proportion to the prevalence of the theme within the scoped literature. Figure 4, below, is a hierarchical map of the two top axial levels of **categorisation**, ***subcategorization***[9].

[8] In this thematic schema elements mixed method inquiries could be categorised as both quantitative and qualitative accordingly.
[9] Throughout this work the typographic convention of Saldaña will be used for **category**, ***subcategory,*** and CODE throughout (2013, p.9).

Figure 4
Hierarchy map of themes from stakeholders and practices of institutions



Reasons for prior research

Before unpacking these themes, it is wise to consider the reasons researchers expound for why such research is needed. Three themes in this intent were evident: response to a growing cohort, researching the support on offer in universities, and researching the lived experience of autistic students.

Responding to a growing cohort and a lack of prior study

The great majority of autism and university research begins with a mantra that addresses two chief concerns: 41% of surveyed work was undertaken following the observation that the numbers of autistic students were increasing in their university, and 23% of papers lamented a lack of research in the area.

Despite the growth in numbers of autistic students, an under representation of autistic participation in Higher Education is reported (MacLeod and Green, 2009; Gelbar, Smith and Reichow, 2014; Dallas, Ramisch and McGowan, 2015; Hamilton, Stevens and Girdler, 2016; Gillespie-Lynch, Bublitz, *et al.*, 2017; Lei *et al.*, 2018; Accardo *et al.*, 2019; Alverson, Lindstrom and Hirano, 2019; Anderson *et al.*, 2019; Ncube *et al.*, 2019; Fairchild *et al.*, 2020). Furthermore, lower completion rates were identified in comparison to other cohorts (Accardo, 2017; Accardo et al., 2019b; Anderson et al., 2017; Bolourian et al., 2018; Dallas et al., 2015; Dijkhuis et al., 2020; Fabri and Andrews, 2015; Fairchild et al., 2020; Francis et al., 2017; Gelbar et al., 2015; McLeod et al., 2019; Ncube et al., 2019; Roberts and Birmingham, 2017; Sarrett, 2018; Siew et al., 2017; Sturm and Kasari, 2019). This was despite university being seen by many as a route to employment (Chiang *et al.*, 2012; Masterson and Meeks, 2014; Schindler *et al.*, 2015; MacLeod, 2016; Martin *et al.*, 2017; McLeod, Meanwell and Hawbaker, 2019). It is tentatively postulated that this reflects a wider societal trend of undervaluing the potential of autistic people in which accommodations are not provided and

success curtailed (Hart, Grigal and Weir, 2010; MacLeod, 2016; Roberts and Birmingham, 2017).

It can be tentatively suggested that the mantra of "growth in numbers and lack of research" in papers may be due an update. UK HEIs are reaching a point where our autistic students are a recognised presence on almost all campuses. If this is true, then we can no longer hide behind the slightly surprised language of an increasing autistic presence, rather we should be talking about these students as an existing community. Furthermore, perhaps we researchers should acknowledge that the autistic community is still systematically marginalised in institutions that have not responded to the recommendations that researchers in the institutions themselves have made. It is no longer a matter of growing autistic numbers; it is that autistic needs have been ignored.

Researching the support on offer in universities

Many studies that address institutional support are shaped by legislative concerns (Madriaga, 2010; Chiang *et al.*, 2012; Chown and Beavan, 2012; Lane and Kelly, 2012; Rutherford, 2013; Taylor and Colvin, 2013; Burgstahler and Russo-Gleicher, 2015; Van Hees, Moyson and Roeyers, 2015; Ames *et al.*, 2016; Barnhill, 2016; Brown and Coomes, 2016; MacLeod, 2016; Wei *et al.*, 2016; LeGary, 2017; Berry, 2018; Chown *et al.*, 2018; Hotez *et al.*, 2018; Sarrett, 2018; Accardo, Kuder and Woodruff, 2019, 2019; Davidovitch *et al.*, 2019; Lambe *et al.*, 2019). Slowness to take action within this legal framework is compounded by the gaps apparent in quality university-based support services (Milton and Sims, 2014; Ames *et al.*, 2016; Barnhill, 2016; Gillespie-Lynch, Bublitz, *et al.*, 2017; Nagase, 2017; Ridout and Edmondson, 2017; Roberts and Birmingham, 2017; Southby and Robinson, 2018; Alverson, Lindstrom and Hirano, 2019; Cribb, Kenny and Pellicano, 2019). Furthermore, a lack of specialist services (Rutherford, 2013; Hamilton, Stevens and Girdler, 2016; Gillespie-Lynch, Bublitz, *et al.*, 2017), research based systematic autism-focused

welfare approaches (Brown and Coomes, 2016; Griffin *et al.*, 2016), or work considering the effectiveness of these interventions (Ness, 2013; Anderson *et al.*, 2019). With such support flaws, it is no wonder that autistic students are marginalised as an invisible minority (Barnhill, 2016; Rando, Huber and Oswald, 2016; Berry, 2018; Accardo, Kuder and Woodruff, 2019; Underhill, Ledford and Adams, 2019).

Reporting on the lived experience of autistic students

A portion of research speaks to its rationale through addressing marginalisation as an act of disability theory (Madriaga, 2010; Rutherford, 2013). Many papers envisage themselves as a reaction to the stressors that many autistic students encounter when adjusting to university life (Welkowitz and Baker, 2005; Lawson, 2010; Chown and Beavan, 2012; Rutherford, 2013; Pinder-Amaker, 2014; LeGary, 2017; English, 2018; Hotez *et al.*, 2018; Ncube *et al.*, 2019), and the precarious mental wellbeing that this can engender (Pinder-Amaker, 2014; Ames *et al.*, 2016; Martin *et al.*, 2017; Cresswell and Cage, 2019; Lei *et al.*, 2019; Sturm and Kasari, 2019). Compounding factors are considered in terms of bullying (DeNigris *et al.*, 2018), loneliness (Lei *et al.*, 2019; Sturm and Kasari, 2019), co-occurring conditions (Nagase, 2017; Accardo *et al.*, 2019), and the disadvantages of being measured against normative markers (Cribb, Kenny and Pellicano, 2019).

A legacy in narratives of impairment

Before turning to the findings of this systematic-thematic approach to the autism and university literature, it is important to note the legacy that some research has compounded through narratives of impairment. Deficit models and functional labelling of autism were overtly recorded in 37 out of the 264 papers. This has led to some more extreme examples in which autistic students are portrayed of as a burden for staff (Nagase, 2017), students

characterised with ‘stalking behaviours’ (Pinder-Amaker, 2014, p. 127), or with ‘helping people with autism appear more normal’ (Obeid *et al.*, 2015, p. 3527).

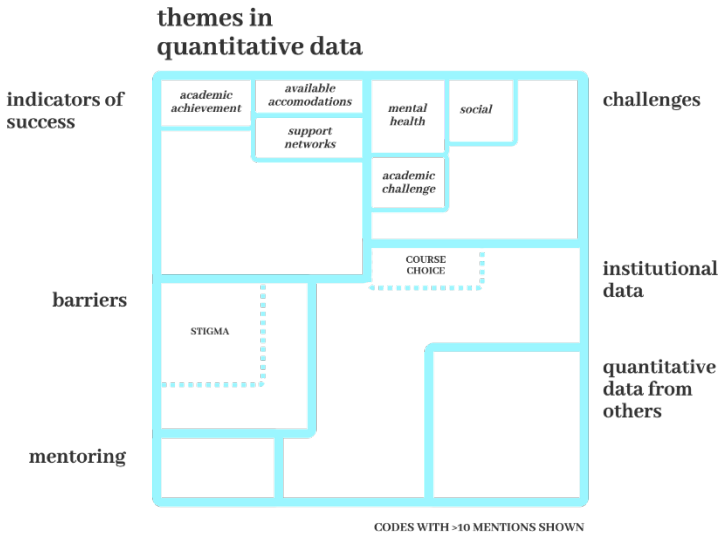
Fortunately, the lens of a mismatch of salience is starting to challenge some of the more insidious microaggressions, particularly around what can be thought of as an imperialism of correct friendship patterns. There are examples in which chosen ‘solitary activities’ seem snubbed (Gillespie-Lynch, Bublitz, *et al.*, 2017, p. 2), or – more alarmingly – when these friendships are censured as being ‘not truly reciprocal’ (Lei *et al.*, 2018, p. 10). These sentiments are buried within otherwise good participatory research and reflect an internalisation of anxiety and concerns by autistic students that there is some fabled right way to do friendship.

The development of participatory action methodologies within the field of autism and university serves to ‘rearticulate’ the autistic experience by stepping away from legacies of impairment and agendas of normalisation towards authentic ways of autistic living (Vincent *et al.*, 2017). It is with this in mind that the path through past research will start from the wider institutional concerns of quantitative measurement before a consideration of the encounters between autistic students and the edifices of HEIs in prior – more human scale - quantitative studies, before turning to ideas of mentoring itself.

Themes about the autistic experience of HEIs in quantitative data

Quantitative studies on autism and university are concerned with **institutional data**, **demographics**, alongside data reporting on **indicators of success**, **challenges** reported and measured **barriers** (see Figure 5). The specific data collated on **mentoring metrics**, will be returned to later as this works turns to the particular phenomenon Specialist (Autism) Mentoring[10].

Figure 5
Hierarchy map of themes from the analysis of quantitative research



Institutional data in the literature

Many studies that profess quantitative epistemologies delve into the NUMBERS OF AUTISTIC STUDENTS even if this is not the primary concern of their investigation. In doing so they seek to place their findings in the broader field of higher education provision. Autistic

[10] This work will follow a textual convention to represent the differing layers of symbolic thematic summaries with CODES, **categories,** and ***subcategories*** (Saldaña, 2013, p.9).

students are attending university at an increasing rate[11]. Data from the US National Longitudinal Study-2 indicates that the number of autistic young people taking up some form of postsecondary education rose to 35% to 43% in 2012 (Chiang *et al.*, 2012; Shattuck *et al.*, 2012; Alverson, Lindstrom and Hirano, 2019) from only 15% a decade before (Ford, 2009). 2003 to 2008 brought a 408% increase in in the UK (National Audit Office cited in MacLeod, 2010), followed by an estimated 200% rise in the UK between 2010-2015 (Chown *et al.*, 2018). Rising numbers do not seem to be constrained to the anglosphere with 250% rise from 0.20% to 0.45% in the student population of Vrije Universiteit in 2010 to 2016 closely echoing the UK data (Bakker *et al.*, 2019). The Japanese picture presents an even greater 3267% increase between 2006 and 2016 (Nagase, 2017). These increases in the diagnosed and disclosed numbers of autistic students, may be rectifying historically underreported prevalence of autistic students (White, Ollendick and Bray, 2011), or it may represent more inclusive and aspiration education pre-HE. It is of interest that no papers yet consider the growth in autistic post-graduate students, of which 1,380 disclosed in the UK in 2019 (HESA, 2019).

Several papers consider autistic students' COURSE CHOICE, with a tendency towards STEM subjects being reported variously from 49% (Wei *et al.*, 2014) through 55% (Bakker *et al.*, 2019; Cage, De Andres and Mahoney, 2020) to over 60% (Gurbuz, Hanley and Riby, 2019; Lambe *et al.*, 2019), compared to 45% of all UK students (HESA, 2022b).

There are few consistent patterns of MODES OF ATTENDANCE in the literature. One study in the UK suggests that 89% of autistic students study full time, in line with the majority of students (Gurbuz, Hanley and Riby, 2019). In contrast, a sample from the US has

[11] In this the term "prevalence" is scattered through such works, and whilst a strict definition of "specific characteristics within a population by time period" has been - hopefully - meant, the covid pandemic may have reinforced an overtone of epidemiology to the word and a potential of connotations of a medical model that frames autism as disease.

only 62.5%[12] of students studying full time (Anderson, Carter and Stephenson, 2018). Though with sample sizes of n=26 and n=48 respectively, few observations can be confidently asserted.

Demographic data in the literature

It may be fair to say that this autistic cohort arriving at university over the last ten years has been reflective of the GENDERING OF THE AUTISTIC DIAGNOSIS (Loomes, Hull and Mandy, 2017; Muggleton, MacMahon and Johnston, 2019; Hull *et al.*, 2020). Consequently studies report reflective historical demographic splits along gender lines from around 1:5 female to male to 1:4 (Chiang *et al.*, 2012; Bakker *et al.*, 2019). In terms of gender, there are some inconsistent findings with one longitudinal study finding autistic women to be less likely to continue through post-secondary education (Taylor, Henninger and Mailick, 2015), and one finding autistic men less likely to complete their studies (Cage, De Andres and Mahoney, 2020).

Five papers pass mention of aspects of PREDICTORS OF PARTICIPATION in higher education by autistic students (Camarena and Sarigiani, 2009; Chiang *et al.*, 2012; Shattuck *et al.*, 2012; Wei *et al.*, 2014, 2016). Significant correlations to household income, parental support and the students own academic success have been posited.

Accounting for variables, autistic students from high income homes of >$50,000/year were 77% more likely than lower income homes of <$25,000/year to attend higher university[13]; OR=0.227 [14](Chiang *et al.*, 2012). Those whose own parents experienced postsecondary education present are more likely themselves to go to university by 72.9%;

[12] 54.2% always enrolled as full time with 8.3% switching to fulltime as their degree progressed as opposed to 18.8% always enrolled as parttime with 16.7% moving across from fulltime.
[13] >$58,621 and <$29,310 adjusted for inflation at 1.78% 2011 to 2020 or currently in the UK, approximately >£45,000 and <£22,450

[14] Odds ratio (OR) at 95% confidence intervals in a weighted logistical regression quantifying the strength of association between the two factors. Magnitude above and below 1 signifies exposure to condition as risk or buffering factor.

OR=14.00 (Wei *et al.*, 2014). Likewise, parental expectation of participation in higher education increases the odds of progressing to higher education by some 277%; OR=3.66 (Chiang *et al.*, 2012). School interventions to prepare autistic students for HE raises the odds of participation by 330% (Chiang *et al.*, 2012). Furthermore, having university as an interfamilial norm seems to have bearing on postsecondary progression (Camarena and Sarigiani, 2009). In short, a class divide in autistic students' university enrolment prevails. Comparison data from the same NLTS-2 data echoes this privilege of wealth across cohorts (Newman *et al.*, 2009).

Student demographics may have a role to play in how limited resources are allocated throughout institutions, it has little to say as to what these supports might be. This is the preserve of data on **success** and **challenge**.

Quantitative indicators of success in the prior literature

The classic definition of person's **success** is a comparative function in which moments of their life can be examined against others, consequently there is a temptation to quantify it as a metric that can be counted. Conceivably, this is not a functional definition. It fails to take creative failure into account. Alain de Botton conceives of a gentler version of success that considers the experiences of being embodied as its own measure of success (de Botton, 2009). Accordingly, much research on autism and success in higher education takes the form of qualitative studies. The few instances of metric driven data in terms of students' records and self-reporting might be considered as a comparatively blunt tool.

With this critique aside, two reports highlight the ACADEMIC ACHIEVEMENT of autistic students in terms of 58.8% receiving a higher assessed grade (Cai and Richdale, 2016) or

mean GPA[15] of 3.37 (Gelbar, Shefcyk and Reichow, 2015)[16]. Success is not confirmed in all studies. In a later online comparative survey a mean GPA of 3.07 was recorded; though the high F-statistic of 14.0 indicates a high variance in the achievements of the autistic group (McLeod, Meanwell and Hawbaker, 2019). Such variance might be expected from the 'spiky profile' associated with autistic learning (Frith, 1996).

Papers have sought to quantify AUTISTIC STRENGTHS that contribute to academic success. Autistic students in one study possess more advanced writing skills than their contemporaries, though with an added burden of more perfectionist tendencies (Gillespie-Lynch *et al.*, 2020). Furthermore, students also self-report strengths in areas of attention to detail, technology use, original thinking and a strong memory (Anderson, Carter and Stephenson, 2018) with a willingness to self-advocate for their own learning needs (Hendrickson *et al.*, 2013; Gelbar, Shefcyk and Reichow, 2015).

To support student achievement, institutions provide an array of ACCOMMODATIONS. Recent research clarifies a picture wherein STRENGTH-BASED SUPPORTS correlate to a sense of belonging and wellbeing, $p < .001$ (Riccio *et al.*, 2021). Whilst reporting on university practices has value in holding institutions to account, the findings collated in

Table 3, below, should not necessarily be interpreted as an indictment of a fragmented system struggling to cope. Rather the multiplicity of localised offerings from Disability Services, student unions and specific academic departments might well be providing a rich tapestry of educational choices. This table serves to highlight in green (>90%) and yellow (>70%) the prevalence of accommodations offered to autistic students.

[15] GPA, or Grade Point Average is a scale used to summarise students' achievements. In America, Thailand, British Columbia, Kuwait, and Saudi Arabia this scale ranges from 1.0 and 4.0 but with differences in grade boundaries; but in in Korea, it goes to up to 4.5, in Vietnam, Malaysia, Pakistan and India 10, and in Denmark it goes all the way to 13. This is just one of several reasons why universities should avoid startling Admissions colleagues during August.

[16] In the US a GPA of 3.0 is akin to averaging straight Bs in the UK, straight As would be around 3.5.

Table 3
Supports and accommodations offered by institutions documented in literature surveyed

*Provisions with over 70% and 90% uptake are shared yellow and green respectively

	% of support provided at university	% support taken up either occasionally or frequently (n=41)	% of accommoda-tions used	% support offered by institution	% support offered by Disability Services or other office (n=146)	% of accommoda-tions received
	UK	Australia	Belgium	US	US	US
	(Chown *et al.*, 2018)	(Anderson, Carter and Stephenson, 2018)	(Jansen *et al.*, 2017)	(Barnhill, 2016)	(Brown and Coomes, 2016)	(Gelbar, Shefcyk and Reichow, 2015)
Specialist staff						
Disability officer meetings		82.9		100		49
Career advisor				87	97.2	
Counselling		46.3	65.4		89.4	
Peer mentor	91	31.7		73	37.6	14
Tutoring		29.3		97	93.8	
Note taker	87	9.8		93	94.4	31
Buddy scheme	48					
Transition						
Interview attendance support	68					
Transition support		22			42	
Orientation week		63.4				
Priority registration				73	57.1	26
Campus wide accommodations						
Housing adjustments	92	17.1			15.6	31
Timetabling and campus zoning	28					
Travel and campus navigation support	59		32.1			
Sensory accommodations					36.3	
Academic supports						
Continuity with academics	39	53.7				
Reduced course load		51.2		83		3
Recorded lectures or provision of audio recorder		51.2			96.5	14

Time management training		34.1				
Essay structure assistance		43.9				
Technology supports	70			93		14
Notes in advance				87		43
Preferential lecture seating						26
Prearranged breaks						11
Assessment accommodations						
Extra examination time		65.6	80	97	100	63
Alternative testing site/ small exam groups		75.6	53.3	97	100	43
Examination reader		4.9	33.3			6
Exam scheduling		65.8				
Extensions	75	56.1	20			20
Alternative to group work		9.8				
Alternative to presentations		12.2				
Holistic provisions						
Advocacy training		14.6				
Social Skills				77		6
Stress management training		34.1				
Life skills				80		
Social supports						
Autism group		4.9				
Student organisation/sport		41.8			36.2	

This presents a multiplicity of options which universities can, and perhaps should, offer. Students can access support if need arises, and conversely, may avoid elements if the provision does not meet them in their particular moment of educational growth. Saying that, in the case of SOCIAL SKILLS TRAINING, there is compelling evidence for HEIs to move on to other priorities as it provides little worth (Barnhill, 2016; Ncube *et al.*, 2019) and little significance as an intervention (Anderson et al., 2019).

Finally, in terms of quantifying success, there is a growing body of evidence that considers the SUPPORTIVE RELATIONSHIPS needed for a successful university journey. Half of the autistic students in one survey reported being satisfied with their close friendships (Jackson *et al.*, 2018), most find university more accepting than school (Anderson, Carter and Stephenson, 2018). Furthermore, in one study autistic students at 2-year US colleges reported higher 'levels of belonging' than the majority population and levels on par with those in 4-year institutions (McLeod, Meanwell and Hawbaker, 2019). It is not surprising that having PERSONAL RELATIONSHIPS OF ACCEPTANCE correlated significantly with lower measured depression and stress scores, though not anxiety (Cage, Di Monaco and Newell, 2018).

Quantitative mapping of challenges reported in prior literature

This optimism requires modulation. The autistic experience of university can still be tough. There are findings which report that 69% of autistic students felt occasionally or frequently depressed (n=2211), in stark contrast to the US national picture of 11.9% of all students (Sturm and Kasari, 2019). This is corelated in smaller scale studies with the self-reported 'big concern' of anxiety (56.1%), depression (41.5%) and loneliness (19.5%) (Anderson, Carter and Stephenson, 2018). Furthermore, two recent studies that used the Depression, Anxiety and Stress Scale (DASS-21) reported mean depression scores of 17.8 (Cage, Di Monaco and Newell, 2018) and 15.71 (Jackson *et al.*, 2018), which are both significantly higher than the 5.66 mean reported by the non-autistic population in the DASS-21's normative data sample (Henry and Crawford, 2005). Institutional apprehension over these findings should be compounded by findings concerning SUICIDAL BEHAVIOURS in which nearly three quarters of students reported some suicidal behaviour in their lifetime (74.6%), and more than half in the last year (53.6%) (Jackson *et al.*, 2018).

LONELINESS in autistic students is endemic on campus, with self-reporting ranging from 42% of the surveyed group (Gurbuz, Hanley and Riby, 2019) to 75% of these students being the ones most likely to also report severe stress and extremely severe depression (Jackson *et al.*, 2018). With the correlations between loneliness and mental health problems, this hidden experience of autistic students should be of great concern to the institutions to which they belong. In addition, there has been one investigation on the extent of loneliness across the broader autistic phenotype (BAP). Higher autistic quotient scores, both below and above the diagnostic line, were found to predict of LONELINESS in terms of fewer reported friendships of shorter lengths (Jobe and Williams White, 2007). There are a few issues with these findings, the BAP itself is a challenged concept (Micali, Chakrabarti and Fombonne, 2004; Losh *et al.*, 2009; De Groot and Van Strien, 2017), and the analysis could hide a pattern of discarding superficial friendships for loyal ones. Avoiding casual acquaintance is, after all, an effective personal strategy for relationships that are too often blighted by high levels of conflict and betrayal (Whitehouse *et al.*, 2009). Converse to this narrative of loneliness, autistic students reported FEELINGS OF BELONGING more than other cohorts of surveyed students (McLeod, Meanwell and Hawbaker, 2019).

As well as the MENTAL HEALTH CHALLENGES of being a student, investigations have been made into autism and comorbidities. The intersection of autism with attention deficit hyperactivity disorder or attention deficit disorder was found in 6.2% of the autistic students surveyed (Bakker *et al.*, 2019), in contrast to the 28.2% sampling from a decade ago (Simonoff *et al.*, 2008). Whether this reflects improvements in autism diagnosis, or the progression of students with ADHD/ADD and autism in HEIs merits further study.

In neighbouring studies, variance in students scoring on the Behavior Rating Inventory of Executive Function for Adults (BRIEF-A) accounted for 38.6% in variance of a subjective quality of life scale. Though it seems that autistic students with EXECUTIVE FUNCTION ISSUES had better coping inhibitory systems that peers with similar issues (Dijkhuis *et al.*, 2017).

Well-being is important, not just for the students, but for developing institutions in which self-advocacy occurs; there is a corelation with autistic students who openly advocate against negative experiences with tutors being those who more often report higher well-being (Bailey *et al.*, 2019).

Previously reported objective barriers to full participation in campus life

In terms of TRANSITION, autistic students are more likely to have taken a non-direct route into higher education, with a finding in Denmark that 21.7% entering university via foundation or university entrance exam (Bakker *et al.*, 2019). This has some bearing in the concerns students voice over clarity expectations (Gurbuz, Hanley and Riby, 2019). When students arrive on campus, they may face STIGMA and exclusion. This might have a gendered component to it, with studies finding male engineering and physical science students being more willing to spend time with autistic students (Nevill and White, 2011). Conversely, in a second study, it was women at university who were identified as having better knowledge about autism and consequently reduced reports of stigma (Stronach, Wiegand and Mentz, 2019). Knowing about a specific student's diagnosis has been shown to reduce negativity towards stereotyped vignettes of autism for all students, autistic and majority alike (Brosnan and Mills, 2016). Though this does not have direct bearing on the vulnerability of having to disclose (Casement, Carpio de los Pinos and Forrester-Jones, 2017). With STIGMA on campus comes BULLYING, and while 75.6% in one sample reported being unaffected (Anderson, Carter and Stephenson, 2018), the remaining quarter is subjected to events that interfere with study (Thompson *et al.*, 2019). Of further concern are findings that the majority of disabled students who reported unwanted sexual contact on campus were autistic women (61.5%) along with a significant number of those who identified as autistic and non-binary (23.1%) (Brown, Peña and Rankin, 2017).

Lower rates of university completion

Challenges and **barriers** lower the rate of student persistence and ***non-completion***. Further research into early identification of students that do not complete their studies is warranted. One study found no significant differences in measures of executive functioning, intelligence, or social responsiveness (Dijkhuis *et al.*, 2020). Another found no significant differences in home country or student age, though it did report that men were more likely to be unable to complete (Cage, De Andres and Mahoney, 2020). Though this stands in contrast to an earlier investigation that found that male students were more likely to persist through college than their peers (Wei *et al.*, 2014). ***Non-completion*** at the first attempt, is not the whole picture, with a survey reporting 14.7% of students GRADUATING AFTER SEVERAL ATTEMPTS. This group usually graduated after two attempts at a year with a modest weighting towards having repeated the first year of their studies (Cage, De Andres and Mahoney, 2020).

Findings of no significance

There is significance in insignificant results. A legacy of a medical model can lead to professionals focusing more on what divides autistic students from their peers rather than that which is a universal student habitus. The following studies may refocus thinking on the mutuality inherent in a diverse academy whilst hopefully diluting a tendency to mis-ascribe and pathologize autistic paths to success.

An investigation into the writing skills of autistic students found no evidence of a reduced Theory of Mind in their writing (Gillespie-Lynch *et al.*, 2020). There was no significant difference in measures of well-being between autistic students who completed and all those who did not (Cage, De Andres and Mahoney, 2020). Measured Autism-Spectrum Quotient (AQ) in the Broader Autistic Phenotype (BAP) did not predict relationship status

(Jobe and Williams White, 2007). Such findings perhaps chip away at some prevalent narratives of difference and incapacity.

Themes from autistic students in the literature corpus

It is heartening that the largest epistemological grouping in the body of literature on autism and higher education was that which sought qualitative themes from autistic students that captured the experience of HEIs. Furthermore, within this corpus, there is a predominance of narratives that capture **factors for success** (Irvine and MacLeod, 2022).

Table 4
Occurrence of themes from autistic students in literature coded

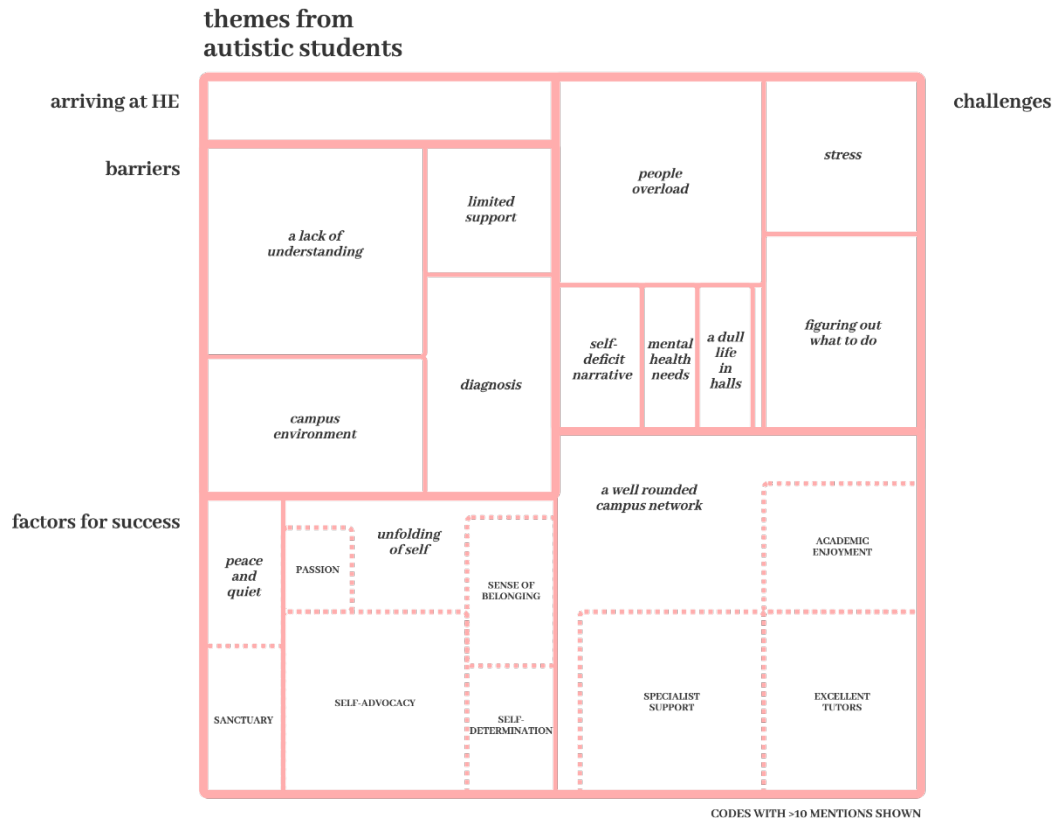
Theme from autistic students	Number of papers in which theme occurs	Total references to theme coded	Ratio of papers to references
barriers to success	44	243	5.52
campus environment	20	66	3.30
diagnosis	18	29	1.61
a lack of understanding	25	109	4.36
limited support	15	35	2.33
challenges	50	227	4.54
a dull life in halls	9	11	1.22
becoming disengaged	3	3	1.00
figuring out what to do	23	42	1.83
internalised deficit narrative	16	24	1.50
mental health needs	11	17	1.55
people overload	25	63	2.52
sensory overload	8	9	1.13
stress	17	49	2.88
factors for success	62	418	6.74
a well-rounded campus network	40	218	5.45
peace and quiet	18	36	2.00
unfolding of self	44	162	3.68
self-advocacy	26	60	2.31
all themes from autistic students	74	936	12.65

In this analysis three broad fields of **barriers to success**, **challenges,** and **factors for success**[17] emerged (see

[17] Textual conventions to represent the differing layers of symbolic thematic summaries with CODES, **categories** and ***subcategories*** (Saldaña, 2013, p. 9).

Table 4 and Figure 6).

Figure 6
Hierarchy map of themes emerging from autistic students.



Arriving in HE

Before continuing to the major themes of **factors for success**, **challenges** and **barriers**, context must be first considered. A smaller category of **arriving at HE** is the precursor to categories of the experience of HE. Students' route to university may be one that reinforces a sense of achievement in their pre-higher education studies (Accardo, 2017). It may be one that is driven by an excitement about studying their course of choice, or an ANTICIPATION of a renewed confidence in a new social dynamic (Lei *et al.*, 2018). But there are challenges to meet and barriers to overcome before even stepping foot on campus.

Students acknowledge the role that the differing forms of DISABILITY SERVICES[18] occupying providing transition support, though in a recent study only 65%-70% of autistic students registered for any support (Sarrett, 2018). Some students voiced an AVOIDANCE OF AUTISM ONLY SUPPORT because of concerns over stigma (MacLeod, 2016; Gillespie-Lynch, Bublitz, *et al.*, 2017; Cribb, Kenny and Pellicano, 2019), WORRIES OVER ADDITIONAL ACCOMMODATIONS that might not be as available as it was in school (Accardo, Kuder and Woodruff, 2019), or FINANCIAL LIMITATIONS on choice (Berry, 2018). To compound these systematic barriers, students also spoke of the SOCIETAL EXPECTATIONS surrounding going to university. Sometimes this was progressing to university because it was simply the local or familial expectation, or the next step towards employment (Accardo *et al.*, 2019). One study reports 62% of surveyed autistic high-school students reported planning on obtaining a postsecondary degree (Anderson *et al.*, 2016).

In short, the category of **arriving at HE** highlights the need to ensure that childhood education about autism does not itself set a narrative of social isolation and awkwardness that limits aspirations of attending university (Camarena and Sarigiani, 2009). Rather, in framing the strengths of an autistic way of being, students may avoid internalising disabling voices that tell them that they should set about their university journey in a particular socially bounded way (Chown and Beavan, 2012; Gobbo and Shmulsky, 2014; Bublitz *et al.*, 2015; Van Hees, Moyson and Roeyers, 2015; Barnhill, 2016; MacLeod, 2016). In doing so the groundwork for success can be laid.

[18] At this point I need to make an apology for Saldaña's text type convention of reporting on codes, for those who spend time on online forums it must look as if I am shouting DISABILITY SERVICES (or perhaps at some point a TIME TO BE CALM!).

Factors for success

It is heartening that the **factors for success** represent the preponderance of themes emerging from the accounts of autistic students, with 44.6% code occurrence. Within this broader domain, there are a few specific thematic constellations. Students discuss their ***well-rounded campus network***, the process of university education as one of ***unfolding of the self***, and their need for places and times of ***peace and quiet*** (see Figure 6, p.40). These key areas are supported by self-advocacy, parental support, and the scope to advocate for and with other autistic students.

Many autistic students report that establishing ***a well-rounded campus network*** has been their pathway to success with multiple factors testified to in the building these positive relationships (Cullen, 2015; Van Hees, Moyson and Roeyers, 2015; MacLeod, 2016; Berry, 2018; Accardo, Kuder and Woodruff, 2019). The simple enjoyment of being part of an academic community is frequently cited as a nexus within ideas about leveraging autistic strengths like focus, interest and monotropism (Lawson, 2010; Van Hees, Moyson and Roeyers, 2015; MacLeod, 2016; Ward and Webster, 2018; Gurbuz, Hanley and Riby, 2019). Whilst this walks the narrow line between care and perfectionism it can result in academic writing that surpasses their peers (Gillespie-Lynch *et al.*, 2020). Alongside this sits the personal pride in ACADEMIC ENJOYMENT (Accardo, Kuder and Woodruff, 2019; Gurbuz, Hanley and Riby, 2019), whilst also - impishly - confounding the narrow expectations of others (MacLeod, 2016; MacLeod *et al.*, 2017).

Credit is given by the students to specialist support and to EXCELLENT TUTORS. SPECIALIST SUPPORT is provided in a myriad of ways; from having mentors and advocates (Beardon and Edmonds, 2007; MacLeod, 2016; Qian *et al.*, 2018; Ward and Webster, 2018), specialist therapists and the provision of support groups (Rutherford, 2013), to the organising of reasonable adjustments (Lawson, 2010). Students self-advocate when they are aware of

services that are easy to access (Perepa, 2018); and if those services 'have your back' there is the security in which people can flourish (Rutherford, 2013, p. 54).

Truly EXCELLENT TUTORS are those who appreciate the strengths of their students whilst providing pastoral support (Rutherford, 2013; Gelbar, Shefcyk and Reichow, 2015; MacLeod, 2016; Bailey *et al.*, 2019). These are tutors who understand needs like recorded lectures, accessible office hours, small groups, timely extension requests, or providing clarity in terms of expectations and explicit written feedback (Beardon and Edmonds, 2007; Hastwell *et al.*, 2012; Rutherford, 2013; Accardo, Kuder and Woodruff, 2019). Tutor support is only one piece of ***a well-rounded campus network***, though it is of interest to institutions as it can be moulded through staff support and training.

Students in this body of literature discussed their FRIENDSHIPS (Accardo, 2017; Berry, 2018; Bolourian, Zeedyk and Blacher, 2018; Cribb, Kenny and Pellicano, 2019), perhaps in contradiction to narratives of impairment that portray autistic students in terms of social deficits (Ford, 2009; Mowart, Cooper and Golson, 2011; Chiang *et al.*, 2012; Rutherford, 2013; Dallas, Ramisch and McGowan, 2015; Ashbaugh, Koegel and Koegel, 2017; Kelly, O'Malley and Antonijevic, 2018; Lei *et al.*, 2018). These students clearly and repeatedly acknowledge the role of supportive friends that both help them get through university, and whom they support in return (Rutherford, 2013; MacLeod, 2016; Berry, 2018). This is perhaps a fulfilment of the societal perception that universities are a 'catalyst' for friendships (Anderson *et al.*, 2016, p. 21). Occasionally, these friendships grow from an autistic solidarity, in which friendship grows through a shared outlook on the world (Hotez *et al.*, 2018; Southby and Robinson, 2018; Cresswell and Cage, 2019). When there is a mismatch of salience within friendship groups, autistic students talk of university as an arena in which there is an ACCEPTANCE OF ECCENTRICITY which helps cultivate the social understanding of all involved (Beardon and Edmonds, 2007; MacLeod, 2016). In cases where friendships were

not established, students defended their right to be accepted as being socially ambivalent (Cullen, 2015; Alverson, Lindstrom and Hirano, 2019).

A well-rounded campus network includes, conversely, parents whose presence is felt in their absence. PARENTAL SUPPORT plays a vital and frequently documented part in the success of autistic students, accounting for two thirds of the coded references in this sub-category (Beardon and Edmonds, 2007; Camarena and Sarigiani, 2009; Rutherford, 2013; Cullen, 2015; MacLeod, 2016; Accardo, 2017; LeGary, 2017; Berry, 2018; Bolourian, Zeedyk and Blacher, 2018; Van Hees, Roeyers and De Mol, 2018; Alverson, Lindstrom and Hirano, 2019; Cribb, Kenny and Pellicano, 2019; Lambe *et al.*, 2019). Parents play particular roles as a means of regulation via ESCAPE DURING VISITS HOME (Berry, 2018), as external people for 'venting' to (LeGary, 2017, p. 258) and - crucially – 'a big hug' (Van Hees, Roeyers and De Mol, 2018, p. 3302)[19]. Whilst siblings have a role in tangible social supports in providing a contemporary to co-access social spheres (Bailey *et al.*, 2019).

This supportive relational ***well-rounded campus network*** provides the context of what can be thought of as the ***unfolding of the self*** that is inherent in the higher educational process. The reports of this unfolding hang on three lynchpins clustering around concepts of SELF-ADVOCACY, a growing RESILIENCE, and a SENSE OF BELONGING. SELF-ADVOCACY straddles the extrinsic and intrinsic factors for success in that students take control by gradually shifting the loci of action for their own needs from existing support structure like disability offices, mentors or parents (Rutherford, 2013; MacLeod, Lewis and Robertson, 2014; Sayman, 2015; Gillespie-Lynch, Bublitz, *et al.*, 2017; Sarrett, 2018; Accardo *et al.*, 2019; Accardo, Kuder and Woodruff, 2019). In doing so they testify to a SELF-DETERMINATION which seems fundamentally rooted in DOING THINGS YOUR OWN WAY (Rutherford, 2013; Bell *et al.*, 2017; Hotez *et al.*, 2018; Accardo, Kuder and Woodruff, 2019;

[19] In the whole of body of work on autism and university, there has only been one reference to the need for a hug; but nearly every mentee I have spoken with over the pandemic has commented on how lovely family hugs have been. There may be something universities are missing here.

Lei *et al.*, 2019; Rosqvist, 2019). This SELF-ADVOCACY is enabled by a sense of student's RESILIENCE; though steps of SELF-UNDERSTANDING and SELF-ACCEPTANCE, students find the DETERMINATION TO PERSEVERE when studies are hard (Rutherford, 2013; MacLeod, 2016; MacLeod *et al.*, 2017; Ward and Webster, 2018; Gurbuz, Hanley and Riby, 2019). This observation comes with a note of caution, resilience is needed most when systems are unjust. Attempts to bolster individuals' resilience by institutions without addressing structural inequalities are potentially futile, and at worst self-serving. The work of RESILIENCE and SELF-ADVOCACY is not an easy task, the autistic students in the body of literature seems to hint that this work requires, and iteratively frames, a sense of belonging to the greater learning community that is the university (Drake, 2014; Lambe *et al.*, 2019). It may be ascribed to FEELING UNDERSTOOD BY OTHERS that may come from living alongside contemporaries in halls or studying particular subjects alongside others with a shared fascination (Lei *et al.*, 2018; Cribb, Kenny and Pellicano, 2019). In some cases, this may be a deeper sense of STARTING ANEW AFTER SCHOOL, or FINDING A PURPOSE and MAKING A DIFFERENCE to their world (Rutherford, 2013; MacLeod *et al.*, 2017).

There are a couple of codes that stand alone in a schema of ***unfolding of the self***. Students relate the function of their own SPECIAL INTERESTS as part of their enriched life at university as well as being a comfort (Simmeborn Fleischer, 2012; Hastwell *et al.*, 2017). A need is voiced to develop a NON-JUDGMENTAL OUTLOOK on others (MacLeod, 2016). Crucially, the importance of simply taking things ONE STEP AT A TIME is developed as a strategy (Hastwell *et al.*, 2017; Cribb, Kenny and Pellicano, 2019), as is the sometimes-need for STUBBORNNESS AS A MOTIVATOR, and an acknowledgement of LUCK when it was a simply a matter of the 'right people, right subject, right time' (MacLeod, 2016, pp. 120 & 140).

Perhaps these codes cross over into the realms of the last core theme in **factors for success**, that of the joy of ***peace and quiet***. It may not be an exaggeration to comment that students thrive at university because of less external interference in their daily routine than in

their life before. Compared to the close monitoring of school and home, students - and maybe autistic students in particular - choose to create or find places and times of SANCTUARY where they can recharge and achieve balance with time to relax thereby enabling them to succeed in the others spheres of their university experience (Van Hees, Moyson and Roeyers, 2015; Accardo *et al.*, 2019). Often this is the REFUGE OF THE LIBRARY (Madriaga, 2010; Anderson, 2018), or the solace of finally having a place of one's own where they may freely choose to MINIMISE UNNECESSARY SOCIALISATION (Rutherford, 2013; Masterson and Meeks, 2014; Gelbar, Shefcyk and Reichow, 2015; Berry, 2018; Lei *et al.*, 2018; Lambe *et al.*, 2019). Occasionally, this refuge requires the student to COMMUTE FROM HOME, bringing with it stresses of public transport but also the joy of PETS (Rutherford, 2013; Cullen, 2015; Casement, Carpio de los Pinos and Forrester-Jones, 2017; Thompson *et al.*, 2018).

It can be tentatively suggested that universities are not always great at promoting a LESS RUSHED CAMPUS (Berry, 2018). Instead, in a corporate-education model, there is no room for surplus time (Readings, 1999; Collini, 2012; Berg and Seeber, 2016). It may that this systematic flaw in the modern university can be blamed for many challenges that confront our autistic students during their academic careers. It is this that penalises those who need time to consider options before action.

Challenges

The prevalence of autistic students voicing **factors for success** in no way negates the real personal **challenges** that these students also tackle. The **challenges** were coded as those themes in which the personal intersects with the public, in contrast to the **barriers to success** which primarily arise in the institutions. Within the **challenges** three major divisions emerged of ***stress***, ***people overload***, and ***figuring out what to do*** (see Figure 6, p.40).

The sad reality is that ***stress*** and WORRIES are troubling themes in the literature. While the gain of knowledge should not be an effortless endeavour, the current mode of education in universities causes a much well-documented stress for all students (Abouserie, 1994; Dwyer and Cummings, 2001; Schaufeli *et al.*, 2002; Oswalt and Riddock, 2007). The reported stress of our hyper-aware, hyper-empathic autistic students perhaps positions them as warning canaries in a mine-shaft of cultural malaise.

Around half of the reported reasons for ***stress*** hinge on academic demands. This is balanced between more external factors such as INFORMATION OVERLOAD (Van Hees, Moyson and Roeyers, 2015; Berry, 2018), EXAM ANXIETY (Berry, 2018) and DEALING WITH CRITICISM (Beardon and Edmonds, 2007); against internalised CONCERNS OVER CONCENTRATION (Beardon and Edmonds, 2007), PERFECTIONISM (Lawson, 2010; Gurbuz, Hanley and Riby, 2019) and SELF-IMPOSED PRESSURE (LeGary, 2017).

Maybe these particular academic challenges would not be so worrying if the students in the literature did not have them compounded with ***people overload***. That is to say that a HYPER-AWARENESS OF OTHERS (Rutherford, 2013; Van Hees, Moyson and Roeyers, 2015; Vincent *et al.*, 2017; Anderson, 2018; Berry, 2018; Alverson, Lindstrom and Hirano, 2019). At times of stress this can become amplified to such an extent that lecture attendance becomes untenable (Hastwell *et al.*, 2017). Furthermore, this hyper-awareness is compounded by EXPLANATION FATIGUE from having to advocate for their own perspectives (Rosqvist, 2019), and a FEAR OF REJECTION (Kelly, O'Malley and Antonijevic, 2018). Particularly so when mixed with the issues surrounding disclosing to friends (Casement, Carpio de los Pinos and Forrester-Jones, 2017; Hotez *et al.*, 2018). These factors may effect RELATIONSHIPS WITH HALL-MATES (Beardon and Edmonds, 2007; Bolourian, Zeedyk and Blacher, 2018; Lambe *et al.*, 2019), FINDING HOUSING (Beardon and Edmonds, 2007; Accardo, Kuder and Woodruff, 2019) and a more generalised DIFFICULTY MAKING FRIENDS (Beardon and Edmonds, 2007;

Vincent *et al.*, 2017) leading to SELF-SEGREGATION (Kelly, O'Malley and Antonijevic, 2018; Ward and Webster, 2018).

The **challenges** of ***figuring out what to do*** while prevalent, has an interesting pattern of variation. Compared to the categories of ***stress*** and ***people overload*** it has the smallest ratio between published papers and incidence of theme occurring (see Table 4, p.39). It could be posited that the prevalence of work aimed at giving practical solutions to the challenge of autistic students would slant the literature in this direction. This practical solution focus provides a distinct agenda for welfare support units, but it is one that may shift focus from a direct confrontation with the barriers in higher education. A wariness is needed whenever advice for students is proposed. Is the function of the advice to help the student flourish, or is it advice that protects the institution from having to change?

The chief factor in ***figuring out what to do*** seems to be around ideas about ROUTINES, particularly when motivation is in short supply (Lizotte, 2018). This is framed not only as TIME-MANAGEMENT (Rutherford, 2013; Van Hees, Moyson and Roeyers, 2015; Lambe *et al.*, 2019) and an UNEVEN WORKLOAD (Bolourian, Zeedyk and Blacher, 2018), but in strategies for COPING WITH UNSTRUCTURED TIME (Chown and Beavan, 2012; Simmeborn Fleischer, 2012; Cai and Richdale, 2016; Alverson, Lindstrom and Hirano, 2019; Lambe *et al.*, 2019; Cage and Howes, 2020). This can be a challenge transmuted, in one powerful analysis, as the self-growth developed by STEPPING PAST STRUCTURE into areas of risk and renewal (Van Hees, Roeyers and De Mol, 2018).

As well as these big three challenges of ***stress***, ***people overload*** and ***figuring out what to do*** there are several ancillary categories that are worthy of note. Autistic students talk about their ***mental health needs*** which vary in severity and gravitate around feelings of LONELINESS and ANXIETY (Hastwell *et al.*, 2012; Simmeborn Fleischer, 2012; Rutherford, 2013; Accardo, 2017; Vincent *et al.*, 2017; Bolourian, Zeedyk and Blacher, 2018; Sarrett, 2018; Van Hees, Roeyers and De Mol, 2018; Accardo *et al.*, 2019; Cribb, Kenny and

Pellicano, 2019; Cage and Howes, 2020). It may be that some of these expressions are linked to ***internalised deficit narratives*** (MacLeod, 2016; Cox *et al.*, 2017; Hotez *et al.*, 2018; Rosqvist, 2019). It was apparent when surveying the literature that many students defined themselves bounded by a FEAR OF JUDGEMENT (Alverson, Lindstrom and Hirano, 2019) and a DESIRE FOR SOCIAL SKILLS (Rutherford, 2013; Gelbar, Shefcyk and Reichow, 2015; White, Elias, *et al.*, 2016; Cox *et al.*, 2017; Kelly, O'Malley and Antonijevic, 2018; Lizotte, 2018).

A well as these internalised challenges, there was a tension evident between a frustration over having a ***dull life in halls*** and the ***sensory overload*** described. Some students owned their own part in having ***a dull life in halls*** whether this was through a personal AMBIVALENCE ABOUT RELATIONSHIPS (Alverson, Lindstrom and Hirano, 2019; Cribb, Kenny and Pellicano, 2019), or a tendency to HYPER-FOCUS ON STUDIES TO THE EXCLUSION OF FRIENDS (Rutherford, 2013; Gurbuz, Hanley and Riby, 2019). This elected TRADE-OFF FOR AN ACADEMIC FOCUS, minimises anxiety and exhaustion (Casement, Carpio de los Pinos and Forrester-Jones, 2017; Bailey *et al.*, 2019).

The rejection of staying in is held alongside the distractions of going out. Such a tension may be one factor in the irritation felt towards SENSORY OVERLOAD (Anderson, 2018; Bolourian, Zeedyk and Blacher, 2018; Sarrett, 2018; Van Hees, Roeyers and De Mol, 2018). Experience suggests that this should be a far greater category than is addressed in the literature. Perhaps, in terms of students' self-report in the literature, it appears as a smaller category either because sensory overload is the individual's norm or because of a lifetime of having such needs dismissed as inconsequential. The sensory dimension of the campus requires further exploration.

Throughout many of these **challenges** faced there is some scope to interpret them via a lens of executive function. Students wrestle with issues of TIME-MANAGEMENT and ROUTINES, WORRIES and BURNOUT, a feeling encapsulated by one student as 'You just want to get out there, but you don't know where to go or what to do' (Cullen, 2015, p. 95). It may be that

through navigating these overwhelming choices may lead to the generation of new personal strategies (Cullen, 2015; Van Hees, Moyson and Roeyers, 2015; MacLeod, 2016; Anderson, 2018; Accardo, Kuder and Woodruff, 2019). Potentially, this feeds into student success that is both because of, and despite of, executive functioning issues experienced.

Barriers to success

Opposed to the more autistically embodied **challenges** that students encounter, there are **barriers** to flourishing that arise from the systems of universities as institutions. These are the themes that are more extrinsic to the student, rather than the interplay of self and society that is found in the **challenges**.

It would be fair to say that, according to the literature surveyed, the predominant cause of **barriers to success** in the literature is in an ***a lack of understanding*** (see Figure 6, p.40). That is to say that barriers to autistic individuals' living full lives as students may well be those things that emerge from NEGATIVE ATTITUDES ON CAMPUS, POOR TEACHING PRACTICE, and an UNTHINKING ADMINISTRATION. Furthermore, it is an indictment upon the whole of higher education that students are subjected to BULLYING (Beardon and Edmonds, 2007; Rutherford, 2013; Gelbar, Shefcyk and Reichow, 2015), though some reprieve is found in that may be less severe bullying than that experienced in secondary education (DeNigris *et al.*, 2018). Alongside this is the frustration born from NOT BEING UNDERSTOOD which becomes particular galling when this is located in educational professionals (Lawson, 2010; Rutherford, 2013; Gelbar, Shefcyk and Reichow, 2015; MacLeod, 2016; Accardo, Kuder and Woodruff, 2019; Alverson, Lindstrom and Hirano, 2019). This is more than interpersonal misunderstanding; there are heart-rending reports of students encountering the NEGATIVE PORTRAYAL OF AUTISM in supposedly authoritative textbooks that does not chime with lived experience (Gelbar, Shefcyk and Reichow, 2015; Sarrett, 2018).

Whilst occurrences of SPECIFIC NEGATIVE TUTORS occur in at least thirteen occasions in five scoped reports (Beardon and Edmonds, 2007; Rutherford, 2013; Cai and Richdale, 2016; LeGary, 2017; Berry, 2018), there are more widespread insidious indicators of POOR TEACHING practice with 47 incidences in the surveyed literature. The ASSUMPTION OF GROUP WORK (Rutherford, 2013; Cullen, 2015; Cai and Richdale, 2016; Hotez *et al.*, 2018), unconsidered and UNEVEN WORKLOAD (Bolourian, Zeedyk and Blacher, 2018), the provision of INACCESSIBLE LEARNING MATERIAL (Beardon and Edmonds, 2007), or SINGLE METHODS OF ASSESSMENT (Gurbuz, Hanley and Riby, 2019), all coalesce to paint an unflattering picture of university teaching.

Sadly, there are still too many reports of ***limited support*** for autistic students that could start to address such issues. Admittedly the limited financial resources seem to be a more historical artifice in the UK, though the need to COMPLETE STUDIES IN TIME still may not be adequately catering to the needs of autistic students (Rutherford, 2013; Accardo *et al.*, 2019). Incidences of SUPPORT GIVEN WITH A NORMATIVE AGENDA, particularly if it has a focus on teaching ""social skills for the 27th time"' (Cage and Howes, 2020, p. 10) reinforces the feeling of 'otherness and difference' that poor support evokes (Vincent *et al.*, 2017, p. 308). These reports of BARRIERS WITHIN SUPPORT AVAILABLE must be seen as a call to ensure timely supports as soon as the student starts university (Rutherford, 2013; Berry, 2018; Lambe *et al.*, 2019). These must be supports based in participatory research (Sarrett, 2018, pp. 685–686), with the potential for this approach in addressing the LACK OF AWARENESS across the campus (Gurbuz, Hanley and Riby, 2019).

Compounding this barrier of ***limited support*** is a systematic issue with the disclosure of an autism ***diagnosis***. There is evidence that some students only disclose when needs become unmanageable, it is only then that disclosure leads to support (Van Hees, Moyson and Roeyers, 2015). Support then leads to self-advocacy which in turn leads to self-worth. The danger is that, to access needs students first have to reach a point in which studies become

overwhelming. This runs a real risk of interruption of studies before academic success, self-advocacy and self-worth can be established. This is the catch-22 of support: 'I need help with all the bloody forms! Of course I need to do them in order to get help, which is a bit ironic' (Beardon and Edmonds, 2007, p. 150).

Entwined with the need for prompt and bureaucratic support are DANGERS OF DISCLOSURE (Van Hees, Moyson and Roeyers, 2015; Casement, Carpio de los Pinos and Forrester-Jones, 2017). Interviews with students reveal moments in which a disclose has been turned against the student by flatmates (Cox *et al.*, 2017). Fear that a label can become a barrier leads to concerns over invasive CONSTANT SURVEILLANCE OF BEHAVIOURS wherein students do not express their authentic selves (Camarena and Sarigiani, 2009; Hastwell *et al.*, 2012; MacLeod *et al.*, 2017; Lei *et al.*, 2018; Rosqvist, 2019). In addition, students are also apprehensive about the ASSUMPTION OF LIMITATION that others – particularly tutors – may hold upon hearing a disclosure of autism (Cai and Richdale, 2016; Vincent *et al.*, 2017; Bolourian, Zeedyk and Blacher, 2018).

This ***lack of understanding*** and the troubles caused by ***limited support*** are magnified through the physicality of the ***campus environment***, where lack of forethought in the strategic planning of institutions is often writ large, disproportionately affecting those with sensory processing needs. Whilst SOCIAL NOISE IN HALLS is notoriously hard to manage it could conceivably have been addressed in the proper funding of construction (Beardon and Edmonds, 2007; Madriaga, 2010; Berry, 2018). At an institutional level, being able to allow students to continue living in the same room for multiple years is a simple accommodation (Casement, Carpio de los Pinos and Forrester-Jones, 2017). At the group level there is little excuse for CROWDED TUTORIALS, or ERRATIC OFFICE HOURS, or - at the institutional level - a paucity of SUITABLE WORKING AREAS or a LACK OF NON-ALCOHOL FOCUSED SOCIAL SPACES (Madriaga, 2010; Gelbar, Shefcyk and Reichow, 2015; Casement, Carpio de los Pinos and Forrester-Jones, 2017; Gurbuz, Hanley and Riby, 2019). Well thought out strategies for

development will include designing campus that allow for the choice between the impingement of others and a built environment that minimises ISOLATION (Madriaga, 2010; Bolourian, Zeedyk and Blacher, 2018).

Barriers and challenges that are also factors for successes

If only things were as simple as **success** versus **challenges** and **barriers**. The HETEROGENEITY OF AUTISTIC STUDENTS is a recurring theme in the literature scoped (Martin *et al.*, 2008; Beardon, Martin and Woolsey, 2009; MacLeod, 2010; Taylor and Colvin, 2013; Burgstahler and Russo-Gleicher, 2015; Brown and Coomes, 2016; Anderson, Stephenson and Carter, 2017; Anderson, Carter and Stephenson, 2018; Shmulsky and Gobbo, 2019; Thompson *et al.*, 2019). This heterogeneity - intersecting with the effervescent nature of university learning - cultivates factors that will inspire some and stifle others.

Such a dichotomy is evident in the social benefits of a welcoming student pub (Madriaga, 2010) standing in tension with the lack of non-alcohol based venues (Madriaga, 2010; Gelbar, Shefcyk and Reichow, 2015; Gurbuz, Hanley and Riby, 2019). These are not either/or provisions but ones that can be reconciled in good campus designs that allow all students' choice.

This complexity is perhaps most heightened in the clash of self-advocacy and what can be termed EXPLANATION FATIGUE; those moments when an autistic student becomes overwhelmed by demands and cannot advocate for their own needs. In these moments self-advocacy, which often indicates a journey towards success, becomes a barrier. Particular, holistic and knowledgeable support for these moments needs to be in place before crisis and structured so not as to build on the individuals' self-doubt (Rosqvist, 2019).

Likewise there are tensions in wishing to be treated no different to their peers (Gurbuz, Hanley and Riby, 2019) and in a desire for the 'eccentric' to be accepted (Beardon and

Edmonds, 2007, pp. 153 & 155). Students find their own path through hidden struggles and social camouflaging to find the best face to present to the world. This navigation of a personal way of doing things may also be echoed in a realisation that SUPPORT IS BENEFICIAL (Lucas and James, 2018; Anderson *et al.*, 2019), but also the knowledge that being seen to have support generates STIGMA (Ward and Webster, 2018; Anderson *et al.*, 2019; Bailey *et al.*, 2019).

These multiple tensions lead many researchers in the field to turn to **universal design** in providing multiple means of academic action, expression, engagement and support (Hart, Grigal and Weir, 2010; Taylor and Colvin, 2013; Bublitz *et al.*, 2015; Burgstahler and Russo-Gleicher, 2015; Milton, Martin and Melham, 2016).

Universal Design – recommendations for HEIs in the literature

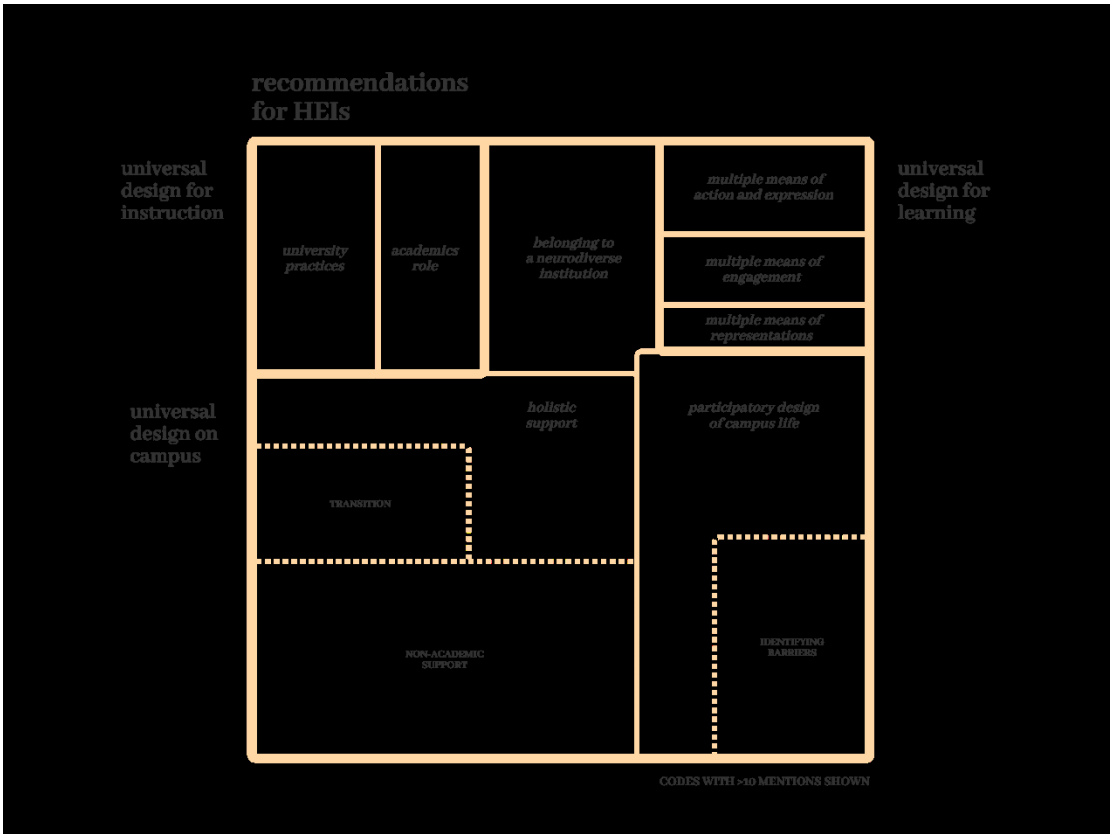
Whilst much of the literature analysed discusses the merits of particular provisions for autistic students, there is a distinct group of papers that posit the prism of **universal design** (UD) (Taylor and Colvin, 2013; Bublitz *et al.*, 2015; Burgstahler and Russo-Gleicher, 2015; Grogan, 2015; Kuo *et al.*, 2016; Milton, Martin and Melham, 2016; Williams, 2016; Cox *et al.*, 2017; Nicholas *et al.*, 2018; Sarrett, 2018; Martin, 2021).

The universal design movement germinated in the disability rights movements of the 70s and 80s which lead to the Disability Acts of the 90s (U.S. Department of Labor, 1990; Australian Government, 1992; HM Government, 1995). Whilst originating in access to the built environment, universal design became a mandate for the liberation of social structures. Within postsecondary and higher education this grew into the three pillars of ***universal design for learning*** (UDL) and an articulation of nine principles for ***universal design for instruction*** (UDI).

UDL seeks to address accessibility in education though designing education that has multiple means of representation, expression, and engagement. That is to say, education practices that find different ways of presenting content, differing ways of letting learners express what their response to that content is, and multiple ways of becoming inspired and stimulated by that knowledge (Rose, 2000; Rose and Meyer, 2002). It can be argued that, compared to UDL the locus of UDI gives precedence to the habitus of teaching practice. As such it presents a paradigm based on nine principles enabling professionals to design instruction that is equitable, flexible, and simple. In this there is a regard to make information perceptible and with tolerance of error. Furthermore, instruction is designed with consideration for low physical effort and appropriate space. Taken together this creates an effective academic community with a climate of inclusivity that minimises the need for support interventions (Scott, Mcguire and Shaw, 2003; Hector, 2020).

A critique may be pondered at this juncture. If 'learning' and 'instruction' are hived off as separate design briefs, does this compromise the integrity of it being a truly universal design? Perhaps, in the context of a university campus, learning and instruction are fractions of the whole experience. If so, then a consideration of a third category of ***universal design on campus*** that is proposed here may be a fruitful hermeneutic for analysis of the themes in this sub-section of literature (see Figure 7, below). In the body of literature analysed, it is this ***universal design on campus*** that seeks to promote a wider experience of student being that takes the greater share of ink.

Figure 7
Hierarchy map of reports and recommendations for university practice



Universal Design for Learning

Universal design for learning is fundamentally grounded in the three interrelated mechanisms of multiple means of representation, multiple means of expression, and multiple means of engagement (Rose, 2000). In essence, three hermeneutic clusters that can be identified within a thematic synthesis of literature to clarify authors recommendations.

In the literature, discussion on MULTIPLE MEANS OF ACTION AND EXPRESSION gravitate towards assessment accommodations. Provision to enable students sufficient time in exams is a fairly ubiquitous accommodation (VanBergeijk, Klin and Volkmar, 2008; Gelbar, Smith and Reichow, 2014; Cai and Richdale, 2016; Perepa, 2018). Though students may not necessarily use the time, having permission to use it when needed lifted an extra burden of anxiety (Madriaga and Goodley, 2010; Ward and Webster, 2018). Alternate locations for exams are often provided, and while small rooms and extra time are appreciated by students for formal exams, moving out of a lecture hall for the quick pop quiz that is a frequent marker of American college education has limitations (Accardo, 2017; Accardo, Kuder and Woodruff, 2019). A single conference paper tackles the issue of the wording of examination questions - within the particular context of Law Departments - recommending that all facts are provided as part of the questions rather than having to generalise answers on assumptions (Lane and Kelly, 2012). Furthermore, questions should be presented in a logical order, and steps need to be taken to ensure questions are clear about the purpose that the demonstrated knowledge is being used for.

There may be a tendency for research to align UDL principles of expression and action towards examinations. They are, after all, a quantifiable and often standardised metric to which educators are held. While this is to be applauded, there must also be an appreciation that exams only represent, at most, a month of students' creative expression and scholarly

action. Whilst examinations are easy to quantify, they in no way encapsulate students' tutelage or educators' andragogy.

Despite a written preponderance, it is not just the apparatus of examination that should be addressed through the UDL paradigm of expression. Recommendations for assessment by *viva voce* for autistic PhD students has been published (Martin, 2010, 2011). Within a particular assemblage of academic pressure and social context, vivas can be a minefield for autistic students. Consequently, a process of universal design that brings principles of clarity, good administration, familiarisation, flexibility, and after-care to all doctoral students also permits a degree of freedom in the means of presentation for all, in what is a pivotal academic moment.

Likewise, within seminar, class, and lecture options can be given to provide MULTIPLE MEANS OF EXPRESSION. Blogging has been suggested as a scaffold for dissertation creation (Bowman and Scaife, 2012; Fabri and Andrews, 2015). Presentations, unless they are explicitly to teach public speaking, can be given the option of a 'less intimidating setting' (Gobbo and Shmulsky, 2012, p. 44) or presentations can be removed as an assessment entirely and viewed simply as peer teaching form those who wish to (Lane and Kelly, 2012, p. 13).

In all these expressions of ***universal design for learning***, lecturers and tutors need to overtly clarify the expectation of a diversity of student expression. This open recognition of the educational strengths of difference allows for experimentation and growth whilst minimising awkwardness and embarrassment (Gobbo and Shmulsky, 2012). It is this clarity of expectations that bridges students' action and expression with their engagement in the object of their studies.

Some of the recommendations regarding the MULTIPLE MEANS OF ENGAGEMENT aspect of UDL have their crux in the clarity of academic expectations. That is to say, autistic students' full participation in an assessed community is predicated on the ability of lecturers

to provide task opacity (VanBergeijk, Klin and Volkmar, 2008; Dente and Coles, 2012; Rutherford, 2013; Cage and Howes, 2020). This outlook considers educators to be lynchpins for allcomers and will be returned to below as a particular instance of UDI.

It must be stressed that clarity and simplicity are not the same. Educators that offer multiple explanations will be more likely to offer ones that engage the particular context of particular students. This MULTIPLE MEANS OF ENGAGEMENT leaves the door open for lecturers and tutors to leverage autistic students' special interests towards greater learning goals. Many autistic students embark on their further studies because of a passionate and sometimes lifelong interest in their field of study (Simmeborn Fleischer, 2012; Bakker *et al.*, 2019). For some autistic students their love of studying their field is not bounded by constraints of the classroom. Rather passion is a powerful motivator in pushing both the boundaries of knowledge and fostering self-esteem, though it may not always answer the question set (Casement, Carpio de los Pinos and Forrester-Jones, 2017). Skilled tutors and mentors can aid in refining search strategies to allow the student – briefly – to settle into a particular assessment without constraining the possible outcomes (Boven, 2018).

Such intense focus requires lecturers to consider UDL principles while planning group work. Too often autistic students are excluded or self-exclude from groups (Gobbo and Shmulsky, 2014; Cullen, 2015), or conversely end up doing it all (Rutherford, 2013; Knott and Taylor, 2014). While observed group work allows lecturers to respond to particular needs (Bublitz *et al.*, 2015), giving options for work to be submitted to the group in alternative ways can be considered (Lane and Kelly, 2012) or group work can be deployed solely as a teaching tool and thereby removing an unjust facet of assessment (Bottema-Beutel, Kim and Miele, 2019). Principles that aid the participation and engagement of autistic students, will make group work a kinder and more fruitful experience for all students as a form of disability gain (Goodley, 2014). Such approaches for a neurodiverse class, will also support culturally

diverse cohorts in which anxieties over assessment can stifle collaborative, trusting teams (Vita, 2002; Strauss, U and Young, 2011).

Such design need not be limited to groups with a defined outcome. Some faculties encourage discussion groups as a part of the lecture or seminar teaching. For students with acute channels of sensory processing, these can cause unbearable moments of anxiety or overload hailing from the micro-geographical constraints of the lecture hall (Pillay and Bhat, 2012). Those leading such modules can provide opportunities for engagement by providing multiple special and temporal locations. These can be as simple as suggesting that groups of students head outside for a colloquium on a nice day, by scheduling lectures for presentation and small seminar groups for discussion, or by ensuring that the same small groups run for the year (Shmulsky and Gobbo, 2013; Knott and Taylor, 2014).

The literature follows school based UDL in suggesting that classroom etiquette be made explicit for all students, which may reduce the anxiety for autistic students and others. It is a fine line, that needs to confront a legacy of framing autistic students as a disruption rather than valuing their contribution and authentic expressions (Gobbo and Shmulsky, 2012). At its best, it presents a well ordered lecture-room with clear expectations for timing, a schedule of generous breaks, and processes for question asking (Burgstahler and Russo-Gleicher, 2015).

Central to both the multiple means of action and engagement is the MULTIPLE MEANS OF REPRESENTING THE COURSE MATERIAL. This is the element in which the institution of the university perhaps has more sway, and it is the element of ***universal design for learning*** that crosses over ***into universal design for instruction***. Through ongoing training and development of their staff cultures can be reinforced that value the need for performing knowledge in many differing ways. This requires providing multiple places for accessing information such as reading lists, course outlines, timetables, and – perhaps most importantly – deadlines in terms of when assessments are due and for when courses can be changed or

dropped without penalty (Taylor and Colvin, 2013; Burgstahler and Russo-Gleicher, 2015; Barnhill, 2016; Milton, Martin and Melham, 2016). As a strategy this works best if there is explicit reinforming of the multiple pathways to ensure that students are not plunged into anxiety when they come across alternative ways of doing tasks, or if advice or deadlines do not match up when changes have been made. This multiple means of representing courses becomes a key strand of ***universal design for instruction.***

Universal Design for Instruction

UDI takes the notion of learning design and situates the educator as the institutionally malleable employee. That is to say, in cultivating tutors or lecturers, their institutions can indirectly improve access to education. The ACADEMICS ROLE is two-fold; as a lynchpin for allcomers, and as an exemplar of explicit academic etiquette.

As a lynchpin the tutor may perform tasks such as exploring how students have interpreted tasks not only for clarification along the learning journey, but for the joy of discovery (Lane and Kelly, 2012). They may provide ACADEMIC COACHING on structuring work and workload whilst students develop their own authoritative voice (Accardo, Kuder and Woodruff, 2019, pp. 579–580). They become a source of reassurance as they provide guidance on submitting work (Gelbar, Smith and Reichow, 2014) and are instrumental in providing campus orientation for new students (Taylor and Colvin, 2013). The bureaucratic burden of submission is a perennial problem for all students. Students imbue assignments with the power of make or break, so providing a simple route to submission lessens bureaucratic hurdles and lances this boil of anxiety. These elements of UDI that are of benefit to autistic students, are of benefit to all students (Burgstahler and Russo-Gleicher, 2015).

The second core strand of UDI in the surveyed literature is that of promoting EXPLICIT ACADEMIC ETIQUETTE. That is to say, successful students take on the mantle of student

'institutional habitus' (Thomas, 2002). New students require induction into the gnostic inner operations of the university department. Drop dates of courses should be explained so that students can elect to retake if possible (Barnhill, 2016). Tutors need to be explicit about the function and timing of office hours so as to supports students who may feel a residual guilt over 'taking up' the time of others (Sayman, 2015, p. 93). They may take this further and provide tours of the warrens that are academic rooms. In doing so they give all students the confidence to know that they belong, that they can come, and that their questions will be answered (Berry, 2018). Conversely, care should also be taken with asking questions from a position of authority. Giving students time to develop thoughtful answers that may diverge to unsuspected possibilities is a key component of andragogy (Knowles, Holton III and Swanson, 2012). Likewise, there is little to be gained from requiring an autistic – or any – student to provide a quick verbal answer to 'unexpected questions'[20] (Hastwell *et al.*, 2012, p. 58). Finally, it is essential that tutors build secure learning relationships through giving frank feedback on what has been achieved so far so the next learning steps can be taken (Cage and Howes, 2020).

These secure relationships, potentially allow sensory issues to be voiced. Autistic students may have had a lifetime of not being believed over the discomfort caused by whining fans, oppressive heat, distracting breezes, or scratchy upholstery. A trusted educator as lynch-pin is often the first step to having such needs addressed by simple accommodations such as being able to wear noise cancelling headphones, opening a window, or bringing in a comfortable throw (Lizotte, 2018).

[20] With the introduction of virtual seminars during the Covid-19 lockdowns there are now multiple, non-verbal, synchronous, or asynchronous platforms for discursive learning which broadly seem to be referred to as being "in the chat". Further research is warranted.

Universal Design on Campus

The principles of **universal design** in higher education have spawned sub-sets of provision in ***universal design for learning*** and ***universal design for instruction.*** Whilst it is evident that this allow practitioners to focus in on the class, lecture, or tutorial, and then by extension pedagogical practice; it may be selling the concept of *universal* short. Students' experiences of university are not bounded by the hallowed walls of their institution. Most experiences sit outside the academic contact hours. To remedy this oversight, we might consider a third strand of what can be termed ***universal design on campus***. Such an analytical strand seeks to reposition the student by considering their agency in relation to barriers to learning and their participation in the creation of educational spaces of transformation. It will also become apparent later in this thesis that the holistic nature of Specialist (Autism) Mentoring requires such a category to be made explicit (MacLeod and Green, 2009). Furthermore, whilst the recommendations in the literature were drawn from autism research, their implementation has an impact of the whole student body through creating whole campuses that are 'reliable, empathic, anticipatory and logical' (Martin, 2008; Martin *et al.*, 2008; Hastwell *et al.*, 2017). A sympathetic university culture that takes individual needs seriously and seeks to integrate them with the group is one in which all students from all backgrounds can flourish. No student wants a university that over promises and under delivers; all students need acceptance so they can accept others; campus systems that anticipate need are so much nicer; and logical, imaginative campuses are a pleasure to live and work on.

For the purposes of this literature analysis four codes within ***universal design on campus*** were identified: PARTICIPATORY DESIGN FOR CAMPUS LIFE, BELONGING AND NEURODIVERSE COMMUNITIES, and PROVIDING HOLISTIC SUPPORT.

Participatory design for campus life

The emergence of autistic advocacy within higher education in the last two decades has a correlation in academic work that identifies barriers to learning. The PARTICIPATION OF AUTISTIC STUDENTS in both the direction and accommodations of their own learning context can be a formative step in the implementation of ***universal design on campus***.

In the literature, Going to university is sometimes couched in terms of A NEW BEGINNING with many autistic students planning on building their confidence, taking risks, reinventing themselves, establishing their own identity and developing a sense of self-efficacy (Rutherford, 2013; Shattuck *et al.*, 2014; MacLeod *et al.*, 2017; Lambe *et al.*, 2019). HEIs take a number of steps to encourage and support these activities through mechanisms that seek to empower students through giving a sense of the wider resources available to advance their own self-understanding, self-esteem and self-worth (Taylor and Colvin, 2013; Davidovitch *et al.*, 2019). Key among this are opportunities for the fostering of self-advocacy, particularly self-advocacy outside of the traditional academic domain. Students can be furnished with the language of rights and disability through their relationship with Disability Offices and advocacy groups and societies, through explicit rights training that offered by academics, from external personal needs-led research, or from social media (Bublitz *et al.*, 2015).

The FOSTERING OF SELF-ADVOCACY is entwined with stigma received, felt, and internalised. This stigma is not limited to relationships between students and teaching staff, though admittedly this is where universities can take the relatively simple mandate of staff training to enact change with 83% of HEIs offering autism awareness (Barnhill, 2016). Questions should be raised about providing 'training 'on request' or to training being 'available'', rather than providing a bastion of staff competency (Chown *et al.*, 2018, p. 842). This potential for lip service may account - at least in part - for why there is still an issue within the autistic population in 'being misunderstood by figures of authority' (MacLeod *et*

al., 2017, p. 12). Whilst in individual instances this may be simple mutual misunderstanding, multiple concurrencies suggest a structural privileging of 'neurotypical behaviours as 'correct' and others as inherently deviant' (Lawson, 2010, p. 49).

STIGMA does not just arise in interactions with authority figures. Research that considered the attitudes of the predominant neurotype student body is mixed. Female college students without an autism diagnosis in the US and Lebanon endorsed sentiments of lower stigma than their male counterparts (Obeid *et al.*, 2015; Gillespie-Lynch *et al.*, 2019). Though this is inconsistent from an earlier study that found no gender differences (Butler and Gillis, 2011). Lower endorsement of stigma is still stigma. Reports based on thin slice judgments substantiate the autistic experience of exclusion peers (Sasson *et al.*, 2017). To tackle this, it is suggested that HEIs may wish to consider online training for all students to improve knowledge about autism to increase acceptance of their autistic peers (Gillespie-Lynch *et al.*, 2015).

GEOGRAPHIES OF DISCRIMINATION emerge when institutions do not consider the use of their spaces. 'Architectures of containment' are established where there are not mechanisms and opportunities for autistic students to meet (Gabel and Miskovic, 2014 cited in Searle *et al.*, 2019, p. 3). Freshers week can be exclusionary if modes of participation that allow for multiple sensory needs are not promoted; exclusion is then magnified as these events are often gateways to Soc[21] involvement (Hastwell *et al.*, 2017). Sensory discomfort created by over-crowding, harsh lighting and interruptive noise in social areas on campus limit the places where others can be met, and friendships can be formed (Vincent *et al.*, 2017). The provision of multiple types of sensory adjusted space would alleviate the distress reported by, potentially, half of autistic students (Anderson, Carter and Stephenson, 2018). Furthermore, such spaces are a pleasure for all to use. If anything, gentle spaces soon become a victim of

[21] Socs or Societies; student led interest groups in the UK often run under the umbrella of the Student Union.

their own success becoming hubs of activity rather than spaces of solace and sanctuary. Should this be observed, the HEI simply needs to plan for more sensory adjusted spaces. This perhaps illustrates the limitation on universal design in all its forms; design is good, but who is involved in the discussions that impose affordability?

The foremost example of the obfuscation of priorities may be in the desire for independence. Any student may need scaffolded support to acquire university 'survival' skills such as cooking and laundry (Anderson *et al.*, 2016, p. 21). For autistic students gaining such skills may require further consideration over sensory distress. These needs play a part in a hidden life of students but is unlikely to cross the desk of senior budgetary teams. The effort in gaining these skills may be obscured from staff, but is sometimes essential in providing a grounding for self-determination and self-advocacy (Knott and Taylor, 2014). Concerns over geographies of discrimination can be ameliorated, to some extent, by the provision of advocacy-led support that would consider funding for cookery classes and comfortable chairs in laundrettes. Such overt symbols are perhaps one way of making an expectation of belonging explicit.

Belonging and explicitly neurodiverse communities

The experiences of BELONGING TO EXPLICITLY NEURODIVERSE COMMUNITIES are explored in several papers (Hastwell *et al.*, 2017; Bolourian, Zeedyk and Blacher, 2018; Hillier *et al.*, 2018). Such groups are potential lynchpins holding together experiences of acceptance, and the provision of agents that can co-design their learning environment. Acceptance from others is pivotal in reducing stress and is a protective factor against depression (Cage, Di Monaco and Newell, 2018). Whist shared understanding of the experience of otherness might be a backdrop for the construction of new adult identities (Clouder *et al.*, 2020, p. 770). Furthermore, neurodiverse communities nestled within the wider student community allows for the possibility of a 'playful and strategic cutting off of

'us' and 'them'' that values autistic dispositions and presentations whilst critiquing the inconstancies of the predominant majority group (Madriaga and Goodley, 2010, p. 126). These groups provide counter narrative to prevailing deficit narratives through making autism 'extra-visible' on campus (MacLeod *et al.*, 2017, p. 1). The personal cost of this declaration becomes one that is shared between the group as a collective voice, and perhaps more so if allied voices can be recruited to join the chorus.

To enable neurodiverse groups to flourish - be they official Student Union groups or the informal friendship groups of which autistic students are part - HEIs must provide spaces to 'congregate without having to contend with loud noises, huge crowds and the consumption of alcohol' alongside the traditional student offering[22] (Madriaga, 2010, p. 44). Then students have the opportunity to socialise as they see fit in vibrant spaces, quiet areas and single rooms[23] (Gelbar, Shefcyk and Reichow, 2015).

With the security of these strategically carved out neurodiverse arenas students may, for the first time, engage in symmetrical intergroup contact. A neurodiverse group may have members that go *en masse* to be constituent of other Societies. There, the backing of autistic friends potentially enables both a change in attitudes and lowers the incidence of stigmatic events across campus (White *et al.*, 2019). The convening of neurodiverse groups enables individuals to construct their own identity where multiple cultures - of which autistic culture may be one - intersect.

Holistic non-academic support

The non-academic may undermine the academic, and so NON-ACADEMIC SUPPORT is an effective provision for all at university. For autistic students alienation that originates outside

[22] In the spirit of "if you've met one autistic person, you've met one autistic person", it must be noted that many mentees over the years have asked me for directions to the nearest pub, where to sign up for a silent disco, how to plan for an amazing rock festival, how to become a hermit, and how to endure lectures whilst hungover.
[23] Whilst single rooms are the norm for UK HEIs, room sharing seems prevalent in other HEIs across the globe.

of their course often diminishes outcomes within the course; it is therefore incumbent on HEIs to ensure HOLISTIC SUPPORT (MacLeod and Green, 2009). Students without robust social connections can be disadvantaged when it comes to seeking clarification or catching up on missed work (Taylor and Knott, 2007). To accommodate for this disadvantage universities may develop a range of personalised supports grounded in enduring personal relationships (Van Hees, Moyson and Roeyers, 2015; Brown and Coomes, 2016; Bell *et al.*, 2017; Accardo, Kuder and Woodruff, 2019). Such provisions sit within the offices of the disability services, well-being departments, counselling services and mental health programs[24].

HOLISTIC SUPPORT is not limited to campus, if it were that would be a poor notion of holistic. Rather support is fundamentally entangled in the wider social and cultural external matrix of relationships (Cox *et al.*, 2017). Students are not simply students; understanding this gives dignity to rich and varied lives that encapsulate the intersection of multiple identities (Botha and Gillespie-Lynch, 2022). As any student identity flourishes associated professionals must have a regard to their personal histories, chiefly the core experiences of their families and their schools.

PARENTAL PARTNERSHIPS in HE requires finesse. Students are adults. Autistic students may need to escape familial autistic infantilisation (Loftis, 2021). Conversely, many autistic participants in prior literature value the support that parents have, and continue to provide (Beardon and Edmonds, 2007; LeGary, 2017; Bolourian, Zeedyk and Blacher, 2018; Alverson, Lindstrom and Hirano, 2019). These supportive parents are an indicator of success 'in terms of support, health, motivation, and expectation' (Accardo, 2017, p. 41). Families can provide 'scaffolding, which compensates for some of the difficulties [students] experience' (Lambe *et al.*, 2019, pp. 1538–1539). There is a tension between a desire for

[24] There is no hard and fast rule to the positioning of Wellbeing Departments, Counselling Services and Disability Offices. As disability is a protected characteristic and wellbeing is not, some are separate and coordinate work to ensure duties are comprehensively fulfilled with specific funding, whilst some Disability Offices sit within Wellbeing Departments with more permeable approaches to support. The only constant seems to be the nagging feeling that the other way of doing it might be better.

independence and close family support that is exasperated through parents distance from students 'day-to-day challenges' and the mismatch of perception over events that occur (Hendrickson *et al.*, 2017, p. 587). Parents can also create barriers to thriving with their own lack of knowledge about higher education, reticence to autonomy, narrow conceptions of autistic capacity or through relationships of pressure rather than acceptance (MacLeod, 2016; Hotez *et al.*, 2018; Bailey *et al.*, 2019; Elias, Muskett and White, 2019). This tension locates a need for what can be termed parental management in the HEIs provision of holistic support as services seek to ensure chances for autistic students to 'sort things out' by themselves (Van Hees, Roeyers and De Mol, 2018, p. 3304).

The second key factor in this external matrix is that of previous education. Transition into higher education is a point of vulnerability. Much is written about planning successful transition into higher education owing to its precedence as a 'cornerstone' in American disability legislation (Wehman, Smith and Schall, 2009; Dente and Coles, 2012; Wei *et al.*, 2016). Furthermore, recent research indicates the ease of transition into university being a significant predictive factor in course completion (Cage, De Andres and Mahoney, 2020).

TRANSITION to university has multiple pitfalls. Schools are wary about passing on written documentation of needs in case it is either used as evidence against students applications or is requested by parents (Essex and Melham, 2019). Students report a need for more school support as they prepare for university, and families need reassurance of HEIs capacity to provide support (Accardo, 2017). Students themselves may require knowledge about the mechanics of disclosure as well as being presented with clear benefits of doing so (Davidson and Henderson, 2010; Fabri and Andrews, 2015; Anderson, 2018). Not only do schools need to foster aspirations to participate in higher education through a focus on academic achievement but they also need to inform potential students about the reasonable accommodations they can expect when they arrive (Camarena and Sarigiani, 2009; Roberts, 2010; Dipeolu, Storlie and Johnson, 2014; Highlen, 2017; Bakker *et al.*, 2019). In doing so

schools and universities can align themselves in a 'gradual transition to diverse supports' (Anderson *et al.*, 2018, p. 324).

There has been some academic interest in the evaluation of summer transition projects or early arrival schemes. These are weekend long residential stays at university hosted by disability offices, occurring before the start of first term. These events allow an unhurried acclimatisation to enable students to encounter university experience and without the sensory assault and expectations of a busy Freshers'[25] or moving-in week. Unlike a Freshers' Week, the structure of a timetable is provided as new students are inducted into both campus and academic life. These TRANSITION programs are often valued by autistic students as they engender familiarity with the campus and normalise the autistic presence at university (Hotez *et al.*, 2018; Lei *et al.*, 2018). Conversely, there is little acknowledgement in the literature of unsuccessful transitions. Potentially this reveals some of the unconscious bias inherent in the research paradigm. Bluntly put, researchers are based in universities, and it is pragmatic to investigate the needs of students who have survived their first term or two than head further afield.

Within this multitude of ***universal design on campus*** one of the most significant findings may be that the provision of such things is important and appreciated, even when not used (Perepa, 2018). These are facilities that may be accessed in according to need that diminishes as independence is gained. Provisions such as mentoring should not be just for times of crisis, rather they are mechanisms in which the individual student may flourish.

[25] Freshers' week is the welcoming period for new students at UK universities focusing on getting enrolled, social events and student society fairs. Despite its name, it often lasts two weeks.

Mentoring from mythos towards logos

Higher Educational institutions do not have to plan for every and all eventualities; students are a deeply heterogenous group. By developing universal design, a concern for a neurodiverse learning community HEIs might be able to - confidently and continually - grow into ideal communities of justice, peace, and learning. Perhaps, if there is no place for idealism in our universities, then there is little hope for it anywhere. Students who can work for these ideals do not spring forth fully formed; so, the *academia* itself needs to be framed as a place for becoming. It is this core tenant that will be unpacked in the following section as the crux of mentoring, before returning to the small lacuna of prior research about Specialist (Autism) Mentoring.

Mentor and Telemachus

Like the *academia* itself, mentoring hails from antiquity. The persona of Mentor plays a minor role in *The Odyssey*. It is to Mentor that Odysseus entrusts his son Telemachus with the command to 'keep everything safe and sound' (Homer, 2003, l. II:226 p.21). It can be argued that Homer's Mentor only faintly embodies modern mentoring motifs of advice, protection, and nurture. Mentor largely fails in his duty to protect the household, with Odysseus returning home to find that rogues that 'turned his whole house inside out, ate up his wealth, and bullied his son' (Robert, 1999; Homer, 2003, l. XXIII:7 p.301). Nevertheless, Mentor speaks from a position of moral authority 'from the goodness of his heart' to stir up a complacent citizenry and, in turn, is branded a 'crazy fool' for inciting against the power structure in which he has his own stake[26] (Homer, 2003, l. II:227, II:240 p.21). His form and

[26] This advocacy against the structures that they are part of may well echo the experience of many who work in university welfare.

voice are taken by Athena - goddess of wisdom and strategy - to inspire Telemachus to action, to bring Odysseus courage, and to bring an end to conflict[27] (Homer, 2003, l. II:398 p.25, XXII:206 p.293, XXIV:542 p.324). In this, Mentor posits to frame Telemachus growth into adulthood (Rieu, 2003).

This trope of an interrogative foundation inspiring the growth to adulthood later becomes an epic in its own right in the work of the 17th century French mystic and educator Fénelon. In *Les Aventures de Télémaque*, Telemachus is taken on his own odyssey as an allegory of the education of kings in ways of simplicity and peace. Mentor is transformed from the provocative bit role of the classical era, to a paragon of guiding wisdom; one who 'regulated the whole course of the life of Telemachus in order to raise him to the highest pitch of glory.' (Robert, 1999; Fénelon, 2010, p. 310). Fénelon's Mentor paints a more Platonic conception of virtue education pushing Telemachus from a literal cave wherein he is tempted by indulgence, desire, luxury and ease through the application of 'gentleness and courage' (Fénelon, 2010, p. 10; Williams, 2010).

Rousseau's 1762 treaty on education, *Émile,* exhorts pupils and readers alike to read Fénelon's *Telemaque*. In sending out his pupil Émile with a copy in hand, Rousseau grounds an 'epistemic Platonism' in the development of innate human goodness (Williams, 2010, p. 40). For Rousseau the virtuous ideal strung between Mentor and Telemachus is – within one's allotted place in the world – the task allotted to tutors and pupils. Furthermore, this part of the treatise is not the preserve of any gendered education, rather the introduction of the ideal of virtue mentoring is one that is given without distinction to Sophie and Émile alike. In short;

[27] To limit any grandiose claims of mentoring, do also know that Athena took on the form of a seagull to do the same.

> We know that the same task [of Mentor and Telemachus] is allotted to all; that whoever loves what is right with all his heart, and does the right so far as it is in his power, has fulfilled that task.
> (Rousseau, 1762, p. 167)

Whilst there is - and perhaps should not be - no clear and definitive definition of mentoring itself, a useful touchstone of a more classical definition can be found in Tennyson's *Ulysses* that centres the task of Mentor as ensuring Telemachus is 'not to fail in offices of tenderness'; this is not mentoring for individual growth, but mentoring to take an ethical place within community (Tennyson, 1842).

A broad-brush history of mentoring

With the rise of the self-help movement in the seventies in the West, it could be argued that the conception of mentoring was tied – for a time – to an explicit value base (Lessor, 2013). Levison's description of informal relationships in which the mentor fulfils social functions in both of fostering development and believing in the capacities of the protégée lent itself to management strategy (Levinson *et al.*, 1978). Being mentored became a matter of occupational identity through developing both job-specific technical skills and competences in inter-personal office politics; whilst providing mentoring was envisioned as a route for keeping midlife managers creative[28] (Kram, 1983).

By the eighties the prevalence of mentoring, particularly in the domains of career development and the training of teachers and nurses, inspired some academic justification on the value of formal and informal mentoring (Fagan and Walter, 1982; Fagenson, 1989). As with much subsequent writing on mentoring, authors take an *a priori* approach by leading with developmental psychology that define the mentoring process (Anderson and Shannon, 1988; Healy and Welchert, 1990). From this theoretical base, further work then sought to

[28] The cynical may also say occupied.

provide practical steps to implementing formal mentoring programmes (Fagenson, 1989; Wilson and Elman, 1990).

Research in the nineties largely focused in on the rebalancing effect of mentoring within marginalised groups, in particular those excluded from organizational power through constructs of gender and race. It is possible to identify nascent roots of disability mentoring roots in a concern for self-efficacy and self-confidence (Powers, Sowers and Stevens, 1995). It could be argued that, in the sampling of the qualitative progression of individuals and the qualitative measuring of economic outcomes, there was a parting of ways between mentoring as the formation of educational *habitus* and more economically driven conceptions of mentoring protégés to fulfil institutional needs[29].

Following the turn of the century, mentoring became further located in personal development. A wider perspective brought to mentoring by social network theory allowed a return to the consideration of 'personal development, growth and change' as a fundamental function of the process (Kram and Ragins, 2008, p. 671). In employment contexts this envisioned mentoring as a factor of influence upon the mentee's ideal self, and the consequent need for rounded thinking about the mentee's life in terms of wellbeing, physical health, and work-family circumstance. It is of note that, as the corporate model of mentoring moved away from outcomes towards holistic conceptions educational mentoring split. Whilst some influential educational research followed the prevailing zeitgeist that focused on a narrow 'improvement orientated profession' (Hargreaves and Fullan, 2000, p. 56; Ingersoll and Smith, 2004), others doubled down on the necessity for holistic models to improve the engagement and outcomes of marginalised youth (Colley, 2003; Nora and Crisp, 2007; Crisp and Cruz, 2009; Ward, Thomas and Disch, 2014).

[29] In much organisational management writing the word protégé is used, with its connotations of a protective power dynamic. In this work mentee will be chiefly used to give centrality to the mentee-mentor relationship.

In the last decade there have been empirical endeavours investigating the *qualia* of mentoring. Though, considering the cross-disciplinary nature of mentoring, the 67 papers regarding sociocultural factors found in a recent literature review still seems small (Banerjee-Batist, Reio and Rocco, 2019). This review realigns mentoring with value education as it considers mentoring's function within the social justice dimensions of gender, ethnicity and culture, and age. In terms of gender, mentoring is suggested as tool to break the glass ceiling; though this is qualified by both the number of women at mentor-ready stages of their career status, and the unequal burden of a heavier mentoring load that these few women have (Banerjee-Batist, Reio and Rocco, 2019). Same-ethnic mentoring is beneficial, giving better insights into living as part of a marginalised group. Conversely, majority-culture mentors provide access to organisational power. Whatever the power dynamic it is apparent that mentoring has better outcomes if it addresses psychosocial support. (Banerjee-Batist, Reio and Rocco, 2019, fig. 2). Perhaps this breadth of support indicates a return to the classical grounding of mentoring in the multiplicities of the civilising process and the 'impersonation of wisdom' (Smith and Alred, 2017, chap. 11).

It would not be surprising if future academics' reflections on mentoring continue this swing between measurable outcomes and holistic growth; not only is this an artifact of the delineation between research epistemologies but of mentoring itself as a fluid field. Mentoring is an amorphous phenomenon that squeezes into cultural gaps as a pragmatic balm to social imbalance. As such it is perhaps all the more important to ensure that mentoring addresses structural imbalances with its core expertise in value education and, in turn, passes its own critical mentoring eye on the systems it queries.

Conceptual contexts of mentoring

A historical jaunt through the narratives of mentoring leaves an impression that a simple definition of mentoring is unwise. Instead, mentoring models should be contemplated in dialectical tension. Mentoring can be a spontaneous emerging phenomenon or one organised by institutions; a formalised agreement or an informal meeting of minds; both a quick fix and a life-long relationship; one that elevates the young mentee or one that calcifies an aging mentor's status.

Categorising mentoring relationships

This conceptual breadth led to the development of ways of categorising mentoring models. Categorisation can plot mentoring against two axis; traditional or reformist, alongside narrow or broad in scope of topics (West, 2016). Traditional mentoring approaches are characterised with 'orientation to local culture' and 'culturally reinforced scripts for learning' (2016, pp. 24–25). This plays out in narrow topics in clinical supervision or in broader themes of consultation and advice modes. Conversely, reform-minded mentoring is more interested in the construction of ideas by approaches orienting mentees towards 'concepts and beliefs relevant to their own lives' (2016, p. 25). Narrow reform-minded mentoring is present in teacher training when the object of mentoring is that, say, of developing a professional identity. Whilst a broader field of mentoring is at work in mentoring for teacher development that encapsulates teaching craft, curriculum knowledge, institutional domains and structures, performance and outcome, practicality, and emotional well-being.

This is not the only way to categorise the phenomena of mentoring. Instead of a matrix it is possible to use qualitative research to create discrete categories of mentoring

observed, such as Buell's Cloning, Nurturing, Friendship & Apprentice models (Buell, 2004). Cloning mentoring seeks to replicate the mentor's skill set and values in the protégé, Nurturing mentoring provides safe spaces, Friendship models step away from the context of a professional relationship, whilst Apprentice models seek to instil expertise. Whilst the categorisation demarks mentoring relationships it has little to say about inherent power imbalances, mentoring that moves between modes, or those nation ships that seek to change the context in which they emerge.

A dimensional model of mentoring practice

Developing mentoring practice requires more than the categorising and sorting of mentoring incidences and outcomes, it demands conceptualisations of what is occurring during the mentoring interactions. A particular model, developed by Galbraith and Cohen, has become predominant in the field of autism mentoring (1996). It is a model that underlies Nora and Crisps seminal work (2007), which in turn informs autism mentoring research (Cunnien, 2016; Roberts and Birmingham, 2017; Thompson *et al.*, 2018). Galbraith and Cohen envisage a 'Complete Mentor Role' along six dimensions:

- An acknowledgement of and emphasis on the mentee's thoughts and feelings.
- A component of information and advice from the mentor about the institution they and the mentee are a part of.
- A process of facilitation through probing of the mentees ways of being.
- A confrontative challenge of non-productive ways of doing things.
- Mentors become a model to their mentee by sharing their own pathways through hardship.

- Mentees develop their critical faculties through their growing relationship with their mentor.

(Galbraith and Cohen, 1996)

The 'Complete Mentor Role' six dimensions posit mentors and mentees each bringing functions to the mentoring session. The mentee brings initiative, whilst mentors bring advice, alternative strategies and motivation to a meeting in which trust and challenge interact (Galbraith and Cohen, 1996). There is a potential flaw in this model, particularly in its usage within disability fields. There is an imbalance of power. It is the mentor who brings alternate life strategies. In reductive terms, mentors in this model present solutions and cajole conformity to a normative agenda, and mentees are passive recipients who need to be taught critical thinking. It is a "Complete Mentor Role" not a complete mentor*ing* role.

Mentoring in the Academy

The black box of mentoring in HEIs, necessitates a digression into a question that vexes academics; namely, what is the university for? In tentatively asserting the function of these venerable institutions, the position of good and apt mentoring in both its broad and specialist senses can be drawn.

Though Newman's conception of a secular university is dated by its mid-nineteenth century assumptions of a narrow enrolment of the clergy and sons of wealthy patrons, nevertheless it is a good enough place to start. In *The Idea of a University,* he places at the centre the

> perfection of the Intellect, which is the result of Education, and its *beau ideal*, to be imparted to individuals in their respective measures, is the clear, calm, accurate vision and comprehension of all things, as far as the finite mind can embrace them, each in its place, and with its own characteristics upon it. (Newman, 1842, p. 166)

But greater than this individual benefice, was Newman's conception of the social function that universities are imbued with as tools of the nation state as a public good, as

> a cultivated intellect, because it is a good in itself, brings with it a power and a grace to every work and occupation which it undertakes, and enables us to be more useful, and to a greater number. (Newman, 1842, p. 196)

The majority of those within the *academy* still champion this cause despite the need for universities to extol their economic good over other forms of public good in a globalised market (Collini, 2012). An optimistic appraisal may find that this hankering of researchers, lecturers and tutors for Newman's *beau ideal* is a promising antidote to a society wobbling towards post-truth.

Imagining the character of universities as that which cultivates the intellect of students may also shore up the culture of striving that has become endemic in our places of learning. The idea of a pursuit of academic excellence is good and right in and of itself, but that idea is required to stand within a society in which students utilise education as a means of escape. The hubris of the educated can be to look down upon those who have not made it, and this reinforces educational patterns that promote feelings of failure.

> The habit of hoop-jumping is hard to break. Many still feel so driven to strive that they find it difficult to use their college years as a time to think, explore, and critically reflect on who they are and what is worth caring about. (Sandel, 2020, p. 180)

Mentoring seems ubiquitous in university structures, appearing in faculty development and the formation of a climate of research (Roberts, Kavussanu and Sprague, 2001; Savage, Karp and Logue, 2004); as a mechanism for righting structural inequalities of race or gender (Vries, Webb and Eveline, 2006; Devos, 2008; Griffin and Reddick, 2011); as a pedagogical technique for the formation of researchers (Whiteside *et al.*, 2007), nurses (Hayes, 1998; Webb and Shakespeare, 2008; Harrington, 2011) and teachers (Fagan and Walter, 1982;

Furlong and Maynard, 1995; Hobson *et al.*, 2009); and finally as a student retention tool (Campbell and Campbell, 2000; Girves, Zepeda and Gwathmey, 2005; Nora and Crisp, 2007). Perhaps this mentoring within university should create alignment away from destructive striving and towards a lofty goal of a *beau ideal*.

Pivotal to much writing on mentoring in higher education is Nora and Crisps conception of mentoring as a student support system (Nora and Crisp, 2007). Taking on the 'complete mentor role' embeds a calling through 'advising, personal counselling, intellectual discussions, and informal socializing' so that students may persist with their studies (2007, p. 339). Though this key paper does not 'examine the what and how inside the mentoring "black box"' (2007, p. 340).

This black-box mentoring is more than the deployment of tools to shape organisational structure (Zellers, Howard and Barcic, 2008). In the academic context - with a focus on the *beau ideal* of the intellect - mentoring becomes a potentially transformative tool in the lives of the people for who research, teach, and are taught. In UK HEIs a particular nexus of disability funding and practice has emerged to leverage such a tool.

Specialist (Autism) Mentoring in UK HEIs

Having first wound through the literature on the autistic experience of university and the themes of success, challenge, and barrier alongside Universal Design; then meandered through the mythos and conceptualisation of mentoring; now is the moment to address the linkage of these paths in the phenomenon of Specialist (Autism) Mentoring in particular.

Specialist Mentors in UK HEIs

Following interest in the US around mental health mentoring in the early 2000s, autism mentoring as a support strategy appears online during the summer of 2006 (Google Trends - specialist mentor, autism mentor, mental health mentor, n.d.). Autism mentoring in HEIs then emerges as a phenomenon to be studied from 2011 onwards with the review and publication of the York University, Ontario mentoring programme and the National Autistic Society's student mentor guidelines in the UK (Bebko et al., 2011; Mowart et al., 2011). Rather than a construct grounded in a wealth of research-based intervention, Specialist (Autism) Mentoring emerged in UK HEIs from students' needs and funding structures.

From mentoring to Specialist Mentoring

A case can be made for Specialist (Autism) Mentoring, Specialist (Mental Health) Mentoring in UK universities and emerging Specialist (ADHD) Mentoring, to be considered as a distinct grouping of mentoring. They are defined into being with caveats that are not found elsewhere. They are *specialised* and *professionalised*, developing from a single mandate 'to remove barriers to learning' (DSA-QAG, 2016).

Whilst, to some degree, all mentoring practices have an element of specialisation, a Specialist Mentor potentially requires further aptitude. Whilst a senior sales manager may

mentor a junior sales manager by imparting skills and outlooks on their shared task, or a CEO may take on a protégé who they can share experience of hailing from minority culture or gender; aside from the experience of having once been a student, Specialist Mentors do not necessarily have shared lived experience. Whilst there is a growing number of autistic Specialist (Autism) Mentors and probably a few Specialist (Mental Health) Mentors who have had their own protracted battles with mental health, they are not the majority. Rather many Specialist Mentors arrive through a process of specialisation. Their academic path may lead them to counselling, social care, or teaching, which then finds its calling back within university. Such specialism starts with qualification. To be recognised as a Specialist (Autism) Mentor who can receive the DSA funding, mentors must hold suitable qualifications autism studies or similar from the non-medical help (NMH) matrix (Disabled Students' Allowances Team, 2019c).

Paid mentoring provision may bring more complexity to a model of mentoring. With funding comes oversight; with oversight, professionalism; with professionalism, expectations of contracts and binding guidance from employers; with this the risk that the profession becomes directed towards serving the institution not the students. Unexamined professionalisation runs the risk of calcifying the power dynamics of what is already an uneven relationship.

Nominatively determined mentoring?

This sub-categorisation of Specialist Mentoring may lead to an uncomfortable thought. The paucity of explicit research into the construct of Specialist Mentoring prior to the creating and naming of Specialist Mentoring as a branch of mentoring is problematic. Perhaps Specialist Mentoring is only mentoring because it was named so. Had it been named in DSA funding allocation as, say, Specialist Counselling or Specialist Coaching a significantly different model in UK HEIs would probably have emerged.

The function of Specialist Mentors in UK HEIs

With the phasing out of local authority grants in 1990 the UK government brought in the Disabled Students Allowance General Allowance, Equipment Allowance and the Non-Medical Allowance (Hansard, 1989). Following numerous complaints the Skill DSA Review, 2001, led to funding being uncoupled from local authorities and becoming part of the regional student finance organisations (Lewis and Corlett, 2001). Since then the number of autistic students disclosing at UK HEIs has bloomed from only 80 to 16,685 (HESA, 2002, 2021b). This funding model - and its apparent success - enabled Specialist Mentors to emerge with a 'collaborative and holistic support model' (MacLeod and Green, 2009, p. 631). For universities responding to global pressures, corporate re-imagining places an increasing economic pressure on tutors time (Readings, 1999; Collini, 2012; Berg and Seeber, 2016). Having colleagues who have funded time for the long task of meeting complex pastoral needs allows tutors – at least theoretically - to take a broader view of the needs of whole classes.

Models of specialist mentoring provision in the UK

Specialist (Autism) Mentors sit within a larger economy of university disability provision in the UK. In UK HEIs Disability Offices hold responsibility for ensuring protected reasonable adjustments, exam accommodations and sharing statements of need with lecturers and tutors (Fabri and Andrews, 2015; Milton, Martin and Melham, 2016; Clouder *et al.*, 2020). They may be able to lessen the bureaucratic burden of accessing DSA funding for support and the following needs assessment (Cooper, 2013; Perepa, 2018). Once funding has been secured offices guide students towards acquiring their assistive technology, arranging for notetakers, transition arrangements, and initial meetings with Specialist (Autism) Mentors. In this there is a potential systematic hurdle, stretched Disability Offices can be wary of committing resources to support potential students ahead of arrival.

Students are required to take action in this transitional period. When applying for student loans[30] students may elect to disclose a disability and apply for the Disabled Students Allowance (DSA). They will then be asked to submit medical evidence, such as a letter diagnosing autism, and to visit an assessor for a needs assessment. During this needs assessment the assessor may recommend a Specialist (Autism) Mentor as a form of non-medical help (NMH). This 'band 4' provision is fully funded by the DSA and is not part of the repayable loan. Recommended specialist mentoring can be provided inhouse at some universities or tended out to third party mentoring businesses and sole-trading mentors at others which all engage the services of professional mentors (Sims, 2016; Martin *et al.*, 2017; Milton *et al.*, 2017; Lucas and James, 2018). This mixed-economy may often have historical roots in the setting up or outsourcing of mentoring by disability offices in the period between 2006-2014, during this period the DSA-QAG non-medical helpers were largely unaudited and unrepresented (*The DSA Timeline and associated developments & initiatives - 1983 to 2014 - NNAC-Wiki*, no date)

Specialist (Autism) Mentor professional status

Unlike Specialist (Mental Health) Mentors who require professional association accreditation and consequently come from counsellor or therapy backgrounds, Specialist (Autism) Mentors have had fewer accreditation pathways, and consequently hail from more disparate backgrounds in counselling, teaching, university administration or as post-graduate students (Disabled Students' Allowances Team, 2019c). The maturation of this biome is perhaps evident in the growing numbers of number of established autistic Specialist (Autism) Mentors who participated in this project.

[30] Or, in Scotland, as a separate application (SAAS, no date).

In essence there are two distinct pathways towards qualifying as a Specialist (Autism) Mentor. The first requires the mentor to hold any degree, and comprehensive training via the six National Autistic Society (NAS) online modules. The second pathway is to hold a relevant degree in Autism Studies, Psychology, Counselling, Child Psychology, Special Education or Childhood Development, a Post Graduate Certificate (PGC) in Autism, or a Masters (MA or MEd) in in Autism, Special Educational Needs, or Critical Disability Studies. On top of this both pathways are required to attend either the NAS's Autism and SPELL in HE or CPD training in autism and HE provided by an HE institution (Disabled Students' Allowances Team, 2019c).

So far, registration as a Specialist (Autism) Mentor has avoided emulating Specialist (MH) Mentoring's reliance on professional bodies. Perhaps this can be attributed to the small number of professional autism associations, or optimistically it is a reflection of a concern that autistic expertise in mentoring may dwindle if professional bodies became a barrier to recruiting autistic mentors (Ridout and Edmondson, 2017). Furthermore, it could also be argued that the current melange of training requirements is itself a barrier, in particular the reliance on charities and private businesses for accreditation of mentors stepping up from being students in wider academic disciplines. There is an economic catch-22 for university leavers; they cannot always afford the training without a secure post, and they cannot enter a secure post without the training. It requires university disability services to fund training upfront from their own tightly stretched budgets.

The UK HEI context of Specialist (Autism) Mentoring

The Equalities Act 2010 requires that institutions have an anticipatory duty 'to take such steps as it is reasonable' to ensure that disabled people, like autistic students, are not put at a disadvantage (HM Government, 2010, sec. 20). They do so by changing how things are

done, changing the built environment, or by providing auxiliary aids and services; of which Specialist (Autism) Mentoring can be counted.

Specialist (Autism) Mentor operates within – and is often required to navigate – the shifting tides of policy as an outworking of legal obligations. Currently, these tides are pulled by the Teaching Excellence and Student Outcomes Framework (TEF), as a tool for measuring student performance against intake benchmarks. Since 2018, the Office for Students (OfS) adopted the TEF under section 25 of the Higher Education and Research Act. Of particular interest is the OfS's adjustments made for autistic students, in which - for reporting student outcomes under the B3 indicators – a downward adjustment of 5 percentage points is proposed for threshold setting for progression and completion (Office for Students, 2022b). This comes with an acknowledgement that, when other demographics are introduced to the analysis, the need for such an adjustment 'recedes' (2022b, p.86). It seems more research is need. What this suggests is that mentoring is doing its job; a potentially vulnerable group of students, in terms of progression and completion, are actually progressing and completing. It is metrics of post-university under-employment – with the systematic alienation of entry and retention in neuro-privileged space - where autistic university leavers face adversity (Allen and Coney, 2021; Coney, 2021).

Not only is mentoring navigating the line between employability and the *beau ideal*, as a non-medical support it is caught in the swell of economics, universal design and the needs of the individual. Inclusive teaching is a 'route to excellence' (Disabled Students Sector Leadership Group, 2017). The case was made above for the Universal Design of campus, learning and instruction that both benefits autistic students and all students. In the case of a specialist intervention like autism mentoring, a universal approach is to have it available on campus for anyone who wishes to engage with it. This does not come under existing DSA funding models; as even the extension of an Exceptional Case Process is exceptional, not universal. It should be noted that the University of Cambridge has developed

a more Universal Design model of disability support based around their Reasonable Adjustments Fund (RAF) in which mentoring can be delegated internally and swiftly, potentially improving the student experience. In such a model there is the opportunity to ensure joined up support with disability offices, wellbeing teams and specialist mentors.

This may have been prescient, in December of 2019, the DSA-QAG closed and ceased oversight of the quality assurance framework (Disabled Students' Allowances Team, 2019b). Its passing was met with mixed response, the DSA-QAG provided statistical evidence that had driven good practice, though some practitioners felt it had been too narrow in its scope with an emphasis on paperwork over provision (Hector, 2020). At the time of this writing, Student Finance bodies are vetting assessment centres, equipment services non-medical help providers. As they update the list of NMH providers, there is one small but potentially deeply significant shift in language that has occurred. The file is now saved as nmh-suppliers-xxx rather than the older nmh-providers-xxx (DSA-QAG, 2020; SfE, 2020). It may be a small shift, but it potentially reflects deeper disenfranchisement. A conception of mentor-as-supplier is radically different from mentor-as-provider. Supplier is distanced from the object of mentoring; whilst provider stands a little closer to a personal relationship.

Subtle pressures on the status of Specialist (Autism) Mentors has been brought to the fore with the publication of the Higher Education Commission's 'Arriving at Thriving' (Hector, 2020). This report raises three distinct concerns over the precarious balance of the current funding model. There are concerns over the criteria for students to receive DSA. Responding institutions have identified students who may need support but lack a formal diagnosis that would lead to mentoring. In addition, the introduction of a competitive two-quote system 'is having a detrimental effect' with experienced mentors being undercut by agencies and 'overstepping professional boundaries due to lack of governance (Hector, 2020, pp. 39, 51). Furthermore, there are reports of agencies who place rapid bids and only after

recruit after confirmation, resulting in delays in mentoring and geographical inequality of service (Hector, 2020).

With these factors at play, research - such as this work – is in demand. It enables the deductive gaze of researching institutions to be turned inwards so that they can include, prosper and grow.

Autism mentoring programmes in other cultural contexts

Whilst this work is chiefly concerned with Specialist (Autism) Mentoring as a particular phenomena within UK HEIs. There is much that can be gleaned from the experience of autism mentoring in other cultural contexts.

There is a strong tradition of peer mentoring in the US (Ford, 2009; Pillay and Bhat, 2012; Koegel *et al.*, 2013; Ness, 2013; Masterson and Meeks, 2014; Bublitz *et al.*, 2015; Cullen, 2015; Barnhill, 2016; Griffin *et al.*, 2016; Sarrett, 2018; Fairchild *et al.*, 2020). Mentors may be graduate students earning credits for clinically-aligned courses such as school or mental health counselling (Longtin, 2014), psychology, special education or social care (Barnhill, 2016), occupational therapy (Schindler et al., 2015) or health and social service (Ford, 2009). Where recruitment is not tied to a specific clinical-aligned department, mentoring may become a function of the colleges' counsellors (Pillay and Bhat, 2012). Alternatively, there are promising accounts of autistic mentees becoming mentors, co-authoring reports of the provision and bringing their embodied expertise to the profession (Gillespie-Lynch, DeNigris, *et al.*, 2017; Hotez *et al.*, 2018).

Perhaps it would be fair to say that the peer mentoring that has been developed in the US is marked by a coaching dimension (Welkowitz and Baker, 2005; Hart, Grigal and Weir, 2010; Rando, Huber and Oswald, 2016; Qian *et al.*, 2018; Accardo, Kuder and Woodruff, 2019; Merydith *et al.*, 2019). Academic coaching is more tightly focused on attainment goals

than a broader conception of mentoring as cultivating the *beau ideal* of a rounded intellect, though its role in development of personal confidence cannot be seriously doubted. As such peer-coaching can provide quick check-in meetings in which a particular block to learning can be considered. It has been argued that this mentor-as-coach is a reflection of a health insurance system in which short-term interventionistic approaches are often an outcome (Welkowitz and Baker, 2005).

An American model of autism mentoring might also reflect the structure and funding of higher education. The Americans with Disabilities Act and its Amendments mandates reasonable access accommodations for students with a documented disability (U.S. Department of Labor, 1990; U.S. Equal Employment Opportunity Commission, 2008). Autism accommodations are developed in the absence of any centralised support funding, leaving the burden for such supports to be incorporated into training budgets, philanthropic organisations or private funding. Several US peer mentoring schemes pay student mentors for their work, but many simply receive course credit or internship hours or do so as volunteers from the student body (Barnhill, 2016; Fairchild *et al.*, 2020). Peer funding is cheap and effective, though training of specialist autism mediators and mentors has been put forward in recommendations for the US context (Sarrett, 2018).

Autism mentoring has provenance in Canada. The York ASD Mentoring Project (AMP) was designed in 2007 with collaboration between the psychology graduate students and counselling services. It was envisaged in response to growing numbers of autistic students and as a complementary provision to fill service gaps. A holistic approach to student development was proposed with its resonance in critical disability theories promotion of self-advocacy (Bebko, Schroeder and Ames, 2011; Ames *et al.*, 2016). Weekly mentoring meetings were found to be consistent with a goal-setting coaching approach, with 91% of students in the programme reporting that the subjects discussed in session were useful. These

meetings are supplemented with fortnightly social meetups between all mentees and mentors in which students endorse a wider range of socio-communicative discussions.

Pilot specialist peer mentoring services in Australia are receiving research attention, providing underpinning evidence that mentoring that targets contextual barriers has beneficial outcomes for students (Siew *et al.*, 2017). The experience of peer mentors and their development has been the subject of initial investigation, finding that the mentors were concerned over the lack of clarity of the scope of their mentoring role and a dearth of training that would serve to bridge mentee-mentor communication issues (Hamilton, Stevens and Girdler, 2016). Such mentoring is available in at least 32% of Australian universities (Owen *et al.*, 2016). Mentoring is not the sole preserve of Australian universities, with interest-based post-school mentoring being piloted for young people who have left education or been unable to complete their degree studies (Ashburner, Bobir and Dooren, 2018).

Outside the Anglo-sphere, there are accounts of autistic academics in Sweden providing mentoring-like support for autistic students with the notion of ensuring that students do not become reliant on support (Rosqvist, 2019). In Belgium, student counsellors have been recruited as mentors following ideas of universal design for learning (Jansen *et al.*, 2017, 2018).

Other autism supports in universities in the Anglosphere

Other supports are documented in the body of academic literature on the autistic experience of university. Psychoeducational training has been trialled in the development of a group-based course focused on problem solving skills and emotional self-regulation (Pugliese and White, 2014). In a small follow-up survey, students in the study reported satisfaction in the progress they made and had enjoyed meeting other autistic students. This approach focusing on executive function is echoed in the Brain-Computer Interface for ASD virtual environment with biometric feedback (White, Richey, *et al.*, 2016). Whilst

psychoeducational training is manageable within a university context, 'neither of the interventions resulted in significant improvement either in social adjustment, executive functioning, or stress management' (Kuder and Accardo, 2018, p. 727).

Transition programmes have been examined. These take the form of a residential visit in the summer before arrival with introductions to key support staff, a series of psychoeducation and induction seminars and social meetings. Summer residentials are often valued by students (Mitchell and Beresford, 2014; Lei *et al.*, 2018), but with some variability that is possibly owing to the differences in programmes across settings (Accardo, Kuder and Woodruff, 2019). While these have been shown to reduce anxiety and worries around transitioning to university and boosts confidence by meeting a diverse autistic student intake. Longitudinal results have not yet been published (Lei *et al.*, 2018; Cage, De Andres and Mahoney, 2020).

Like the original York Mentoring project, elements of social meetings for mentors and mentees has been positively embraced in numerous settings in America, Australia, Canada, as well as in the UK (Bublitz *et al.*, 2015; Ames *et al.*, 2016; Gillespie-Lynch, Bublitz, *et al.*, 2017; Siew *et al.*, 2017; Lucas and James, 2018; Fairchild *et al.*, 2020). Social groups of fellow autistic students are distinctive in their function of filling a need to discuss and reflect on students own 'perception management' of an autistic diagnosis (MacLeod, Lewis and Robertson, 2013, p. 42). Furthermore, groups have been convened with psychoeducational aims, creating space for informal discussions around topics such as stress-management, group work or the nature of disclosure of diagnosis (Hillier *et al.*, 2018; Lei *et al.*, 2018). These social groups are often, but not unanimously, regarded positively by participants (MacLeod, Lewis and Robertson, 2013; Pugliese and White, 2014; Hastwell *et al.*, 2017).

In addition, there are informal participant-led autism social groups in which a university disability officer acts as a point of contact and books a room, then organises the first few sessions of the year before seceding to a user-led model (Hastwell *et al.*, 2017); and

autism groups are also founded as distinct provisions from mentoring and other formal services (Luey, 2014).

Staff led social skills programmes are documented. The REACH project deployed the PEERS curriculum, though it had better outcomes in terms of self-advocacy than the strictly social skill set (Gillespie-Lynch, Bublitz, *et al.*, 2017). Video modelling for social skills education has been trialled and satisfied its own narrow metric for success (Mason *et al.*, 2012; Koegel *et al.*, 2016). None of this should really be a surprise, with the consensus among students is that social skill sessions are not particularly warranted or wanted (Bublitz *et al.*, 2015; Barnhill, 2016; Accardo, Kuder and Woodruff, 2019; Ncube *et al.*, 2019) by anyone but parents (Elias and White, 2018).

Perhaps this dichotomy is built on a mismatch of intention and need. Milton argues that training, as the chopping up of social process 'does little to help autistic people adjust to the changing flux of negotiated socially constructed realities' (Milton, 2014a, p. 798). Consequently, what is potentially of use is not a pyramid of merit or a ridged set of social skills, but Newman's *beau ideal* of a cultivated, clear, and calm understanding of these negotiated realities. It is not that skills cannot be developed through training, rather it is a model of education that values the scholars integrity, identity and vulnerability above brute skill (Smith and Alred, 2017). The ongoing mentee-mentor relationship is an ideal untidy biome for negotiating what Milton terms the 'double empathy problem' (Milton, 2012). That is to say that, owing to differing dispositions rooted in differing perceptual experiences, the empathy extended by the majority to the minority autistic population – and *vice versa* in return - is often 'wildly inaccurate in its measure' (Milton, 2017a, p. 44). With the minority status of autistic people in the majority of fields, oppressive power dynamics are further compounded over autistic peoples' lives through the stigma of being othered. Within the mentoring dyad, rather than the enforced social skills group, it may be possible – whatever the

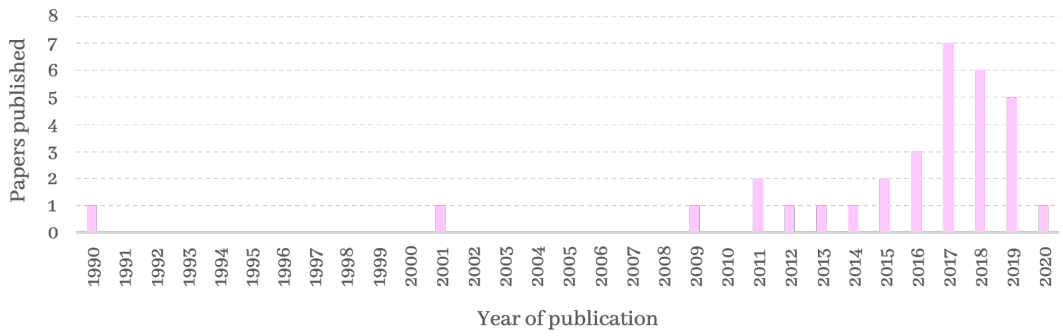
dispositions of mentee and mentor – to advance mutual understandings of both each other and wider society.

A small corner of a small pool

Of the 264 papers that merited inclusion in the systematic review into autism and higher education, 183 papers mention mentoring, and 28 papers elaborate on it as a support. Of these, the majority were peer mentoring projects, with only six papers considering the phenomenon of Specialist (Autism) Mentoring in UK HEIs (Milton and Sims, 2014; Sims *et al.*, 2016; Martin *et al.*, 2017; Milton *et al.*, 2017; Ridout and Edmondson, 2017; Lucas and James, 2018).

The earliest mention of a mentor in an autism context comes from Temple Grandin who, in her article for *Focus on Autistic Behaviour* suggested that; ‘teenagers and adults with autism need a "mentor" to help them develop their interests, assist them with social skills, and motivate them to succeed’ (Grandin, 1990, p. 1). Despite this, universities did not seem to have developed formal mentoring support for their autistic students for another twenty years, and even then, research into such provisions took another six years to gain traction (see Figure 8).

Figure 8
Papers on autism mentoring in HEIs by year of publication



In 2001 peer mentoring was floated in terms of a potential occupational therapy intervention to reduce stress using social stories (Glennon, 2001). One could convincingly argue that social stories are not the reciprocal territory of mentoring, but by co-opting the term 'mentoring' is endorsed as a mechanism of social support. This co-opting of the language of mentoring presents an ongoing liability in mentoring research; it both obscures actual mentoring practice and positions mentoring as an educational bucket category for anything that is not teaching.

Prior quantitative studies into autism mentoring

Whilst the great majority of the thirty studies are qualitative in nature eight papers present quantitative data from 185 autistic participants[31] in just four mentoring projects and two surveys between 2016 and 2020 (see Table 5). In short, quantitative data posits that autistic students report high levels of satisfaction with mentoring at university.

Table 5
Models of mentoring as object of qualitative studies and the number of autistic participants involved

	Model of mentoring provision	Methodology	Number of autistic participants	Total number of participants
(Ames *et al.*, 2016)	PG specialist students as mentors	Mixed methods evaluation of mentoring project	23	23
(Gillespie-Lynch, Bublitz, *et al.*, 2017)	Peer UG & PG students	Participatory design of mentoring project	12	18
(Hotez *et al.*, 2018)	Peer UG & PG students	Participatory design of summer school project	14	14
(Lucas and James, 2018)	Specialist (Autism) Mentors	Interviews with mentees and Specialist (Autism) Mentors	8	24
(Martin *et al.*, 2017)	Specialist (Autism) Mentors and autism mentoring outside of university context	Participatory design of specialist mentoring project	15	9
(Nagase, 2017)	Peer "supporter"	Survey of autism support	51	51
(Ncube *et al.*, 2019)	PG specialist students as mentors	Mixed method analysis of mentoring project	23	23
(Thompson *et al.*, 2019)	Peer mentoring	Q-sort investigating viewpoints supporting peer mentoring	42	57
			185	

[31] With the overlap between projects studied by Gillespie-Lynch et al. and Hotez et al., and with Ames et al. and Ncube et al. the total number of individual participants may be closer to 165.

Autistic peer mentoring

Two papers presenting qualitive data on the mentoring of autistic students by autistic mentors can be considered. A Q-sort exercise conducted across Australia found autistic participants valuing the individualised support of autistic peer mentors as 'making life easier for students', as a single contact to 'discuss difficulties with in relations to coursework, or lectures or tutors' (Thompson *et al.*, 2019, p. 298). An effort to quantify this interaction was made, finding that students with both lived experience of high AQ-J-10 scores[32] and a good network of social support could better support autistic students (Nagase, 2017).

Quantitative insights into peer mentoring projects

Two seminal peer mentoring projects have been reviewed in mixed method academic papers; AMP[33] at York University, Toronto, and Project Reach[34] at the City University of New York.

As a pilot project in response to service gaps in 2009, the AMP found high levels of satisfaction in a goal-led peer mentoring provision[35]. (Ames *et al.*, 2016; Ncube *et al.*, 2019). Mentees set on average 5.58 goals with their mentors, with goals covering a wide section of social student life. It is suggested that such a high number of goals set resonates with the high number of demands placed upon autistic students (Ames *et al.*, 2016). A *t* test was conducted on mentees SPS and CFQ[36] scores from the beginning and end of the year; there were no significant findings (Ncube *et al.*, 2019).

Project Reach used autistic students' perspectives to build a self-advocacy curriculum for peer led group and one-to-one sessions. Mentees completed SRS-A, an anxiety inventory,

[32] Autism Quotient 10 - Japanese version
[33] ASD Mentoring Program
[34] Resources and Education on Autism as CUNY's Hallmark
[35] 2016: [$\bar{y}$ = 4.25, SD = 0.75; max = 5]. 2019: [$\bar{y}$ = 4.22, SD = 0.60; max = 5].
[36] Social Provision Scale -A (Cutrona and Russell, 1987) and the Cambridge Friendship Questionnaire (Baron-Cohen and Wheelwright, 2003)

and a self-report of academic efficacy test[37] at the beginning and end of the year. As in the AMP there were no broad statically significant findings, however analysis of the specific areas of perceived friendship support, academic efficacy, and the use of the language advocacy revealed positive gains[38].

On the periphery of Project Reach is the review of a developing summer transition programme (Gillespie-Lynch, Bublitz, *et al.*, 2017; Hotez *et al.*, 2018). It documents both incoming and current students alongside an established year-round programme in which mentees could become mentors. Findings from the small group of ten respondents to the second iteration of the summer transition project resulted in a statistically significant increase in knowledge about autism increase and a decrease in measurements on the SRS-S scale[39]. If a decrease in measures is because of a decrease in anxiety, this is welcomed; and hopefully not because summer school became an opportunity to learn camouflaging strategies. In addition, measures of disability pride, feelings of inclusion, orientation towards a social model of disability, and measures of self-efficacy, all showed positive tendencies though were not in themselves statistically significant. Whilst it is promising that such a participatory approach to autistic mentees becoming mentors has such encouraging results, it is a still a single localised study that requires duplication and evaluation.

Quantitative insights on Specialist (Autism) Mentoring provision

Two UK Specialist (Autism) Mentoring contexts have been evaluated; the Cygnet Mentoring Project at London South Bank University, and the mentoring provision at Royal Holloway, University of London.

[37] The Social Responsiveness Scale-A (Constantino and Gruber, 2012), the Spielberger State-Trait Anxiety Inventory (Spielberger, 2010) and the Student Self-report of Academic Self-efficacy (Hoover-Dempsey and Sandler, 2005)
[38] Social support from friends [$\bar{y}$ = 20.92, SD = 6.80 to $\bar{y}$ = 22.38, SD = 5.33; Z = –2.34, p = 0.02]. Academic self-efficacy [$\bar{y}$ = 8.79, SD = 1.89 to $\bar{y}$ = 9.75, SD = 2.03; Z= –2.893, p = 0.004].
[39] Knowledge about autism [Z = −2.21, p = 0.03]. Autism traits [Z = −2.14, p = 0.03].

The Cygnet Mentoring Project was envisaged as a goal-setting mentoring programme involving autistic adults in its design, implementation and evaluation (Ridout and Edmondson, 2017). Although intended for a broad demographic, it included mentees and mentors from within the higher education sector. Mentees rated their own satisfaction in areas such as relationships, safety, connectedness, achievements in life, security, and spirituality before and after the mentoring programme on the PWI-A scale[40]. For the twelve mentees who finished the programme of mentoring satisfaction with life as a whole, thoughts about personal achievement, and feelings of safety all increased[41] (Martin *et al.*, 2017).

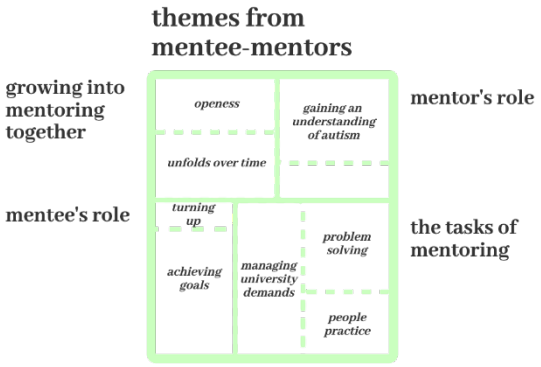
Mentees and mentor attitudes towards Specialist (Autism) Mentoring and Specialist (Mental Health) Mentoring were investigated at Royal Holloway (Lucas and James, 2018) [42]. Using tools that had been developed for educational mentoring in other educational contexts the study sought to examine expectations and experiences of the mentoring provision (James, 2014). All mentees reported an expectation that mentoring would help in the domains of social relationships, academic skills, and wellbeing. There were no significant differences between the expectations of those with Specialist (Autism) Mentoring and the with Specialist (MH) Mentoring. Neither were there any significance difference in the satisfaction that both groups of mentees had with their mentoring and the relationship they felt they had with their mentor by the end of the year. Though autistic mentees did seem to report higher levels of satisfaction and mentee-mentor relationship earlier in their mentoring. This pattern of the quick impact continued across domains; autistic mentees identified early increases during the Spring term in confidence in studies, time management, feeling comfortable in university, confidence in meeting new people, feelings of belonging and that they feel understood, developing coping skills, and feeling positive.

[40] Personal Wellbeing Index -A (International Wellbeing Group, 2006)
[41] +1.8, +1.6 and +1.4 [max 10] respectively
[42] 32 autistic mentees, 21 in receipt of mentoring for mental health, and 12 mentors. Small world disclosure: I was one of the mentors studied!

Qualitative themes from mentee-mentor dyads

In addition to the meagre pickings of qualitative data on Specialist (Autism) Mentoring, the systematic literature review produced a data set that was interrogated to extract themes of research that had been explicitly conducted with mentee-mentor dyads. This literature comprises of some thirteen papers that explore autism mentoring in higher education (see Figure 9).

Figure 9
Hierarchy diagram of themes from studies of mentor-mentee dyads included in systematic literature review



Dyadic research - that is research that investigates both autistic mentees and their mentors - is perhaps pivotal to a growing conception of Specialist (Autism) Mentoring. Such an approach may serve to interrogate the inherent power imbalance of a professional caste of mentors and anchor inquiry in the mentoring relationship. Mentee-mentor dyad research produced themes that coalesced around the process or ***tasks of mentoring***, elements that can be ascribed to the ***mentors' role***, the ***mentees' role a***nd of ***growing into mentoring together***, what happens ***when mentoring goes wrong***, and the insights that ***autistic autism mentors*** bring.

Geographies of research

There is some evidence that the distribution of the themes of mentoring arising from studies of mentee-mentor dyads has regional and cultural contexts (see Table 6).

Table 6
Coded incidences of mentoring themes by publication region of research into mentee-mentor dyads involved in autism mentoring

	USA	**Australia**	**UK**	**Canada**	**Belgium**
autistic mentors	8		2		
growing into mentoring together	7	1	4	14	1
mentor's role	10	4	3	3	
mentoring meeting			2	1	
the tasks of mentoring	12	24	18	6	
the tasks of the mentee	1	6	5		
when mentoring goes wrong				4	
Total incidence of themes	37	35	32	31	1

Hesitantly, it can be suggested that the peer mentoring systems from the coach-counsellor model in the US puts a greater onus on the ***mentors' role*** than the professionalised models found in the UK and Australia, where the loci become that of the ***tasks of mentoring***. Perhaps, though, this is a too simple distinction. Canada, with its peer mentoring system that seems to be in step with the US's finds its loci in themes of ***growing into mentoring together***. Such comparisons warrant further examination within our diversifying global institutions.

Dyads and the tasks of mentoring

The breadth of mentoring is apparent, summarised masterfully by a mentor in Project Reach who wrote:

> you have agreed to focus on the mentee's concerns. You are not moulding them into the person you think they would benefit from being, but instead helping them to become the person they themselves want to be. (Gillespie-Lynch, DeNigris, *et al.*, 2017, p. 397)

Such a core impetus for mentoring leads to a radically unbounded provision with a remit to encompasses any issue that a student may raise. A PROBLEM SOLVING directive finds

it's expression through multiple means. Sometimes it is by developing and sharing coping strategies for anxiety, and ways to endure 'big crowds of people' (Thompson *et al.*, 2018, pp. 423–424), other times the focus is on normalising the experience of university by talking with 'someone who's gone through the same thing' (Roberts and Birmingham, 2017, p. 1046).

Mentoring also seems to serve a role in PEOPLE PRACTICE. Mentees in the literature express a hope to learn social skills (Siew *et al.*, 2017; Lucas and James, 2018). Mentoring is a relationship in which the mentees desire for developing strategies of communication is practiced in a 'non-judgemental' space (Thompson *et al.*, 2019, p. 423). This is perhaps a different mode of learning than simply being yet another formal instruction in social skills (Bublitz *et al.*, 2015; Fabri and Andrews, 2015). In PEOPLE PRACTICE, there is an element of trust. Not only are trusting relationships with mentors built though regular meetings, but these mentors can be present as back up in other relationships in being present at moments of self-advocacy; 'the initial approach [to staff] is the scary part. It's less so with a mentor there' (Siew *et al.*, 2017, p. 10).

This self-advocacy seems to bring a realisation that the exhaustion of being autistic in a neurotypical space should not be the source for self-recrimination. With mentees coming to the realisation that being overwhelmed is 'due to others lack of accommodations' rather than any failing of their own (Martin *et al.*, 2017, p. 235). In doing so the mentoring process is one that encourages the self-identification and regulation of an emotional life. Manging stress and anxiety through an awareness of supporting relationships and confidence in one's own agency through 'tools to help change' (Siew *et al.*, 2017, p. 11).

In the reports from mentee-mentor dyads, the MANAGING OF UNIVERSITY DEMANDS is perhaps the most pressing task of mentoring. This undertaking can be thought of as a constellation of discussion around adapting to a new student *habitus* that is different from previous educational experiences. This is apparent in the theatres of university learning. Mentoring discussions recognised the busyness of campus environments in lecture halls, guild

areas, libraries and study rooms (Thompson *et al.*, 2018). In busy lecture room, strategic discussion with a mentor may be a fruitful means of discerning when to ask clarifying questions, and when to wait to see how the lecture unfurls (Siew et al., 2017). Perhaps most telling was the participant's development of a category of 'feeling comfortable in the university environment' (Lucas and James, 2018, p. 697).

As well as the navigation of environments, skills for completing work need to be developed or honed. Essay strategies need to be tailored to the student at that particular point in their academic development. This may be initial strategies of outlining supported through breaking down assignment requirements and rubrics, or it may be the instilling of confidence in a direct and clear writing style rather than being over encumbered by exuberant[43] and 'fancy' use of a thesauruses or a tendency towards hyper-lexia (Gillespie-Lynch, DeNigris, *et al.*, 2017, p. 400). Organisational skills, deadline management and self-prompting techniques that straddle the output of essays and the rich experiences available at university are also negotiated (Mowart, Cooper and Golson, 2011).

On top of this development of an academic skill set, mentoring rises to the task of providing accountability. Thorough a non-judgemental and trusted relationship executive function - or plain old procrastination - can be addressed thorough simply agreeing on a starting point (Mowart, Cooper and Golson, 2011).

As the mentoring relationship sits outside the power dynamic of an assessing tutor, mentoring removes a focus on penalties allowing students to board the risks that are higher level learning. Mentoring provides reassurance that the good-enough is actually good-enough. It provides challenge when old strategies are not working anymore, and gives reassurance that a missed deadline could still have a late submission (Taylor and Knott, 2007).

[43] That is not to say that there isn't a home in academia for a lofty floating phrase or near impenetrable pseudo-philosophical diatribe… or - at least for the sake of this PhD - I really hope that is the case.

Dyads on the mentees' role

In the dyads studied, mentees explained their own role in mentoring. Regular accessing of mentoring provision was characterised as 'a regular weekly marker in [a] chaotic life' (Martin *et al.*, 2017, p. 236). It was seen by some as a context in for ACHIEVING GOALS (Martin *et al.*, 2017; Thompson *et al.*, 2018). Even when mentees told how they 'found the process of setting goals challenging and intense', an anticipation of acceptance allows students to inhabit their own autistic expertise (Ridout and Edmondson, 2017, p. 6).

Dyads on the mentor's role

Adjusting to university life may be stressful, but it affords students an opportunity to rebuild self-esteem and self-regard. Mentors act as an external point of validation as they engage with the task of reflecting students achievements back to them and a space in which earlier experiences can be 're-evaluated' (Ridout and Edmondson, 2017, p. 6). Mentors use this re-evaluation process to encourage mentees in GAINING A BROADER UNDERSTANDING OF AUTISM. Mentors with a wide case load are able to share insights between autistic viewpoints (Roberts and Birmingham, 2017).

An understanding of the common challenges of autistic students and an openness to the unique manifestations of these challenges enables mentors to fill the need to be on the same page as their mentees (Gillespie-Lynch, DeNigris, *et al.*, 2017; Roberts and Birmingham, 2017). This permits the development of positive identities in which mentees find their 'own awesomeness' (Lucas and James, 2018, p. 704)[44].

[44] A note of academic caution, I was part of this study and the phrase "mentees' own awesomeness" sounds like it has my sticky fingerprints all over it. In citing it I am aware that it might be summoning a concept into being… but it has resonance in the experience of seeing many mentees find themselves and flourish over quite a number of years now. So, I stand by it.

Growing into mentoring together

The mentoring relationship is not one that arrives fully formed. The relationship between mentees and mentors UNFOLDS OVER TIME within an academic community. It is about feeling on 'the fringe of a wonderful network of erudite academics' so self-worth can be rebuilt (Martin *et al.*, 2017, p. 235). With a professional mentor 'already out there in the field' widening relationships from a simple peer network (Ness, 2013, p. 272). This mentoring relationship is one in which may have a genesis in an academic context, but often grows past a focus on academic needs (Gillespie-Lynch, DeNigris, *et al.*, 2017). By sharing the everyday the relationship finds a balance between '"authority" and "comradery"' (Roberts and Birmingham, 2017, p. 1044).

It helps to match the right mentee and mentor by following mentees requests (Martin *et al.*, 2017). Though it is also important to have mentors who can use the flexibility of mentoring to tailor provision to the needs of each mentee (Roberts and Birmingham, 2017, pp. 1047–1048). In doing so the relationship can grow into OPENNESS, with both mentee and mentor becoming comfortable in talking through the joys and grumbles of university experience (Roberts and Birmingham, 2017).

Roberts and Birmingham's 'mentee-centred approach' is a conceptual framework for peer autism mentoring (Roberts and Birmingham, 2017, p. 1038). Taking a grounded theory approach, five main themes of The Natural Progression of the Relationship, The Supportive Mentor, The Meeting Process, Identifying and Implementing Goals, and Learning Together, are posited as a means of understanding a peer mentoring scheme at the Simon Fraser University, Canada. As a framework for peer mentoring, it ties itself to progression. Peer mentoring is predominantly comprised of mentors with a single mentee caseload. If all goes well, both mentor and mentee learn about their specific instance of mentoring together. Specialist (Autism) Mentors can learn much from such a framework, though the added

dimension of a professional mentor seeing up to 25 mentees in a single week limits a simple mapping of frameworks.

The mentor in Specialist (Autism) Mentoring

A single published case study considers the phases of Specialist (Autism) Mentoring practice from the vantage of a professional mentor (Adams, 2021). Here the mentoring journey is described as passing though: containment, in providing a holding relationship in which the mentee could bring up what they felt was important; the psychosocial, wherein anxiety was addressed; and finally, a phase of adaptive behaviour skills for academic work. It is a mentee-centric conception of mentoring that builds adaptive behaviours and seeks to develop resilience in mentees.

When mentoring goes wrong

The work of Roberts & Birmingham touches upon those moments when positive mentoring relationships do not emerge (2017). It recounts two mentee-mentor pairs that had issues with the initial understanding of what mentoring was. The projects orientation towards what was described as a 'hierarchy' coming from peer mentors training about boundary setting led to professional but not sustainable relationships (Roberts and Birmingham, 2017, p. 1047).

Furthermore, there is a catch-22 for students who wish to manage demands. One student reported being '"forced" to enter the programme by her parents', yet she valued the attitudes and skills for self-advocacy that she gained (Hotez *et al.*, 2018, p. 11). This does pose a conundrum that requires juggling by provisions; by suggesting self-advocacy, are limits placed on self-advocating through withdrawal from conflict? Such layered questions may be best fielded by those with rich autistically-lived experience.

Autistic autism mentors

Finally, and with an eye to the future development of the mentoring profession, prior studies have sought the experience of autistic autism mentors. At times this was couched in a general appreciation of all mentors, regardless of disposition. Other mentees, though, have explicitly asked for ***autistic autism mentors***; someone 'who had experienced the challenge she was facing of learning to function more independently in college' (Gillespie-Lynch, DeNigris, *et al.*, 2017, pp. 396–397)

Not only does such provision foster independence away from more medicalised notions of support, but it also provides opportunities for mentees to triangulate their personal experience against that of their mentor. Furthermore, with a confident and open mentor there is opportunity to challenge prevalent attitudes towards autism through the application of radical honesty. The ability to 'literally obsess with objectivity' can be a useful mentoring trait (Hotez *et al.*, 2018, p. 11).

Though if the mentor has not yet developed into their mentoring with the ability to challenge mentoring is blunted. It might feel 'just like talking to myself' (Crane *et al.*, 2017, p. 33).

Mentoring might be fundamentally about a relationship with the Other. Be that Other autistic or allied, if they are too similar then efficacy could be curtailed; just as if the two stood too dispositionally distant. The separateness of an understanding yet demanding Other is perhaps the intersubjective ground on which the Self can become further defined so that a self-awareness may bloom in mentee… and mentor. Conversely, if there are demands without understanding, then the mentoring endeavour falls into the chasm of the double empathy problem. To mitigate this double empathy problem cultural agility is required by any aspiring mentor - whatever their own disposition - to negotiate universities in which both dispositional frames co-exist. It is this flexible mentoring that is highly valued as a support in

navigating the complexities of becoming and being a student (Ridout and Edmondson, 2017; Siew *et al.*, 2017; Ashburner, Bobir and Dooren, 2018; MacLeod *et al.*, 2020).

Aside from peer reviewed papers, there is a little published guidance available for UK Specialist (Autism) Mentors. The National Autistic Societies' *Supporting students on the autism spectrum* guidelines by Mowat, Cooper and Gilson (2011) provides an overview of the mentoring role, whilst Ridout's A*utism and Mental Well-Being in Higher Education: A Practical Resource for Students, Mentors and Study Skills Support Workers* (2018) presents valuable strategies and advice for practitioners.

With the NAS guidance being more than a decade old, models of autism have progressed somewhat since its conception. As would be expected from this era psychological theories that ground autism in impairment models such as the theory of mind, central coherence and executive function are laid out. A neurodiverse paradigm is not explored. Conversely, Ridout's book expresses no definition of autism, rather it considers disclosure through elected usage of positive language about difference. As such it places conceptions of autistic being as that which is constructed by the mentee in their daily relationships. Furthermore, there is guidance on how mentees can be provide with the tools to access autism research through journals and collaborative bodies like the Participatory Autism Research Collective. As such it is an approach that prepares the autistic individual to continually research and develop their own understanding of autism.

Both works give a precedence to the sensory assault of the campus. The NAS guidelines revolve around awareness of adjustments that can be made within the mentoring room, with lighting, exits, and noise. Ridout take this further and explores the common experience of sensory overload and the coping strategies that can be put in place through identifying issues, having a forum to process and articulate distress, and creating spaces of quiet. Neither extend the role into the systems domain through ensuring that the mentor has a

hot line to report flickering bulbs or over-heated rooms or in co-advocating for autistic representation in Estates projects via the Student Union.

There is some evidence for the widening of the scope of the mentor's role between the seven years of these two publications (see Table 7).

Table 7
A comparison of mentors' roles, duties, and boundaries between Mowart et al., 2011 and Ridout, 2018

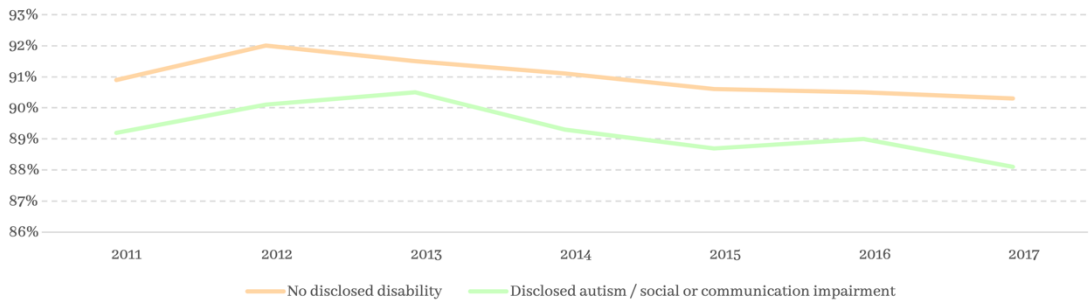
		(Mowart, Cooper and Golson, 2011)	(Ridout, 2018)
To meet regularly		p.10	
	And to keep records of meetings	p.13	
	To have a mentoring agreement	p.14	
To set goals and review them			p.7
To assist in developing coping strategies			p.7, chap.7
	Strategies for living with others		p.43
	Planning for sensory sensitivities	p.8	chap.6, p.112
	Managing stress and anxiety		chap.7
	Focus and distraction		chap.10
	Support relationships with flatmates		p.112
To aid in thinking through situations and considering perspectives			p.6
To have an attention to safeguarding			p.6
To structure a wellness-recovery action plan to mitigate and follow crisis			chap.11
To provide guidance and encouragement with			
	Study skills	p.10	chap.2
	Organisational skills	p.10	p.23-25
	Breaking down tasks	p.10	p.8
	Group work		p.21-22
To provide advocacy and liaison support		p.10	
To assist in developing reflective skills			chap.5
	Mental well-being		p.48
	Intersection of identities		p.48, chap.12
	Explore barriers to self confidence		p.104
To assist access of university facilities			
	Tutors		p.7
	Disability Services		p.7,10,17, 76
	Careers Service	p.11	p.129
	Student Finance	p.11	p.121
	Hardship funds		p.121
	IT Services	p.11	p.25
	Library	p.11	p.26
	Should have familiarity with the HEI	p.11	
To assist access of leisure facilities			
	Food outlets	p.11	
	Sports Centres	p.11	
	Student Union	p.11	
To assist access with student accommodation			
	Discuss shopping and cooking		p.113
To offer clear advice and guidance		p.12	
To offer a combination of support, challenges, and constructive criticism			p.6
	Negotiating terminology about autism		p.35
	Career planning		p.11?
	Modelling communication		chap.8
	Considering disclosure		chap.9
	Discuss legislation and disability rights		p.79-81
To attend regular training		p.13	
"Any other support consistent with the defined role of student mentor."		p.13	
	Discussions on friendships		chap.4
	Money matters		chap.15
	Employment skills		chap.16
	Identifying further study		chap..17

The 20 explicit roles in Mowart's NAS guidance, are nearly doubled to 38 in Ridout, with only eight functions overlapping. Perhaps this is the fleshing out of the 'any other support' through defining of the role of mentor (Mowart, Cooper and Golson, 2011, p. 13). Though it may well be a positioning of the role in terms of developing coping holistic strategies to challenges, rather than it's more initial function of removing barriers to learning.

In the seven years between publications, the number of first year, first degree autistic students attending HEIs had more than doubled from 1,965 to 4,190 (HESA, 2012, 2019). With more autistic students and the associated increase in Specialist (Autism) Mentors there is some evidence of this role enlarging to fill need (see Table 7). The advice to provide 'any other support consistent with the defined role of student mentor' coalesces with the instruction to remove barriers to learning and becomes a mechanism for wellbeing (Mowart, Cooper and Golson, 2011, p. 13). The role is reimagined not as one with a focus on academic outputs and university systems, but one in which the managing of stress and is 'fundamental to any student' (Ridout, 2018, p. 70).

Finally, it could be asked whether this widening of the scope of mentoring has been effective. Whilst the number of autistic students has doubled, the completion rate of autistic students has remained slightly less than that of students who did not disclose a disability (see Figure 10).

Figure 10
Completion rates of undergraduate students 2011-2017 (Office for Students, 2019)



Whilst this is static it could be argued that, with both the increase in autistic students over the period and the increased pressure on the UK's university system, static is a good enough result. Further modelling by the Office of Students that takes demographic factors into consideration, shrinks the two percentage point gap in completion to a single point and places continuation for autistic UK full-time undergraduates as 0.9% better than the reference group (Office for Students, 2022a). During this period the number of UK HE autistic students more than quintupled from 1,745 in 2011 to 9,930 in 2017[45] (HESA, 2012, 2018). With more autistic students nationwide, there would be an expectation of more students with complex needs. It can be surmised that the emergent holistic conception of Specialist (Autism) Mentoring has maintained completion rates with an increasingly complex cohort.

[45] 16,685 in 2021

Impact of this systematic-thematic literature review

This systematic approach had an unforeseen outcome. Within the coding schema it was possible to extract 78 papers which recounted the autistic experience of university using direct quotes from students. It was evident that, taking just these papers into account, there was a narrative that was more about the success and flourishing of students than the greater body of literature would suggest. This led to publication of *What are the challenges and successes reported by autistic students at university?: a literature review* (Irvine and MacLeod, 2022).

This chapter has presented a both an unpacking of the literature stemming from the autistic experience of HE and a narrative of mentoring. The breadth of literature on the autism throws the paucity of research into Specialist (Autism) Mentoring into stark relief. Of the 264 papers systematically gathered, only 6 concerned themselves with these enduring relationships that seem to be valued as a lifeline within UK HEIs.

The prior literature has many substantive gaps that require addressing. Fundamentally, there is little collated data about the prevalence and uptake of Specialist (Autism) Mentoring. There is very little insight into the black box of this provision that occurs on almost all UK campuses. What is evident, is the rising prominence of participatory research that seeks to address the marginalisation of autistic students within HEIs. Combined with the espoused holistic scope of Specialist (Autism) Mentoring this required the following research to be crafted in a way that inquired into a provision that has the potential to touch upon every aspect of the rich tapestry of autistic students' university experience as well as one that would ensure authentic autistic direction from mentee hypothesisers and the assent of autistic majority forums. Only then could a framework be developed that practitioners may consult to inspire their own development as mentors.

Chapter 2

Methodology

The breadth of literature on the autistic experience of university surveyed in Chapter 1 throws the paucity of research into Specialist (Autism) Mentoring into stark relief. Of the 264 papers systematically gathered, only 6 concerned themselves with these enduring relationships that seem to be valued as a lifeline within UK HEIs.

The prior literature has many substantive gaps that require addressing. Objectively, there is little collated data about the prevalence and uptake of Specialist (Autism) Mentoring. Perhaps more fundamentally, there is very little insight into the black box of this provision that occurs on almost all UK campuses. What is evident, is the rising prominence of participatory research that seeks to address the marginalisation of autistic students within HEIs. Combined with the espoused holistic scope of Specialist (Autism) Mentoring this required the following research to be crafted in a way that inquired into a provision that has the potential to touch upon every aspect of the rich tapestry of autistic students' university experience.

From these insights, initial research questions were formulated:

Table 8
Research questions by conditional matrix

Research question	Matrix level (Strauss and Corbin, 1994)
What is the prevalence of Specialist (Autism) Mentoring provision in UK universities?	National and Organisational
What do mentees want to know about mentoring? What is discussed during mentoring sessions? Do mentors hold theories that might explain mentoring?	Interaction
Does the reported experience of mentors resonate with mentees? What should be foregrounded in a framework for Specialist (Autism) Mentoring provision in HEIs? Is the proposed framework seen as useful by those who may encountered it?	Collective

These questions required an iterative mixed method design grounded in participatory research that ensures authentic autistic direction from mentee hypothesisers and the assent of autistic majority forums. From such an approach a framework could be crafted so that practitioners may consult it to inspire their own development as mentors.

Methodology summarised

This mixed method iterative project contextualised research with data from SFE and HEIs before turning to a more substantial element in qualitative analysis of diaries from mentees and mentors. The Freedom of Information requested numbers of autistic students in receipt of mentoring, this was followed by a scoping study of all UK universities to map current provision.

Fourteen mentees were polled for questions to ask Specialist (Autism) Mentors. These questions provided the kernel for solicited and structured online diaries, completed over the year by 14 mentees and 29 mentors. 116 diary entries were gathered over four tranches. Six online interviews were held with mentees to confirm and challenge themes and provide an arena for answering questions hypothesisers had set. Thematic analysis of the diaries and mentee feedback formed a briefing presented to a forum of five blind-selected master mentors for critique. This forum was autistic majority[46]. Forum discussions were added and informed thematic analysis that underpinned the development of grounded theory.

Table 9
Number of participants in project

Mentees (as hypothesisers)				14
Mentors	Autistic	(and "it's complicated")	(3 in master mentor forum)	10
	Allied	(2 in master mentor forum)		19
	Total			43

Table 10
Number of responses during diary tranches

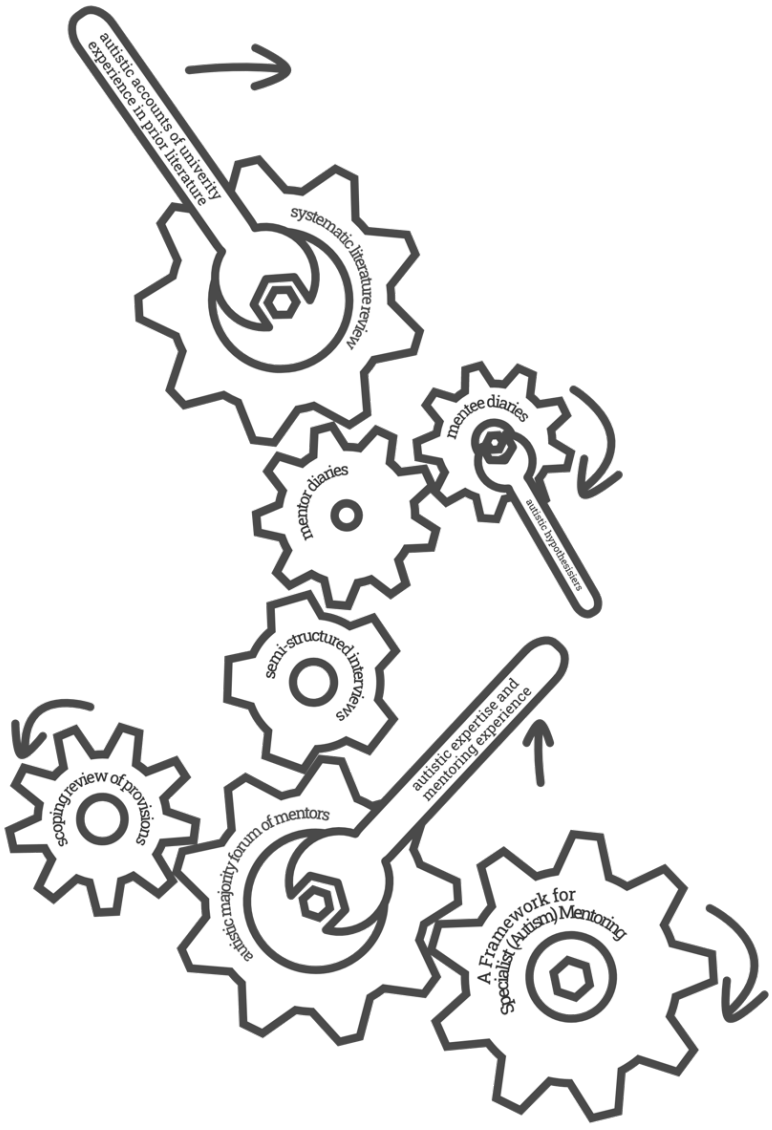
	Christmas 2020	Reading Week	Easter 2021	End of Year	Total diary entries
Mentees	7	7	3*	2*	19
Mentors	23	25	24	25	97
				Total	116

*exam season

[46] Detailed demographics are presented in Findings, Chapter 3.

The project could be described as a series of interrelating cogs which mesh to ensure autistic expertise at multiple pivots (see Figure 11, below). The richness of such a comprehensive methodology perhaps reflects two points. Firstly, this is among the first projects seeking a framework for Specialist (Autism) Mentoring in HEIs; consequently, all facets of the role require consideration. Secondly, with universal design on campus and the move towards holistic support, research with a narrow focus may miss the richness of the wider relational context that is a university education.

Figure 11
The interlaced phases of research



Predicates and principles

Before outlining the steps that were taken to investigate the phenomena of Specialist (Autism) Mentoring in UK universities, it is imperative to consider the predicates and principles for just autism research.

Epistemological predicates for research on Specialist (Autism) Mentoring

The systematic literature review in Chapter 1 provides foundations for a further exploration into the hows and whys of Specialist (Autism) Mentoring. As a collected body of knowledge, it reinforces the need for just and ethical research that addresses the power structures inherent in mentoring within university that may gravitate towards the majority neurotype. Literature reviews provide checks and balances to subsequent research through developing 'thickness by "mapping" the research' (Schwartz-Shea and Yanow, 2012, p. 51). Such thickness is pivotal to the endeavour of holding a balance between the reality of the disablement stemming from the experience of being autistic as a minority in a neurodiverse society; and the idealism of being able to picture a new and better way of creating a shared space of education. Through literature reviews that seeks such tension 'theoretical sensitivity' can be gleaned as the first step towards the development of grounded theory (Strauss and Corbin, 1991, pp. 41–47).

<u>Autism expertise</u>

Starting from a natural ontology of scientific endeavour, there is a role in reflecting on that which researchers do; those that 'know best what to do next in a science are the leading workers in the field' (Hacking, 1999, p. 198). Within the field of the production of knowledge about autism, it follows that those who work in their lives to mesh the 'partial

symmetry' of their autistic perspective to social intuitions will be those who can pave a way towards some understanding (I. Hacking, 2009, p. 1472). This autistic expertise unfolds from the embodiment of agency reconfiguring itself to socially constructed institutions where autistic persons can find themselves as 'alienated outsiders' not just in terms of sociality, but in terms of alienation from the research itself (Milton, 2014b, p. 2). This needs to be resisted as alienation from the methods of research leads to a self-reinforcing deficit modelling of the autistic experience (Milton, 2014a). If mentoring as the object of this study is conceived of in with 'holistic' function within HEIs, then valid research is constructed through a rapprochement of autistic expertise with allies versed in collegial adroitness (Martin, 2006, p. 2, 2008, p. 81; MacLeod and Green, 2009; Milton, Martin and Melham, 2016, p. 81; Cox *et al.*, 2017, p. 83; Jansen *et al.*, 2018, p. 272; Davidovitch *et al.*, 2019, p. 55; Essex and Melham, 2019, p. 101; Getzel, Prohn and Carr, 2019, p. 423; MacLeod, 2019, p. 482; Fabri *et al.*, 2020, p. 11; MacLeod *et al.*, 2020, p. 10).

Such a coming together starts with first-hand reports of the phenomenon of mentoring and to that adds an interest in the relational performance of mentoring. This co-performance requires a mentee who will be autistic and a mentor who may or may not hold a diagnosis themselves. Such a co-creation of salience must be outfitted with protections for the students situated in a relationship that has obvious, but usually caring, power dynamics. Researching Specialist (Autism) Mentoring – particularly if suggesting a potential framework – demands a methodology of collaboration that should echo the ideal of mentoring, rather than becoming a systematic barrier in its own right.

Grounded theory and autism research

Researching Specialist (Autism) Mentoring is a novel and relatively untrod field. To do so - whilst valuing autism expertise - requires methods that take seriously accrued oppression. The act of researching to build a framework for mentoring is, by its very object,

an act that is suited to the building of grounded theory. If, as the literature suggests, autism mentoring is holistic in nature then it can be expected that research will need to delve beneath a descriptive layer to make meaning from 'change and process, and the variability and complexity of life' (Strauss and Corbin, 1991, p. 25). A grounded theory approach seeks to develop and test a schema of that which is being investigated in a way that is more than a selection of useful statistics or themes. Through inductively building a theory such methods eschews tendencies to force data to fit existing theory through normalising feedback loops inherent in the academic process (Glaser, 1998). Sadly, autism research itself has an uncomfortable history with normalising outputs (Milton, 2014a). It might be contended that grounded theory has some potential to resist Glaser's normalising loops.

A grounded theory approach would be one that seeks meaning from the particular phenomenon of Specialist (Autism) Mentoring occurring within the constructs of UK universities. It seeks to the 'systematic generation of theory from data acquired by a rigorous research method' that can be used to provide a scaffolding for both new and veteran specialist mentors (Glaser, 1998, p. 3). Mentoring - as bridge between the person and the institution - sits in a rich nexus on the 'conditional matrix' (Strauss and Corbin, 1991, p. 163). That is to say, the phenomenon of mentoring is inextricably entwined with the being of persons, those individuals in a mentoring relationship, that relationship in the context of the lofty goals of higher education and its bureaucracies, and all within nationally funded HEIs which inform global attitudes towards autistic people.

The substantial overlap between thematic analysis and grounded theory permits a free flow of coding methodologies (Braun and Clarke, 2006). One core difference is apparent; thematic analysis is usually performed on complete data sets, whist grounded theory lends itself more easily to iterative resampling. Such resampling also may be an opportunity within research cycles to seek to calibrate the direction of analysis with autistic expertise, meshing with a second epistemological pillar in an expression of participatory research.

Participatory research

Participatory thematic research has a central place in developing grounded theory (Charmaz, 1996; Glaser, 1998; Brown et al., 2002; Corbin and Strauss, 2015). Within autism studies, such participatory research has a goodness of fit with developing emancipatory models of mentoring (Sims, 2016; Gillespie-Lynch, Kapp, *et al.*, 2017; Martin *et al.*, 2017; Milton *et al.*, 2017; Lucas and James, 2018).

A groundswell of participatory research has led to practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants. The AASPIRE guidelines and Autistic toolkit in particular provides noteworthy checklists that were used to audit the following methodologies (Nicolaidis *et al.*, 2019; Crane, Ashworth and Davies, 2020). Resources, such as these, are evidence of autistic advocacy becoming established within the fundamentals of research design in the field. Researchers have been developing much needed autistic-friendly interview protocols in terms maximising the comfort of participants (Camarena and Sarigiani, 2009; Kelly, O'Malley and Antonijevic, 2018), of multiple modes of interviewing (MacLeod, Lewis and Robertson, 2013; Roberts and Birmingham, 2017; Cribb, Kenny and Pellicano, 2019), provision of questions in advance (Searle *et al.*, 2019), and the use of visual break cards (Cresswell and Cage, 2019). Autistic participants have been explicitly engaged with processes that review the design of research (MacLeod, 2016; Cage, Di Monaco and Newell, 2018), and with drafting research procedures and instruments (MacLeod, 2010; Gelbar, Shefcyk and Reichow, 2015; Sarrett, 2018; Searle *et al.*, 2019).

The field of autism research is producing notable examples of research methodologies in which autistic participants are co-analysts of their own data (MacLeod *et al.*, 2017; Gillespie-Lynch and Riccio, no date). Furthermore, data collected about interventions for autistic students have been analysed by secondary autistic groups from within the same university (Searle *et al.*, 2019). Finally, there is a potential illustration of a gold standard of

participatory research in the inclusion of autistic hypothesisers and analysts (Gillespie-Lynch et al., 2020).

Participatory research is a fundamental tool for developing mentoring frameworks, though not all participatory research is equal. In terms of Aldridge's delineation of participatory model this work sits within the bounds of 'participant as actor' in terms of equal researcher-participant roles that includes potentially marginalised voices using qualitative participatory methods. Within the strictures of a PhD, and the expectation of a single author, a creative methods was required; and so the mobilisation of autistic hypothesisers and an autistic majority forum were developed. At some points, this project may even aspire towards an emancipatory model through these elements of bottom-up approaches, and in an explicit intent to create a framework for mentoring that would necessitate just social change within our higher education institutions (Aldridge, 2016, fig. 6.1).

Ethics

Disability research cannot shy away from the ethical imperative of the embodiment of participants. Ethical discourse in this field cannot be about some abstract universally representative agent, but must frame the interaction of the specific heterogenous group of persons with the production of knowledge (Leach Scully, 2008). The autistic being-in-the-world is too often one in which the significance of subjective autistic experience is not immediately apparent (Milton, 2017b). Autistic students speak about a deep concern over not being understood by those who in authority (Lawson, 2010; MacLeod *et al.*, 2017; Vincent *et al.*, 2017; Sarrett, 2018; Accardo *et al.*, 2019). Consequently, a robust research ethic requires 'person-orientated' practices to be developed that provide support for individual participants, remove individuals' barriers to research, create a forum in which participants can advocate for better services, and accommodate and leverage participants' needs and strengths. In such a

paradigm ‘person-oriented’ informed consent here is more than a singular act, rather it becomes an ongoing relational process throughout the project (Cascio, Weiss and Racine, 2020).

Ethics are not the sole preserve of autistic participants. In the field of autism research, the ethical rigour that is required for autistic participants in terms of a research experience that is reliable, empathic, anticipatory, and logical, also improves the experience of all participants (Martin, 2008). Ethical considerations for autistic participants are not an add-on; it fundamentally improves methods. In this project, the dual project briefing pathway of detail and clarity is of as much use to the overworked allied mentor as it is to the overworked autistic mentor. Videoconferencing that took seriously the encroachment into the home of others was applauded. The re-humanisation of elected pseudonyms allowed for the protection of confidences and a sense of ownership of the framework by participants. Dignity is universal.

Research phases

The meeting of participatory ideals with the complex research object of UK Specialist (Autism) Mentoring requires a suitably structured mixed methods project (Creswell and Tashakkori, 2007; Creswell and Creswell, 2017). Four research phases were devised. A scoping survey of university disability departments, online guided diaries by mentees and mentors, semi-structured interviews with mentees to investigate salient themes, finally a discursive forum of mentors to validate future frameworks for mentoring (see Table 11).

Table 11
Project phases by primary research question

	Phase	Principle research question
1	Scoping survey of university disability departments.	What is the prevalence of Specialist (Autism) Mentoring provision in UK universities?
2	Online guided diaries by mentees and mentors.	What do mentees ask about mentoring? What is discussed during mentoring sessions? Do mentors hold theories that explains what might be going on?
3	Semi-structured interviews with mentees.	Does the reported experience of mentoring in diaries resonate with mentees?
4	Forum of "master" mentors	What should be foregrounded in a framework for Specialist (Autism) Mentoring provision in HEIs?
+	Mentees and mentors offboarding and reply (with elements in phase 3 and 4)	Is the proposed framework seen as useful by those who would have otherwise encountered it?

Four phases of research

The four phases of this project were designed as a recursive iterative process probing the phenomenon of Specialist (Autism) Mentoring (Christ, 2007; Finlay, 2013). Iterative design that brings back questions raised by participants to participants becomes a conduit for ensuring that priorities identified by autistic participants is routed into the next round of enquiry. The culmination of this approach was in the convening of an autistic majority forum

of practitioners. Such an incremental and iterative methodology seems to be a rarity in previous literature, despite its capacity to both deepen participatory evolvement and validate findings. Furthermore, envisaging research as curating spaces for discourse on autism support may permit just frameworks to be formed through ameliorating the emotional labour of navigating 'dehumanising and infantilising medical models' (Milton *et al.*, 2019, p. 8).

Despite the iterative nature of this research - and the start of the Covid-19 pandemic - ethical approval was obtained with minor corrections[47] from the Humanities and Social Sciences Ethical Review Committee at the University of Birmingham (see Appendix, Document 1). Perhaps this was owing, in part, to an explicit commitment to an ethical approach that goes beyond that of more traditional research (Manzo and Brightbill, 2007). A methodology in which research questions are generated by participant-hypothesisers in previous phases is one that requires the dignity of the individual to be upheld at each and every point. Taking a robust ethical stand ensures that the locus of power only resides with the researcher as they overtly cede control to the participants.

Consent, detail and clarity

The groundwork of the participant-researcher relationship is founded on the project brief. With the autistic dispositional duality of a '*gestalt* perception' focusing on detail and clarity (Bogdashina, 2005, p. 57), two versions of the project brief were developed (see Appendix, Document 2). One provided a rich explanation of the project accessible to university students, and one simply and clearly stated the aims and means of the project. The concise version sought to appeal to those whose executive functioning lends them towards rapid choices and a desire to efficiently complete tasks. Whilst an option for the full

[47] It was wisely requested that the established data management policy was made explicit in participant data sheets.

contextualised version allowed those who find comfort in the detail of the gestalt to provide consent. Online recruitment enabled participants to opt to click through either the shorter or longer versions before giving their initial consent, with both versions and a route to withdrawal delivered to their email boxes for later consideration.

Not only does informed ongoing participation require a robust person-oriented mechanism to ensure clarity of the research aims, but it needs regular overt points at which this consent can be easily withdrawn. Consequently, each email correspondence and each online guided diary presented opt-out links with options to skip the next data gathering event, to stop participation in all future events, and to stop participation and have all collected data removed.

A person-oriented ethic, which takes seriously the ownership of knowledge production, is one that also needs to consider the tension between anonymity and confidentiality. The depersonalisation of referring to a participant as string of letters and numbers is one that strips away the essential dignity of a name. This project asked for elective pseudonyms so as to maintain a sense of identity and ownership by participants over the creation of knowledge (Allen and Wiles, 2016). Pseudonyms were mutable and could be changed at any time. Use of pseudonyms was augmented by manual removal of geographic, institutional, and other personal identifiers in the data.

Interviews were conducted following protocols developed from this person-centric ethic. In terms of research design, the inclusion of a scoping phase provided many direct contacts to university welfare service that could be signposted to participants if needed. Furthermore, a ‘linked filesystem’ was introduced into the data management procedure in case concerns over suicidal intent were raised (Lee, 1933 cited in Cohen *et al.*, 2000, p. 234). Data collected was held under a data management procedure that ensured encrypted storage.

Phase 1 - Scoping study

The fragmented emergence of Specialist (Autism) Mentoring in UK universities requires analysis to contextualise findings. The scoping phase functioned to delineate the context by asking: What is the prevalence of Specialist (Autism) Mentoring provision in UK universities?

Freedom of Information requests

In the first instance a freedom of information (FoI) request was made to Student Finance England (SFE) for two data sets. Firstly, the number of HE students in receipt of Specialist (Autism) Mentoring as a non-medical help (NMH) provision provided through Disabled Students' Allowance (DSA) for the academic year 2018/19. Secondly, the number of hours of SFE DSA NMH[48] Specialist (Autism) Mentoring provision used by students in this period.

This request was refused under section 12(1) of the Freedom of Information Act (2000). As it transpired, SFE did not hold such data in an accessible form, estimating that they would take "several weeks" to be able to collate the information (Student Loans Company, 2021). A second request was made for the data that they did hold, namely the aggregate number of hours of mentoring for autistic students and mentoring for those students with mental health needs allocated by DSA assessors. In addition to this total possible amount, a request for the number of hours submitted for reimbursement from the DSA by universities, mentoring companies and mentoring sole traders was submitted.

[48] Student Finance England Disabled Students Allowance Non-Medical Help. FYI: acronym overload seems to be a hazard in UK HEIs

SFE provided the aggregate numbers combining both Specialist (Autism) Mentoring and Specialist (Mental Health) Mentoring allocated by assessors, but not the spend data that would indicate numbers of hours of mentoring taken up. The first FoI request was submitted on 2nd December 2021, with the follow up being submitted 6th January 2021. Final response was dated 3rd February 2021.

Scoping survey to UK HE institutions

A manual trawl of the UK's 169 degree-awarding institutions was conducted (GOV.uk, no date). This identified the contact details of Specialist (Autism) Mentoring provision, or the Disability Offices responsible for student's support. These contacts were surveyed seeking: information on the organisational models of specialist mentoring, the amount of mentoring provided, and CPD provision (see Appendix, Research tool 1 and Document 2).

Historically, as Specialist (Autism) Mentoring emerged as a NMH provision opportunities coalesced. Existing large NMH providers extended their services, smaller mentoring or autism specific companies were founded, some universities created their own internal structures, and many mentors registered as sole traders. From the vantage of HEIs there are four models. Those of mentoring being provided in house by university staff, mentoring provided by a third-party provider in association with university disability services using resources such as room allocation, third parties informing disability offices but working independently of university resources, and finally students arranging their own DSA funded mentors with no university involvement. To access the prevalence of theses differing models, university disability offices were asked to complete a matrix in which provision of these four models was assessed against a five point Likert frequency scale of always to never (Likert, 1932).

The limited data from the SFE FoI necessitated an inquiry into expected prevalence of Specialist (Autism) Mentoring in HEIs. University disability services were asked to state the number of students that they were aware of receiving Specialist (Autism) Mentoring in their institutions. This data was plotted against total numbers of students.

A function of the creation of a framework for Specialist (Autism) Mentoring is ensuring that such a construct can be widely disseminated. With yearly evidencing of continuing professional development (CPD) is a prerequisite for specialist mentors; disability offices were asked how this CPD was found and sources. Finally, as part of the flow through to further recruitment stages of this project, potential gatekeepers and custodians were sought.

Scoping surveys ran between 28th October and 2nd December 2020.

Phase 2 - Online diaries

As the keystone qualitative phase of this project, online diary entries provided a thick description of the phenomena of Specialist (Autism) Mentoring (Geertz, 1973). Opening questions were suggested by autistic mentees. Fourteen mentees were recruited for developing diary questions and the later Phase 3 interviews. These students took a twofold role within the project. They held a formative place in the research cycle through the questions that they posed, with each round of mentors' diaries led with a question asked by an autistic mentee. Moreover, they brought validity to data through triangulating mentee phenomenological discourse with mentor diary data

To work as an exercise in grounded theory, it is usual to aim for some 20-30 participants to ensure the researcher is 'well-saturated' in the heterogeneity of the demographic group (Creswell, 2007, pp. 126–128). 29 mentors were recruited to completed four tranches of online diaries alongside the 14 mentees.

Over the year of data collection, diaries were solicited during reading weeks and term breaks. These tranches were thematically coded and axial categories drawn before the next set was collected, so as to hone the research tool (see exemplar Appendix, Research tool 2). As an exercise in grounded theory these axial categories were introduced into tranches three and four to probe for more detailed responses (Strauss and Corbin, 1991; Glaser, 1998; Braun and Clarke, 2006).

Recruitment

A system of informed consent and on-boarding was developed on the Qualtrics platform. The result was a single link that all potential participants could click that would take them through either a condensed or detailed introduction to this project; both versions

were emailed to participants for reference (see Appendix, Document 2). Initial consent could be given, and preferred contact methods securely left.

Mentees were recruited for developing diary questions and interviews via university contacts made during the scoping study. Mentors were recruited as a convivence sample through a mail shot[49] to sole-trading mentors, university disability offices, and businesses listed as delivering Specialist (Autism) Mentoring in the v1.4 DSA-QAG[50] listing of NMH providers (DSA-QAG, 2020). A snowballing method was pursued in recruiting mentees through institutional contacts from the scoping survey. It is acknowledged that in a time of pandemic - and with concerns over student overload - welfare minded personnel may have been more reluctant to forward such requests.

Participant demographics

Consent and onboarding finished with an optional section in which participants could give demographic data.

Mentees' demographics

As with the mentors, the fourteen mentees-hypothesisers were given the option to provide demographic data. Gender identity was asked so that elected pronouns could be used in communication. Type of qualification was requested which, alongside age, year of study and repeated years, could identify students who had progressed straight from school to university, and those who had other educational pathways. Mentees were asked how often they usually met their mentor. Permission was sought for interviews.

[49] 10th November 2020 - Three Specialist (Autism) Mentors replied directly by email to express thanks for research that they considered to be long-overdue.
[50] The Disabled Students Allowance - Quality Assurance Group. This group was dissolved in December 2019 and provisions are now monitored directly by Student Finance.

Mentors' demographics

As there is evidence of psychosocial roles being predicated on the gender of the mentor, participating Specialist (Autism) Mentors were asked for gender identity. There are autistic Specialist (Autism) Mentors who bring their lived expertise to the mentoring of their students, and there are allied Specialist (Autism) Mentors who work to bring about positive change within institutions for the student within their charge (Gillespie-Lynch, DeNigris, *et al.*, 2017; Martin *et al.*, 2017; Nagase, 2017; Hotez *et al.*, 2018; Kelly, O'Malley and Antonijevic, 2018; Rosqvist, 2019). Investigating the strengths of both these dyadic structures is necessary (Sosik and Godshalk, 2000). Mentors were asked if they identified as autistic themselves. With some mentors having had their own formative years before the recognition of autism as a wide clinical diagnosis, this was presented as more than a simple binary choice[51]. An option of 'it's complicated' led to a submission box in which mentors could give their own reflections.

Mentors were asked how long they had worked as a Specialist (Autism) Mentor, what their current case load was, and how many mentees they had work alongside over their career. Of these, mentors were asked how many had yet to complete their studies, had completed, or had been unable to complete. Mentoring qualifications, both for Specialist (Autism) Mentoring and if they also held qualifications for Specialist (Mental Health) Mentoring were sought. Mentors were asked if their provision provided or sought supervision. Finally, permission was requested for the researcher to ask follow-up questions via Zoom and whether the participant would be interested in to join a forum of mentors at a later point.

It is acknowledged that such sampling has skew. Becoming invested in research that seeks better ways to mentor may well attract mentors who are invested in their profession.

[51] Asperger's Syndrome only appeared in the WHO's 1993 International Classification of Diseases (ICD-10) 1994 fourth edition of the Diagnostic and Statical Manual of Mental Health (DSM-IV), before being subsumed back into a single definition of autism in 2018 and 2013 respectively. Mentors who are in their late 40's and beyond, went to school before such a diagnosis was available.

Consequently, this work should be viewed as an aspirational project, drawing out good practice and creating a framework for mentors to review and reflect upon their own practice.

Developing guided online diaries

Solicited diaries have pedigree as a research tool (Plummer, 2001). Journaling captures narrative as individuals go about the tasks of introspection, skill development and social contact, and nowhere is this more apparent than in the profusion of blogs over the last two decades (Jones and Alony, 2008). Having a blog as an object of research permits the researcher a degree of closeness to the thoughts of the journal keeper over time, whilst allowing the blogger to be freed from the 'normative screen' of more traditional methodologies (Hookway, 2008). Research in this context, the professional field of Specialist (Autism) Mentoring, requires a more nuanced approach. Blogs are open access, anyone on the internet can find and read them. For mentees and mentors, this adds a layer of hesitancy further obscuring the back-stage nature of the mentoring act. To this end a closed online diary system was created using Qualtrics, an online surveying platform with design tools that both enabled and prompted mentors to enter regular textual reflections on their practice.

There are several facilities that commend such online platforms to autism research in terms of the gestalt path that can be navigated between detail and information overload. Surveys were designed to present questions incrementally in blocks of associated queries and surrounding questions were dimmed to minimises distraction. Furthermore, randomised identifiers were used to create longitudinal links between participants online recruitment and guided diaries set at different points the term. This allowed participants to select a pseudonym and have it used throughout, potentially defusing the remoteness of the research tool and generating rapport.

There are challenges in having blog-type data as an object of study. The entries may present a few central weaknesses in terms of their typicality or selectivity as well as challenges of digital fatigue and their solicited nature (Plummer, 2001; Kaun, 2010). In developing the online diary tool used here strategies were taken to minimise these demands. Issues of typicality and digital fatigue were addressed through the spacing out of quasi-asynchronous diary entries over half-termly cycles. Not only may this have minimised decline in participant engagement – with 92% of mentors completing all of the tranches - but it also potentially permitted reflection over a larger unit of time so as to aggregate responses rather than being drawn towards dramatic events.

In terms of the selectivity of diary entries and their solicited nature, an iterative approach was taken in the guided elements of online diary design. With mentees as overt hypothesisers questions raised could be inserted into the kernel of the next wave of diaries.

Guided diary elements

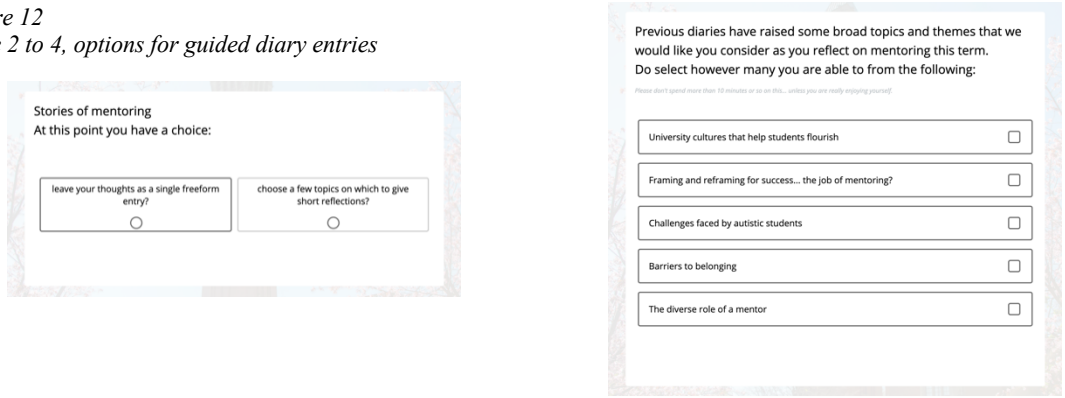
As part of the online onboarding tool mentee hypothesisers were asked "What would you ask mentors about mentoring?" (see Table 12). Responses were crucial as they formed the opening questions in subsequent iterations of the mentors' guided diary.

Table 12
Mentees questions for mentors

Tranche	Question from mentee
Christmas	How much about autism do you know? Lily
Reading Week	What inspires individuals to work with autistic people as mentors? Artemis
Easter	Do you actually understand us? Or do you just listen? Mollie
End of Year	Do you find different mentoring strategies work better for different students, or do you take a one-size-fits-all approach? Sam

Owing to the burden of keeping unstructured diaries, research can be hampered by entry fatigue and high drop-out rates (Kaun, 2010). Soliciting diary responses seeks to remove this barrier by requesting short narrative vignettes. Second and subsequent diaries reflected broad themes from responses back to participants to provide fertile ground for the next iterative generation of data (see Figure 12).

Figure 12
Wave 2 to 4, options for guided diary entries



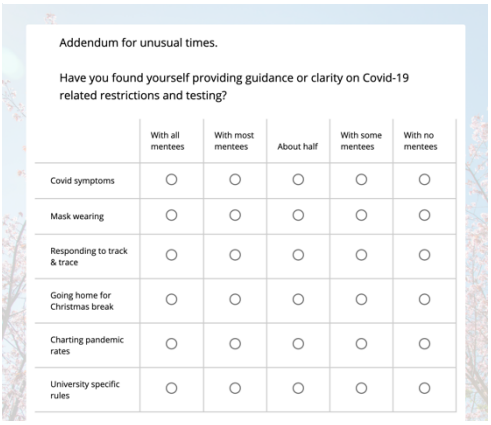
The historical context of the Covid-19 pandemic required a third element to be added to the mentees' questions and mentor entries.

An addendum for extraordinary times

As a researcher continuing to work as a Specialist (Autism) Mentor, it was apparent that mentoring sessions had changed substantially during the Covid-19 pandemic and lockdowns. Not only were sessions occurring online via whatever medium of communication was on hand; but responding to the change wrought by the pandemic became itself a pressing and recurring mentoring topic. Consequently, a third section was introduced as an "Addendum for extraordinary times" with the intent was to create a receptacle to delineate and limit pandemic contextual responses from majority of the mentoring undertaking.

The "Addendum for extraordinary times" constituted of a Likert matrix followed by two open textual response boxes (see Figure 13). The matrix sought responses to 6 statements inquiring whether mentors had found themselves providing guidance on: covid-19 symptoms, mask wearing, responding to track and trace, travel to and from parental home, charting pandemic rates, and university specific rules.

Figure 13
Addendum for unusual times



Implementation

An autistic advocate and mentor in her own right, Louise[52], was recruited as a consultant on with final say on the diary soliciting tool. Diaries were solicited during reading weeks and term breaks (see Table 13). Each tranche was open for response for 3 weeks, with a reminder sent after one week.

Table 13
Scheduling of diary collection

First tranche	Christmas break	7th December 2020
Second tranche	Reading week Term 2	11th February 2021
Third tranche	Easter break	29th March 2021
Final tranche	Summer break	21st June 2021

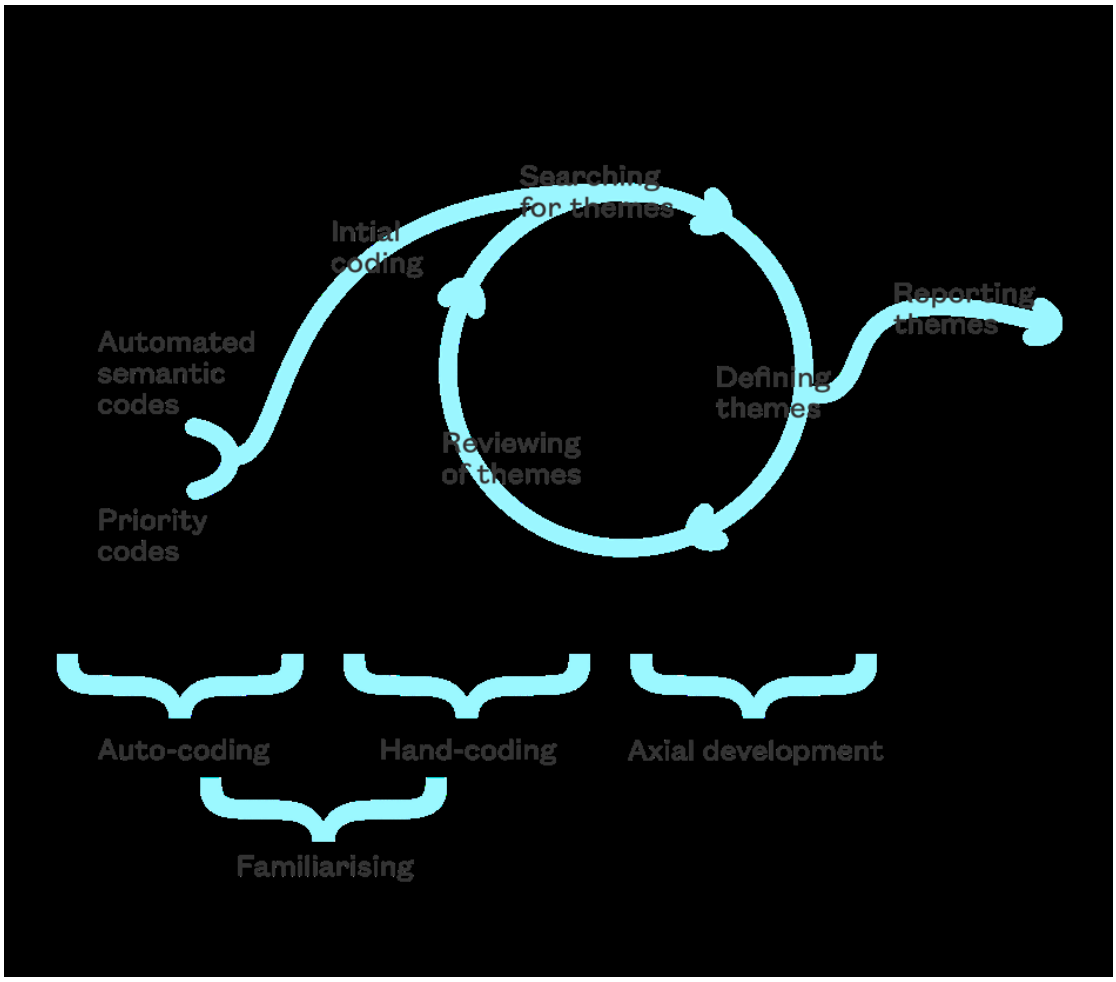
Thematic coding

The method for a thematic analysis of the guided diaries echoed the epistemology and processes that were developed for the review of literature concerning the autistic experience

[52] Like all participants, an elected pseudonym.

of HE; Chapter 1. To recapitulate, a loose iterative process was established to identify specific and axial codes to delineate patterns to ground useful theories in the data (Strauss and Corbin, 1991; Braun and Clarke, 2006). NVivo was used to record and develop thematic codes. Four coding passes were made on each wave of diaries: the first to familiarize the researcher with the data with auto-coding, the second to code phrases manually with an eye to *in vivo* phases, the third to develop axial subcategories and string together memos, and the fourth to justify axial codes and finalise top level categories (see illustrative coding; Appendix, Figure 41 and Table 28). With some 647 unique codes being identified and some 42 axial categories being developed, this method structured layers of sensemaking from participants rather than an imposition of pre-existing theory (Gioia, Corley and Hamilton, 2013).

Figure 14
Thematic coding process of diaries modelled on Braun & Clarke (2006)



To model this analytical process as a remote realist qualitive endeavour would be naïve. The steps taken by the researcher to uncover themes are shadowed by the researchers own experience and values. This work takes a contextualist approach towards the phenomenon that is Specialist (Autism) Mentoring. It affirms that the challenges, barriers, and stigma faced by autistic students is a socially constructed reality, yet there is also an innate essential – and quite wonderful - autistic disposition that can and does flourish in the university context.

Phase 3 – Interviews on salient themes

Interviews were deemed necessary to the research project to ensure epistemological validly through the confirmation of the thematic categories and to provide a conduit for a right of reply to autistic hypothesisers.

Design considerations for online interviews with autistic participants

Following the more participatory model of this project, protocols for the interviews and forums of phases two and three were developed as an act of participation in their own right. Participants views on protocols for holding online interviews in a time of pandemic were sought as an element of the online diaries.

The transition to online research methods

Updating research methods for research into practices in HEIs during the COVID-19 pandemic had unforeseen benefits in the enforced ubiquity of video calls. In the months before the pandemic hit, some prescient work had hinted at the benefits that moving interviews online could have (Irani, 2019). All that was needed was a familiarisation with the digital tools. Mentoring online during lockdown and beyond has certainly fostered such familiarity in students and mentors alike. What was required was the emulation of good in-real-life protocols to continue the professionalism of the craft of interviewing. Participatory design of such protocols aimed to ensure that autistic participants were not excluded from the production of knowledge.

Canvasing of good online interview practice via diaries

With the iterative design cycles of the termly diaries, it was possible to introduce optional postscripts for autistic participants to leave a wish list for interview protocols (see Figure 15 and Table 14). Two mentees and two mentors responded to this call. Responses to this consultation requested protocols of understanding of autistic presentation, clarity and reminders of process, and a request to "don't be starchy" (see Table 14). These considerations formed the shared participant protocols for interviews and forums (see Appendix, Documents 3 and 5).

Figure 15
Diary postscript canvasing for good interview practice on zoom

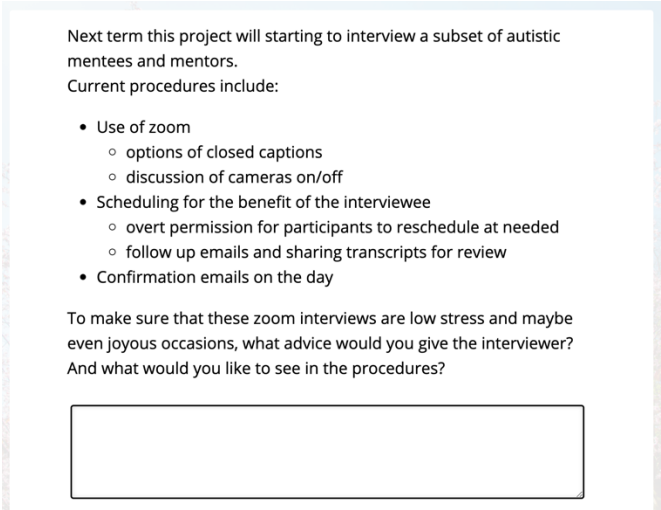


Table 14
Responses to consultation on interview via zoom protocols

	Response	Pseudonym
Mentees	To not be offended if the small talk at the beginning is one-sided or answers are blunt. Maybe an option to skip questions in advance.	Rosie
	Be told that I can stop at any point or take breaks. Be reminded that it is all anonymous and confidential.	Lily
Mentors	Perhaps explore the Autistic Research Passport - in pilot form from Autistica currently - allows for the autistic participant to share information about their preferences, any stims and what they might mean, need for breaks, etc. This isn't specifically zoom related but could be helpful for the interviewee and interviewer in advance. I personally would like to know that the person interviewing me understands autism - if I need to stim, look to the sky when I'm talking etc - I am more comfortable and can focus on the task instead of focussing on not appearing autistic or worrying what someone may think. I would be more comfortable and the interviewer will get more "real" authentic content if I don't feel judged.	Louise
	Be friendly, be yourself, **don't be starchy**. Have something is an interest very visible in the background to quickly try and build rapport. I have Grogu most of the time. Pets in backgrounds are hilarious.	Sloth

Transcript approval

Immediate responses to questions are not always indicators of considered wisdom. Transcripts of zoom calls were shared with participants to elicit further conversation. Doing so has an ethical dimension. Transcripts require written fluency so as to ensure that naturalized verbatim language does not occlude meaning or stigmatise specific groups (Brinkmann and Kvale, 2015). The choice was given to approve either whole transcripts - with explicit caveats over verbatim language - or simply the polished highlights to be used in this research. Doing so permitted the development of trust between interviewee and interviewers through the care evident in holding the words spoken (Mero-Jaffe, 2011).

Sampling

Mentees who had acted as hypothesisers were approached alongside mentees who had themes in their diaries that could be further unpacked. As data had already been analysed as part of the iterative design process of the diaries, purposive sampling was employed to both investigate salient themes and to provide summaries of answers to questions set by the autistic hypothesisers. Six mentees met for detailed interviews online with the researcher.

Interview protocols

An interview protocol was developed from participants responses, (see Appendix, Document 3). Following Brinkman and Kvale (2015), loose scripts were developed to ensure clarity of questioning (see Appendix, Document 4). Each script was annotated with contextual data from the participants earlier diaries. Finally, as some mentees were those who had developed opening questions for mentor diaries, time was allocated to respond to anonymised responses. These protocols were reviewed, queried, and given assent by an autistic autism mentor, Louise.

Implementation

Six interviews were conducted during the summer term of 2021, eight students declined.

Methods of interview thematic analysis

Assented transcripts were compiled and added to the existing NVivo schema for thematic coding. The four-pass method of thematic analysis used for the online diaries was repeated. Existing codes from the guided diaries were developed with further granularity as a reflexive ongoing process over many months (Braun and Clarke, 2021). Multiple rounds of analysis build deductive processes on the original inductive schemas both challenging and promoting the validity of assigned categorisation (see illustrative coding, Appendix, Figure 42).

Phase 4 – Mentors' forum

The forum of mentors was introduced, not only as a means of triangulating thematic analysis and findings from the diary phase, but as an explicit route towards ensuring the impact of this research by identifying and bringing together a small autistic-majority group of master-mentors who might be instrumental in ensuring developed frameworks are adopted

Forum design

Sampling and recruitment of experts

Two aspirations were set in the recruitment of the mentors' forum. Firstly, that it was a group that recruited mentoring wisdom and expertise, and secondly that autistic autism mentors were not to be excluded from the production of knowledge. By interrogating the coding of diary responses, it was possible to identify narrative gobbets[53] that had been pivotal in developing the axial categories of the **role of the mentor** (see Table 15). Gobbets were selected author blind. Once authorship was traced back it became apparent that the dispositional spread of this forum was an autistic majority, with three autistic members and two allied. This emergent disposition weight brings further layers of validity to the production of knowledge about autism supports in institutions by autistic people involved in providing such support.

All mentors had given permission for further contact in their original consent, and so elected pseudonyms could be reconnected to separately stored email addresses.

[53] Gobbets - primary text sources that require commentary, used in some university examination systems.

Table 15
Core themes of key texts for mentor sampling

Core theme	Key text	Pseudonym
SPACES OF SAFETY	With their own strengths and struggles it is important to give [mentees] space to communicate these, so they do not feel they should always be coping or feel they should always be adapting and fitting in, let them be bored, annoyed, confused, fragile as well as being strong and resourceful.	Ana Ray
EXTRA-ORDINARY MENTORING.	A natural sciences student had been very disappointed that she couldn't do the owl pellet dissection in 'real life' and that the lecture was only observed by students - so I supported her to follow up with her tutor, source her own owl pellet from a local wildlife charity, store it in a university freezer and do her own dissection in her own time.	Claire
MENTORING ROLE. PROFESSIONAL OPTIMIST. DISMANTLING BARRIERS	An ever-changing role in which no two students have identical needs. A bespoke service centered around individual students but based in a firm knowledge and understanding of autism, and the main complexities associated with this. A detailed knowledge of how a particular university operates is vital in order to make students feel secure that they can be helped to achieve their best, and believe that their mentor knows how to access the available network of support which is relevant to their needs. An attitude of 'everything can be sorted' along with positivity and an acceptance and love of all things different are vital qualities in the autism specialist mentor. Finally, the autism mentor needs the courage to stand up against the system which sometimes misses the talents, contribution and also the extreme anxiety and concerns of autistic students.	Lady BigFoot
OUTSIDE THE BOX MENTORING	One challenge I agree with my students is that my zoom background will never be the same, I will sit somewhere different each week. This way it is a low stimulus novel "environment" all bar one have thought this was a great idea…	Sloth
MENTORS CHARACTER. THE INEFFECTIVE-EFFECTIVE MENTOR.	I try to be myself as I think it is important for others to know that I am not perfect or trying to be, as this creates a more relaxed and open relationship where it is OK to make mistakes. The students I work with are generally very open-minded and accepting. However, this can make me look incompetent at times, perhaps (!). Sometimes a person wants to be fixed. If this is the case then mentoring has a different approach long term - where I try and work with the person to understand themself see and value their strengths and support them to self-advocate, but it takes time to unpick years of deficit-based judgements that have been thrust upon autistic people over the years. So, is an ineffective mentor sometimes an effective mentor?	Neko

Protocols

With more limited travel and the adoption of remote working practices during the pandemic the forum of mentors was moved online. Protocols developed during interviews were revisited for use with forums. With a regard to feelings of judgement and the added complexities of communicating on zoom with large groups, a decision was taken to ensure multiple smaller interrelated forums of up to three attendees. Such a strategy also enabled busy mentors to schedule their own participation.

Implementation

To ensure all could participate in fruitful discussion the five participating mentors were split over three forum meetings. Forums were held before the start of term in September 2021.

Dissemination of findings so far

Ahead of the forums a briefing document was developed and circulated that provided a summary of the findings from the diaries (see Appendix, Document 6). Louise, again acting as the autistic consultant on this project, had last say and sign off.

Thematic analysis of forum transcripts

Assented transcripts were again added to the NVivo database developed from previous phases. Following previous procedures for the thematic analysis of diaries, transcripts were coded using extant codes when warranted and new codes where needed (Braun and Clarke, 2006). Further *in vivo* codes were generated. Sub-categorisation and categorisation did not require further substantial modification having reached saturation during phase two diaries and phase three interviews (see illustrative coding, Appendix Figure 43 and Figure 44). Rather than substantially changing schemas, forum analysis served to give shape to the placing of themes over a mentors ongoing development within the framework for Specialist (Autism) Mentoring. Such layered analysis resides with Glaser's loose formulation of grounded theory, acknowledging the positioning of the researcher-interviewer as a mentor amongst mentors (Charmaz, 1996; Glaser, 1998; Creswell, 2007).

Off-boarding and reply

To complete this project a final video and report were prepared and circulated to all participants (see Appendix, Document 7). These were distributed on the Qualtrics platform - and to ensure participatory principles were adhered to throughout - reply and reflection were sought.

Fourteen of the 34 participants downloaded the report, three requests were made to share it with wellbeing teams. Seventeen participants watched the video in its entirety, with five repeat views. Two participants took time to thank the author for "valuable research" and "a fabulous way of receiving the information".

Participants were asked to leave thoughts that had about the research process. All were positive. There was not just a hope for future "common standards of mentoring", with multiple requests to access the work on its completion so that it could inform development; but also, a warm acknowledgment that the act of participating in this research informed current practice:

> Some of the topics raised for discussion would not be ones I might have thought about but they are things that I should take into consideration with students. Once or twice topics have interested me to such an extent that they have sparked discussions with my students. This have been very valuable for me.
> Nichola

Furthermore, Lady Bigfoot was "cheered" by the fact that Specialist (Autism) Mentoring was being taken seriously as there was a feeling it can sometimes be the "the poor relations of the NMH world". Finally, it was gratifying to hear the support mentors had for the involvement of autistic hypothesisers in the development of questions:

> This research has felt alive with mentee driven design, it has been a pleasure to engage with.
> Lee

Chapter 3

Findings

Reframing the student's experience of themselves
as failing
(by some normative standard)
inviting them to look at things differently,
think about what their values are,
how awesome they are as they are,
rather than constantly punishing themselves
for not being 'good enough'.

Claire

A very brief summary of findings

Very little has been published on the phenomenon of Specialist (Autism) Mentoring in UK HEIs. Following the mixed methods of this endeavour this chapter will first convey the more quantitative picture of provision before turning to rich descriptions of that which occurs.

The Freedom of Information request to SFE provided slim pickings; an impression might be formed that operational data is seldom interrogated in any meaningful way that would seek differentiation in provision between mental health and autism mentoring. Scoping university Disability Offices was sufficient to create a model to address the paucity of nationwide data. Only 55% of disclosing autistic students received funding for Specialist (Autism) Mentoring.

In solicited online diaries, responses to autistic hypothesises elicited writing on the phenomenon of Specialist (Autism) Mentoring. Mentors described their role as being centred around "whatever was needed at the time" and as a "bridge to the next destination". It became apparent that mentors are required to be well versed about the barriers, challenges, and cultures of success inherent in the university system. Furthermore, this knowledge underpins the act of mentoring as a process framing and reframing. Mentees identified joys and structural injustices, they work with mentors who have a repository of potential strategies to build their own, and mentors become trusted pillars of encouragement.

Freedom of Information requests

The Freedom of Information request to Student Finance England (SfE) ascertained that there were 19,336 mentees in receipt of DSA funding for both autism and mental health in England during the academic year 2019-2020. That is, 1 in 130 of the UK's 2.5m students received SfE funding for some type of specialist mentoring (HESA, 2021a). The data set of SfE DSA2 letters revealed that 694,750.25 hours of mentoring was recommended by Needs Assessors in England for that year, but not whether it had been taken up. No data was available on the split between Specialist (Autism) Mentoring and Specialist (Mental Health) Mentoring.

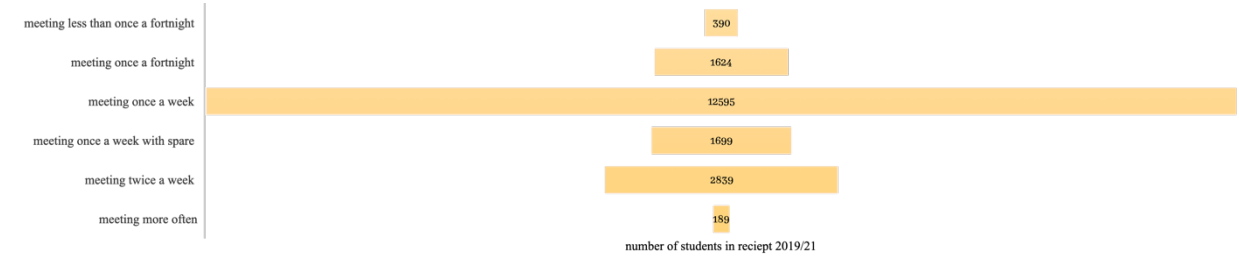
The number of hours of specialist mentoring recommended ranged from a single hour to 260 hours per year, favouring one meeting a week over the academic year[54]. Students received a mean average of 35.9 hours of mentoring (see Table 16 and Figure 16).

Table 16
Hours of specialist mentoring recommended by Needs Assessors to SfE in 2019-20

		No. of students	No. of hours
no hours given for 2019-20	0	191	
less than once a fortnight	>12 hours	390	2871
once a fortnight	12 to 25 hours	1,624	29,440
once a week	25 to 36 hours	12,595	393,496
once a week with spare hours for flexibility	45 to 50 hours	1,699	72,681
twice a week	50 to 80 hours	2,839	175,277
more often	80 to 260 hours	189	20,322
		19,527	670,894

[54] A UK academic year is variable. Not including breaks, most universities have 30 weeks spread over 42 weeks or so on campus. Oxbridge have 24, being rooted in a tradition of clergy training with time for contemplation.

Figure 16
Specialist mentoring sessions recommendation by Needs Assessors to the SfE, 2019-2020 (Autism & Mental Health Mentoring combined)



Data trends

Of the 19,527 students, 895 students only received a mentoring recommendation for 2019-20 alone; most probably either as a master's course or having sought support in their final year. 191 received no hours in the academic year, potentially indicating specialist mentoring had been recommended as a limited transition intervention. Perhaps of concern are the 222 students who received less mentoring support in their first year than subsequent years. This may indicate students who do not arrive at university with support in place, and only sought it having reached a point of crisis.

Data fidelity

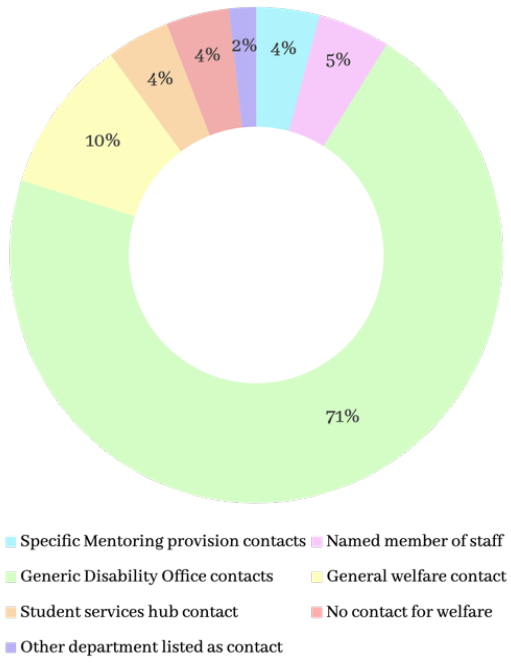
Data was extracted by the SfE from manually completed entitlement letters and hence will have a margin of error[55]. The dataset provided by SfE had several instances where more complex Needs Assessor remarks have been duplicated. '74.5 hours in total for 18/19 90 hours per year from 19/20 onwards' and '58 hours in total for 2018/19 6 hours for the 2019/20 academic year' appear twice. It must be asked whether such data holds duplicates of updated needs assessments which would inflate the number of mentoring hours reported above.

[55] There are two lucky mentees who, probably owing to typos by their Needs Assessors, are entitled to '30 hours per hour' and '60 hours per hour' of mentoring funding respectively.

Identification of Specialist (Autism) Mentoring Provision through University Disability Offices

A trawl of all UK HEI websites provided contact details for mentoring services (GOV.uk, no date). Whilst, in the main, these were for the universities' disability offices there were a few discrepancies of note (see Figure 17 and Table 17). Of the UK's 169 degree-awarding bodies 4% did not publish a welfare contact online in any shape. These institutions fell into 3 categories: umbrella institutions which delegated support to subsidiary colleges, banking institutes and schools, and the Archbishop of Canterbury[56]. More promisingly, 4% of institutions listed explicit autism or specialist mentoring contacts.

Figure 17
Distribution of publicised contacts for accessing Specialist (Autism) Mentoring on UK university websites as of January 2021



[56] Under the Ecclesiastical Licenses Act of 1533, the Archbishop of Canterbury can, and does, confer Lambeth degrees following examination or thesis as degrees of the realm. Doctorates are few, averaging about one a year (The Faculty Office, no date).

Table 17
Route to access Specialist (Autism) Mentoring on UK university websites as of January 2021

Specific Mentoring provision contacts	Named member of staff	Generic Disability Office contacts	General welfare contact	Student services hub contact	Other department listed as contact	No contact for welfare	Total number of universities
7	8	120	17	7	3	7	169

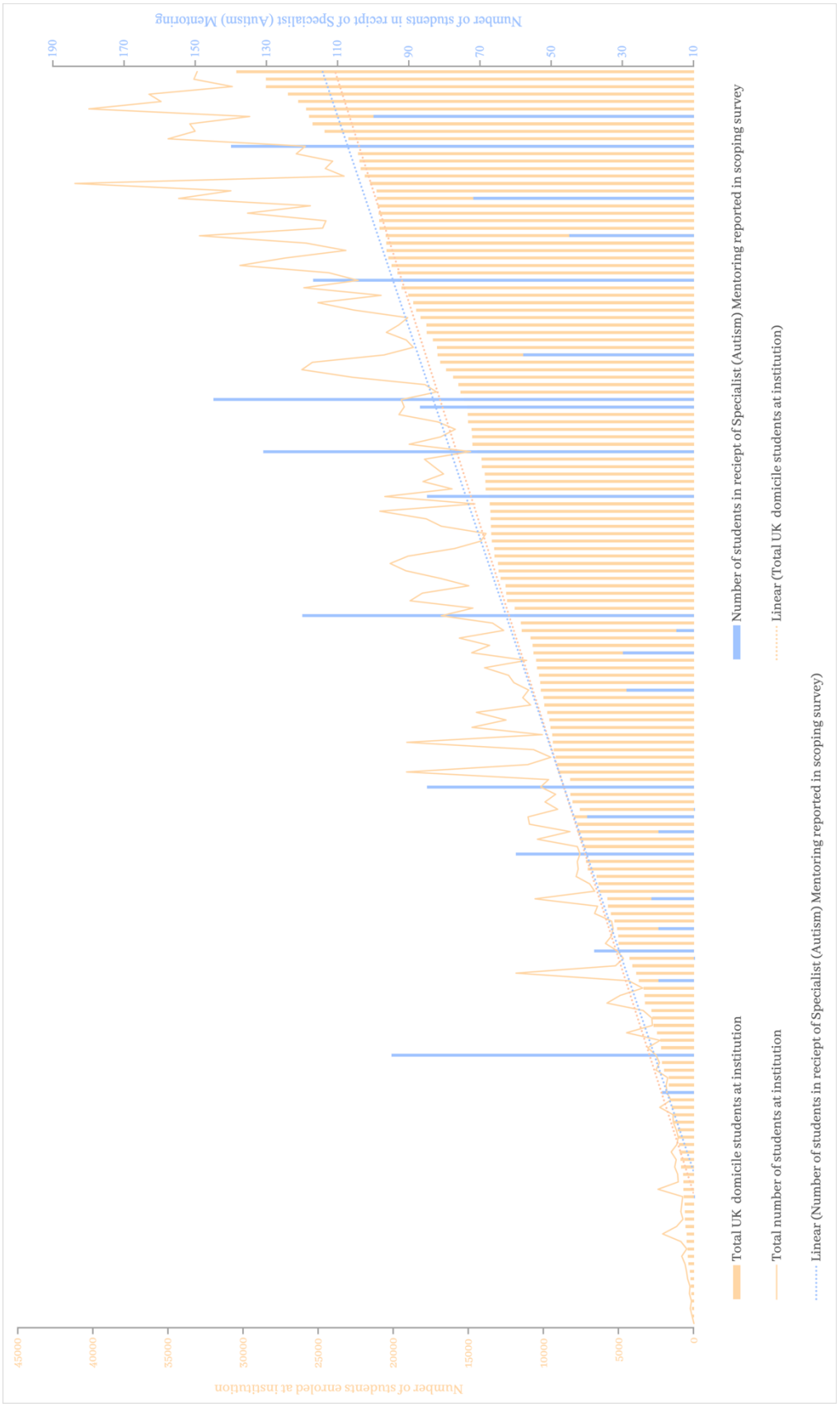
Responses from Disability Offices

Of the UK's 169 degree awarding institutions, 29 submissions were made from disability offices. The sample was representative of all university size and geographic locals (see Figure 18 below and Appendix, Table 26). Whilst in no way a complete or full data set, it sits within 2 SD of response rates for the education sector and provides sufficient data to infer trends (Baruch and Holtom, 2008).

Reported Prevalence of Specialist (Autism) Mentoring

Figure 18, below, sets data reported against enrolments at HE of UK students (HESA, 2020). Anecdotally, Specialist (Autism) Mentoring is provided for students from outside the UK, but diagnostic frameworks and funding constraints provide an uneven picture, hence the use of HEI's UK domicile students as a comparative metric to UK funded mentoring. Furthermore, the Open University, with more than four times the enrolments of the next largest institution, was excluded from analysis as it greatly skewed statistical models. As a provider of distance learning that can be accessed outside of the tighter 3-year funding model it is a prime candidate for further research into the prevalence of support for autistic students.

Figure 18
Comparisons of the number of students enrolled in UK degree awarding institutions (HESA, 2020) to the number of students reported as being provided with Specialist (Autism) Mentoring



What is immediately apparent is the inconsistent national picture of Specialist (Autism) Mentoring in UK institutions. Whilst the distribution of the enrolment size of the UK's HE intuitions follows a linear distribution the data received from UK HEIs on mentoring provision only loosely follows such a pattern with many outliers.

Simple bivariate regression between the continuous variables of university size and the prevalence of Specialist (Autism) Mentoring investigates the hypothesis (H_a) that the reporting of mentoring correlates to university size. Regression indicates a significant correlation (p >.001) rejecting the null hypothesis of no correlation (see Table 18). Furthermore, an R^2 value of .3968 suggests a weak relationship accounts for about 40% of the relationship between university size and the number of students in receipt of Specialist (Autism) Mentoring. This strongly suggests that that there are other factors involved in this interplay, though the significant p-value for the F statistic (p=.003) indicates that this bivariate regression model performs better than a simple use of mean values.

Table 18
Simple bivariate regression of prevalence of Specialist (Autism) Mentoring against number of UK domiciled students in institution

Source	SS	df	MS		No. of obs	= 28
Model	21716.4333	1	21716.4333		F(1,26)	= 17.11
Residual	33005.6739	26	1269.44899		Prob>F	= .0003
Total	54722.1071	27	2026.74471		R^2	= .3968
					Adj R^2	= .3739
					Root MSE	= 35.629

MentoredStudents	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
NumberofUKStudents	.0041658	.0010072	4.14	.000	.0020955	.0062361
__cons	12.6436	12.83151	0.99	0.334	-13.73194	39.01915

From this, and with the caveat that a greater number of observations would be preferable, it can be tentatively suggested that institutions should be ensuring Specialist (Autism) Mentoring is provided for about 1:240 UK students[57]. Hence, out of the 14,360 students who declared autism in their enrolment, around 8000 students were funded for Specialist (Autism) Mentoring in the UK in 2020/21 (7939 mentees, 95% ci [3993,11884]). With 14,360 autistic students disclosing to their HEIs in that period, it does seem that many are unable, unaware or unwilling to access mentoring (HESA, 2021b). With 55% uptake findings here are slightly higher than the 48% uptake among autistic students reported by the Disabled Students Commission (Disabled Students Commission, 2022). This may suggest a self-selecting bias in the universities that returned data for this project.

Estimating of the cost of Specialist (Autism) Mentoring

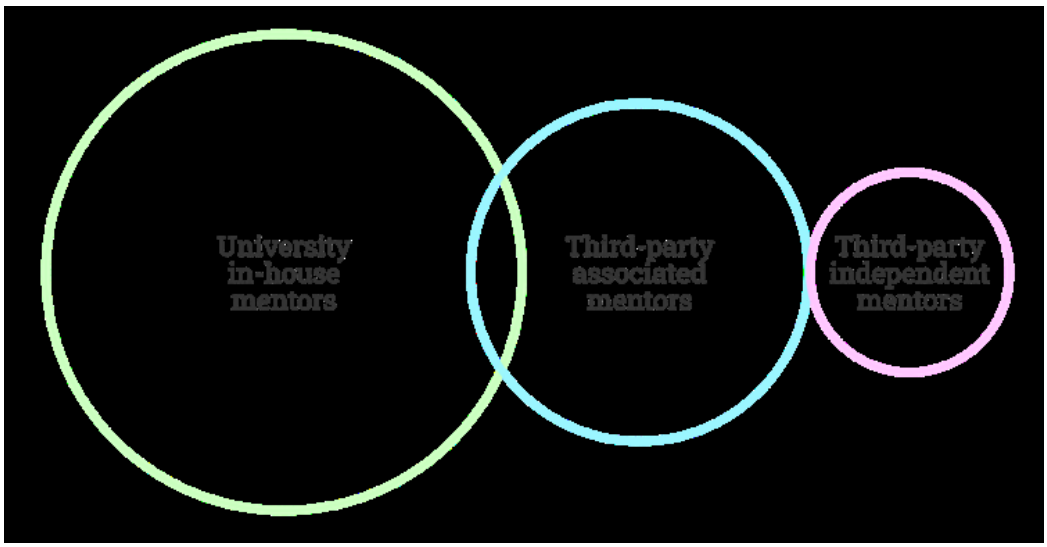
The SfE FoI has students receiving an average of 35.9 hours of mentoring a year. A search for published fees from Specialist (Autism) Mentoring NMH providers suggests an average hourly charge of £61.76 (see Appendix, Table 27). With the assumption that the mean of hours of mentoring is evenly distributed between autism and mental health mentoring, this suggests that mentoring support for 7939 autistic mentees from this model required £17.6m in 2019/20. Though to provide Specialist (Autism) Mentoring to all 14,360 autistic students that year would be closer to £37 million.

[57] The wide confidence interval at the 95th percentile could mean that this varies from around 1:160 to 1:480

Models of Specialist (Autism) Mentoring provision

The scoping survey returns from welfare and disability offices addressed the model through which Specialist (Autism) Mentoring was provided (Figure 19 and Table 19). The in-house model is one in which the university itself acts as a Specialist (Autism) Mentoring provider. This contrasts with the two third-party models in which mentors are either sole traders or work as part of a larger NMH provider. These two third-party models are differentiated by the way they work with university services and resources. Whilst some third-party mentoring providers work using university resources such as room allocation and have stronger links in terms of sharing and signposting services, others simply inform universities that the mentoring is happening. In addition to the university in-house and the associate third-party models two further less common models were reported. One in which permanent mentors are university staff, whilst shorter fixed-term mentoring support is provided by a third-party; and one where mentors are considered as university staff but paid for through an agency payroll.

Figure 19
Ratios of Specialist (Autism) Mentoring provision models in UK universities surveyed



*ratio is shown by proportion of mentees under model

Table 19
Summary of models of Specialist (Autism) Mentoring provision from responding UK universities

Model of provision	Number of institutions reporting as "always" or "mostly"	Number of mentees at responding universities	% of mentees in model	Notes
In-house mentors	13	782	51%	Includes: - one split model where permanent mentors are university staff, but fixed-term mentors are independent third party - one model in which mentors are considered university staff and use resources however they are on an agency payroll
Third party mentors working in association with university disability services	7	416	27%	One institution excluded from analysis as numbers are not kept.
Third party mentors inform disability services, but do not share university resources	10	327	21%	One institution excluded from analysis as numbers are not kept.
Students arrange their own mentoring independently of university	0			Whilst no institutions use this as sole model, there were 6 instances of it sometimes being used.

Despite the higher number of HEIs using remote third-party mentoring provision, this accounts for a smaller share of students, indicating either that support is unknow known to the host university, that smaller institutions need to buy in services, or - more worryingly - that universities that do not prioritise the needs of their autistic students perhaps do not recruit or retain autistic students. Further research is warranted.

In submitted comments, disability practitioners from universities with in-house mentoring provision sought to clarify the DSA assessors' role in the allocation of mentoring provision leading to "the vast majority, but not all" mentoring being conducted in-house[58]. In-house providers were reported to have the capacity to "front load" support whilst waiting for DSA funding to be approved. Institutions working alongside third-party mentoring providers work to support students applying for DSA, and reported helping students through

[58] As a mentor I have known students who have either visited a DSA assessor before being accepted on a particular university or have moved universities mid-degree into one with an in-house-provision. In such cases the original DSA needs assessor can be contacted to change providers.

the process of making initial contact with providers. Good working arrangements with independent agencies are the norm, though a small minority of students work with mentors for whom there is no contact with the university.

Specialist (Autism) Mentors always (88%) or usually (12%) engage in yearly continuing professional development (CPD) as a requirement of their registration. The majority mentors arrange their own CPD, and universities often contribute towards its funding. Courses are "found randomly" via Eventbrite and word of mouth. It was acknowledged that accredited courses can be expensive, so online opportunities are sought. The University of Cumbria, is a fortunate outlier in having a part-funded Education Guidance Service providing screening, diagnostic assessment, and regular in-house CPD. For all other institutions without such a resource either Wellbeing admin teams are tasked with finding CPD, or HR takes responsibility for non-autism host-university training. There was also a single case in which CPD is reported as being seldomly accessed by third-party mentors, this is particularly interesting as it comes from a university with a relatively high reporting of mentoring compared to its size. This might be a case of institutions not knowing what the third-party mentors are involved in, or it may be evidence of deeper issues with current oversight.

Participant demographic and methodology meta-data

During the online onboarding of mentees and mentors in the diary phase, demographic data was sought via the online platform.

Demographics of mentees (n=14)

All participating mentees were aged 18-25. Seven identified as female, five as male and two as other; Figure 20. They were studying a range of qualifications at their respective institutions, though the majority were undergraduates more than a quarter were studying at postgraduate levels (see Figure 21). Half had participated in autism research before.

Figure 20
Gender of participating mentees

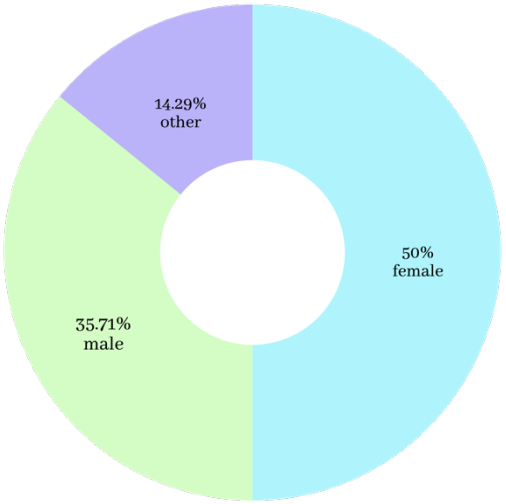
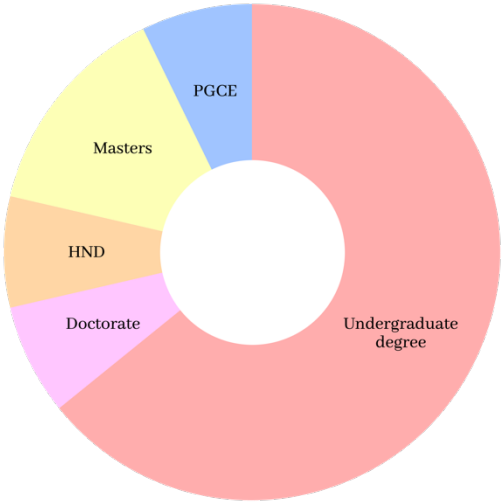


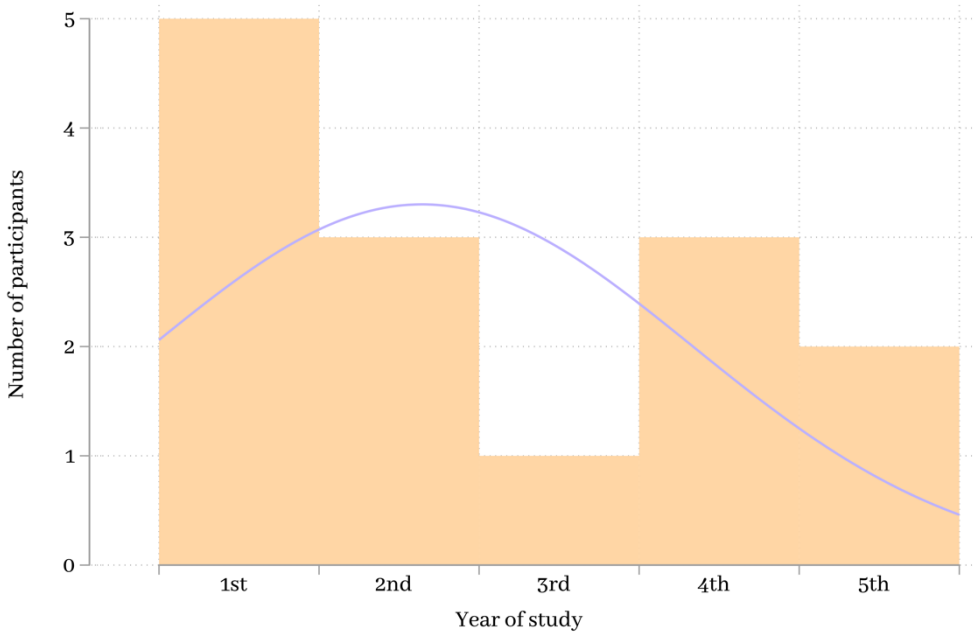
Figure 21
Qualifications studied by participating mentees



Most students met their mentors for an hour a week, with only one meeting for two hours and one meeting fortnightly. This is consistent with data from the SFE FoI.

More first years and fewer third years appeared in the sample than one would expect from a normative distribution, with two students reported taking a repeat year (see Figure 22). Perhaps the lack of third years participating can be ascribed to a waning of interest in the future of mentoring as students align themselves towards post-university. It is certain that a pandemic-effect cannot be discounted.

Figure 22
Histogram and normative curve of participants by year of study



Participating mentees studied a wide range of subjects. Secondary Music, Physics, Game Art, IT, Biochemistry, Physics, Creative Arts, Environmental Conservation, Psychology, Media studies, Evolutionary Developmental Biology, History, and Geology. There were two physicists and two psychologists. An equal split between STEM and Arts subjects follows other work that challenges findings of Wei et al. that found a preference in

selecting STEM subjects in autistic students (Wei *et al.*, 2013; Fabri and Andrews, 2015; Gelbar, Shefcyk and Reichow, 2015).

Demographics of participating mentors (n=29)

For anyone who works in a university wellbeing office, it will come as no surprise that about 90% of participating mentors identified as female, echoing the 82% prevalence of women in across health and social care work in the UK (Morse *et al.*, 2018), Figure 23.

Figure 23
Gender of participating mentors

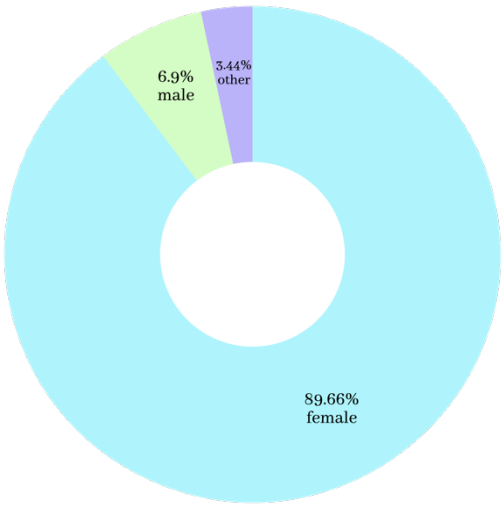
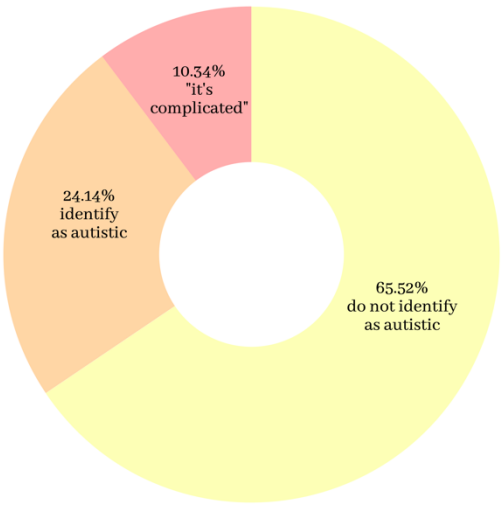


Figure 24
Disclosed autistic identity of participating mentors



However, a third of participating mentors identified as autistic, or had a complicated relationship to diagnosis, Figure 24. Seven autistic mentors had an autism diagnosis, and a further three were on waiting lists for formal diagnosis. It must be emphasised that diagnosis was not a hard delineation, with one participant taking the time to write as part of the recruitment process that…

> I don't want to respond that 'I don't identify as autistic' as that puts one or other of us in the 'other' group and good relationships are not formed that way. I like a more rounded human connection and like difference.
> Neko

In the diary entries that followed, there was a tension over an othering of diagnosis that manifested in a wariness rooted in what Lee attributed to the "impact of the medical model […] and issues with a sense of belonging". The divisiveness of the diagnosis line was framed against and the valuing of the lived experience that diagnosed autistic autism mentors brought.

> I am autistic - I think this gives me an insight into some of the experiences that other autistic people may experience - particularly around sensory and communication styles and preferences.
> Louise

The 29 mentors met with 330 mentees over the year. Participating mentors could be roughly grouped by their caseloads. Eleven worked caseloads that could usually be attended to in a day; ten had a caseload that could be spread over two or three days; eight mentors were working fulltime (see Figure 25). That is a mean of 12.03 mentees for each mentor [sd = 1.6]. *Ceteris paribus*, it is possible to estimate that there are 660 Specialist (Autism) Mentors working across UK HEIs. Though with the paucity of information held by SfE this could create a range at of between 382 and 872 [ci=.05].

Figure 25
Caseload of participating mentors

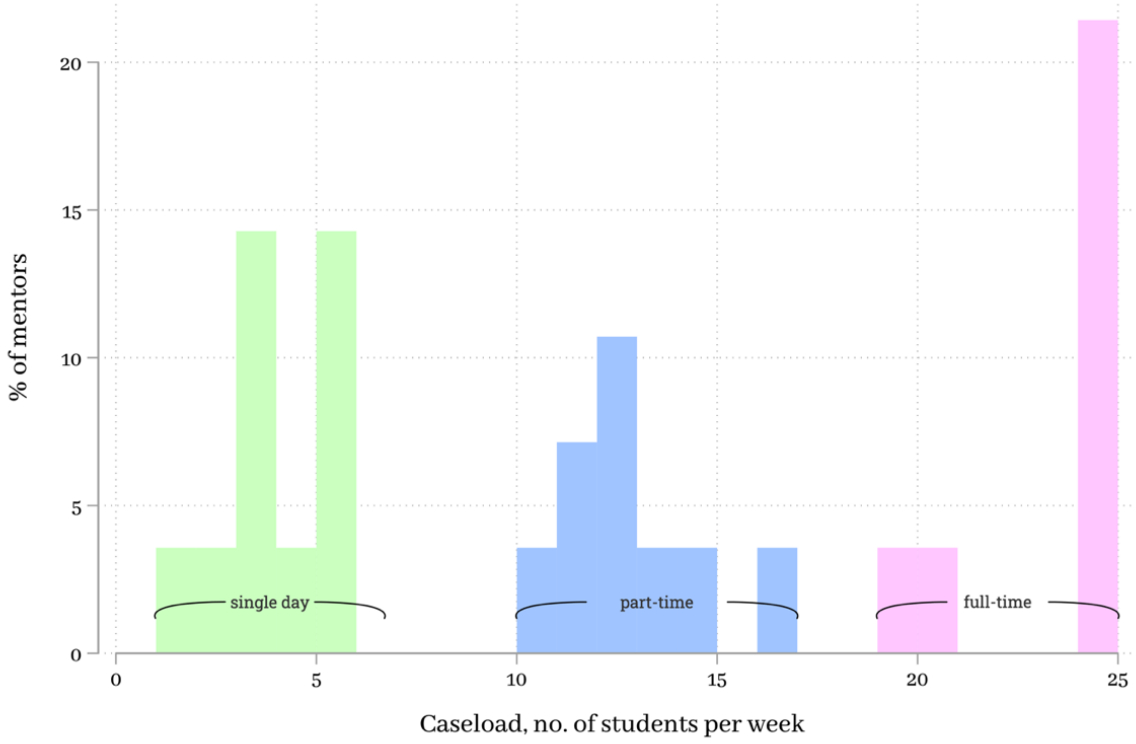
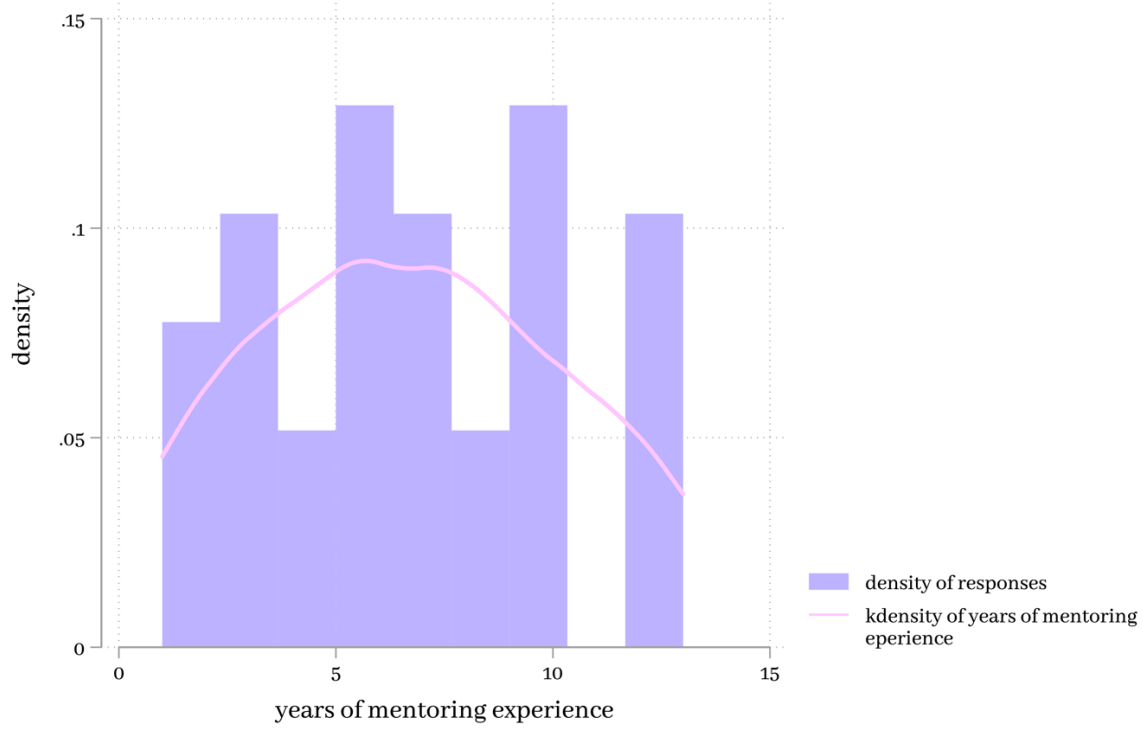


Figure 26
Experience of participating mentors



The study recruited both relatively new and experienced mentors, with total numbers of students seen over careers ranging from 7 to 82. Plotting the years of experience of mentors gave a smoothed kernel density estimate that plateaued around the six or seven years in service mark (see Figure 26). With 3 mentors in their first year, the sample's turnover is 10.34%. With the caveats of a small sample and a participation bias that may lean towards established mentors - a loose estimation of between 38 and 87 new mentors a year in the UK can be made.

Participants response rate

Online diaries were solicited in four tranches during the Christmas break, Reading Week Term 2, Easter, and Summer break. Submissions came from 33 participants; of whom 24 were autistic and 19 allied. Of the fourteen mentees, half completed two or more tranches whilst five completed all. Of the 29 mentors, all completed two or more, whilst 25 completed every tranche. During the COVID-19 pandemic, this was a healthy response rate that brings further validity to the study and underlines the perceived need amongst mentors that such research is needed and warranted.

Themes from diaries

Diary responses

The following section recounts the themes that were found within the years diaries. As with much thematic coding there is a fuzzy demarcation between the ideas coded and that which is ripe for discussion. Despite the temptation in iterative processes to conflate the analytical with the explorative, the hope is to relay the broader themes whilst leaving the development of these ideas for Chapter 4. Furthermore, in this commentary the intent is not to strictly demarcate between dispositions and only label mentors as autistic when it is pertinent to the theme.

Reactions to the questions posed by the autistic hypothesisers will be investigated as they contextualised much of the following responses, before turning the five core themes of: the **mentoring role**, of **barriers**, **challenges, factors for success**, and of **framing and reframing**[59].

Mentees questions

Questions originating from mentees acting as autistic hypothesisers within the project were particularly instrumental in identifying emergent themes within the **mentoring role**. All questions submitted by mentees were woven into the diary solicitations.

[59] As in Chapter 1 textual types are used to represent the differing layers of symbolic thematic summaries: CODES, **categories** and ***subcategories*** (Saldaña, 2013, p. 9).

"What inspires individuals to work with autistic people as mentors?" – Artemis

The second tranche of diaries opened with a question that elicited responses about the underlying impetus towards having become a mentor. With a third of participating mentors being autistic themselves, many answers gravitated towards the value that they placed in their own experience of having been mentored. Three allied mentors talked about their own neurodiverse family. In these two groups there was a particular sense that mentoring was, in some ways, giving back to the autistic community through ***creating spaces of safety*** through providing JUDGMENT FREE SPACES. As Louise wrote…

> [as a mentee] it was great to be able to talk things through and ask for help in a safe space - I hope that I offer the same to others. A space where they won't feel judged - and more than that, will feel understood.
> Louise

A desire for social justice was evident in responses that sought the carving out of places of understanding within universities, a 'bigger wish to establish equality and diversity as the norm in society' that Nickie hoped for. There was also an honest appraisal form those, like Neko, who "fell into working with autistic people by chance", and then found that the "addressing of injustices" became an enduring motivator.

Whilst the preponderance of themes emerging from this question were related directly to **the mentors' role**, an axial category that will be returned to in more detail shortly, there were responses that considered the events of mentoring sessions. Mentors, like Ellie, voiced a "shared satisfaction in" ***dismantling barriers***, which seemed entwined with a ***joy in problem solving***. This was unpacked through having the AIM OF COMPLETING STUDIES, alongside the motivation of mentors who FIND THE SUCCESS OF OTHERS REWARDING.

Mentors talked about students MAKING SENSE OF THINGS and finding a place in the world, and how mentoring permitted a …

> different way of thinking. Autistic people are some of the most creative thinkers and this makes the mentor have to up their game to keep up. Sloth

In following diaries, this consolidated as the NEURODIVERSE POSITIVE CULTURE in mentoring relationships that revealed the AUTISM GAIN that students bring to their institutions. This intersects with a narrative that promoted autistic aptitudes that, as Nichola put it, "are not always recognised by society" and manifested in an overt SHARING OF JOY with…

> a genuine appreciation for people that are not typical, I value differences and greatly enjoy promoting and cultivating an acceptance and value for difference and diversity in my work, and I've just always had an affinity with neurodivergent people, I find the company of autistic people quite refreshing. Lee

"Do you actually understand us? Or do you just listen?" – Mollie

> I THINK that by listening, that is how we gain understanding. Hazel

Of all the opening questions, this question posed over the Easter break garnered the most response. Andrew and Ellie exclaimed, "That is a fantastic question!" and "Great question!", while both Louise and Nickie found it an interesting and helpful question to be asked as a mentor. As part of the third tranche of mentor diaries answers to this question coincided with the first forays into developing axial categories. As such, responses were instrumental in the coalescing of a distinct axial theme of **the mentoring role**, in particular owing to emerging themes of ***understanding as more than listening*** and of ***the usefulness of the mentor's character***.

Mollie's question gets to the heart of the double empathy situation of the mentoring relationship. Autistic and allied mentors alike echoed Lucy's sentiments that "wouldn't presume to fully understand what I have not experienced myself", but to listen, clarify and empathise. There were many reports of a process of CHECKING FOR UNDERSTANDING, arising from the simple expedience of asking questions to clarify both thoughts and feelings. From their own experience of specialist services and universities, autistic mentors tended towards

being acutely aware of the gulf of understanding that can blight badly considered professional relationships.

> Many professionals may say that they understand autism but their actions may be in conflict and I have seen how damaging lack of understanding can be. Ellie

This gulf of understanding is bridged first by a comprehensive THEORETICAL UNDERSTANDING OF AUTISM, with work authored and produced by autistic researchers being particularly valued. For established mentors this is developed through the PROFESSIONAL EXPERIENCE of mentoring other students. If they are fortunate, they have opportunities to extend this experience through pooling ideas with colleagues. Long-serving mentors discussed the tension between becoming inured to hearing again the daily challenges of autistic students, alongside an appreciation of what the mentor NatSav termed the "full impact that these challenges have on any one individual". There is value in ACTIVE LISTENING, extending EMPATHY, and then proffering Lady Bigfoot's "bespoke and evidenced based support".

Furthermore, mentors wrote of their work as an act of service, framed by Nickie, as "to be as supportive and respectful as possible", there was the kernel of what, in later analysis became ***the usefulness of the mentor's character***. Evident in this, is the humility of mentors, in both Bil's acknowledgement that, "sometimes a student might just want me to listen even if I don't understand"; and Jake's honesty when discerning, "sometimes I understand, sometimes I just try".

"Do you find different mentoring strategies work better for different students, or do you take a one-size-fits-all approach?" – Sam

Sam's question, which led the final tranche of diary solicitations, led to the emergence within the **mentoring role** of a subcategory of ***appreciating the heterogeneity of mentees***. All mentors were definite on this, there was no one-size-fits-all in mentoring. As an

experienced mentor Lady Bigfoot declared, “students are unique, wonderful individuals and all work is bespoke to fit their need. No two students have identical needs”. Whilst Louise, a newer mentor, could, “already see that I use completely different strategies for the mentees I support”. This firm embracing of heterogeneity was held in tension by mentors for whom the baseline work of individualising and adapting allow…

> what I like to think of as a toolbox as resources that can be useful but what combination is applied, or even the details of how to make use of each 'tool' or strategy as a resource is highly refined for each individual
> Lee

Such a toolbox needs mentors like Suki, who will “tweak and improve” strategies to keep practices focused on a HOLISTIC APPROACH. Such a toolkit comes with a stark and humble realisation that a single mentor may not be enough. As one mentor wrote…

> There may be occasions when I don't have the right skills to suit the student and if it isn't possible for me to adapt / learn sufficiently quickly then at our university there is the option to negotiate changing to a different mentor if that would suit the student better.
> SD

From autistic hypothesisers to axil coding

These questions, posited by the mentees themselves provided the kernel of the construct of the mentoring. Coding of themes in mentor diaries was not performed in the abstract. The theoretical sensitivity developed in the coding of prior work in a thematic systematic literature review became evident (Strauss and Corbin, 1991, chap. 6). The big three categories of **barriers**, **challenges** and **factors for success** were echoed in the writings of mentors.

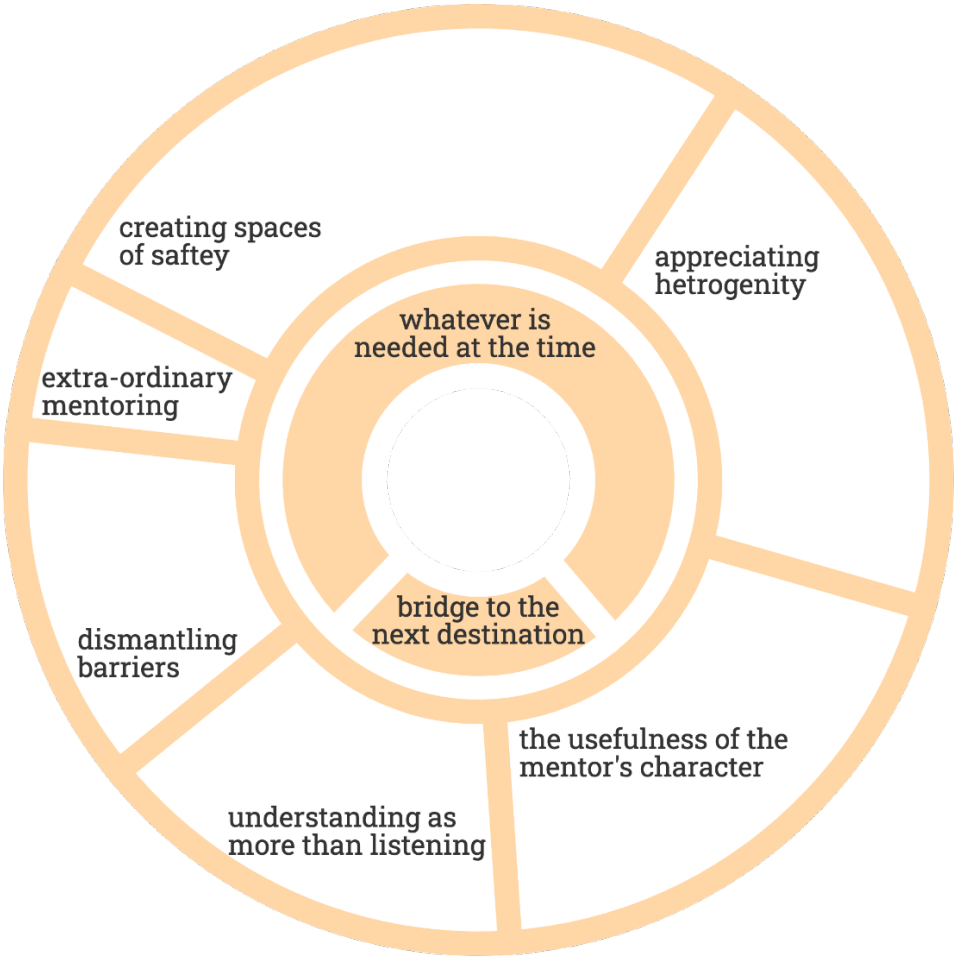
Responses to autistic hypothesisers questions revealed that the big three themes from the literature were not sufficient on their own. While the three describe the field in which Specialist (Autism) Mentoring plays out; as concepts they are not enough to describe the phenomena itself. Two additional categories emerged. Mentors both overtly and implicitly

theorised and speculated on **the mentoring role**. Secondly, and perhaps more fundamentally, the function of mentoring was portrayed as a process of **framing and reframing**, in which issues were analysed by the mentee, consummate strategy was built to address situations, and mentors devised ways to motivate mentees.

The mentoring role

At the core of the **mentoring role** are two temporally bounded elements. That which is ***whatever is needed at the time***, and that which is an abutment to the future as a ***bridge to the next destination*** (see Figure 27).

Figure 27
A model of the themes of the mentoring role from mentees and mentors' diaries 2020/21



**size of pie of theme is relative to prevalence in diaries.*

Whatever is needed at the time

In diary entries, and in the forums of mentors that followed, mentoring was described as a BESPOKE ROLE including SOCIAL, EMOTIONAL AND PASTORAL SUPPORT to deliver ***whatever is needed at the time***, unbounded by many of the other constraints of other university roles. Chief among the framing of mentoring as a BESPOKE ROLE "led by the needs and preferences of the individual", as Lee so eloquently summed it. This FLEXIBILITY LED BY NEED requires a foundation on what Ana Ray called 'rapport and trust', that allows mentees the confidence to express needs in a NON-JUDGEMENTAL SPACE; a theme that will be returned to during considerations of ***creating spaces of safety***. Such flexibility lies in tension with the assessor led process that awards DSA funded mentoring provision. Assessors produce a Needs Assessment which is usually - but not always - circulated to the mentor. Such a codification of needs may tip the mentor into more study-skills based support such as Ellies' cluster of "time management and organisation, perfectionism and or meeting deadlines". The assessor is a starting point, but the process of mentoring requires a BUILDING ON THE NEEDS ASSESSMENT REPORT that provides strategies that focus on what Andrew identified as, "alleviating associated anxieties".

Flexibility is required by a mentor who considers the more long-term SOCIAL, EMOTIONAL AND PASTORAL SUPPORT CONCERNS of the mentees they work alongside. One of the mentees in the study, wrote…

> We often talk about things in my life that feel very unrelated to my degree or not important but my mentor always says that if it matters to me then it is important. I once got really upset about not being able to throw something out, my mentor spent time talking it through with me and we ended up finding a deeper issue about my shame around my anxiety.
> Rosie

Mentoring as a long-term pastoral relationship has time for these meandering conversations of self-reflection. In doing so mentoring becomes a powerful tool for PROMOTING WELLBEING and going some way to address difficulties stemming from co-

occurring mental health conditions. In addition, mentors support PHYSICAL WELLBEING through providing cookbooks, meeting up for walks, and organising gym memberships. This overtly flexible positioning of mentors as a point of pastoral care provides a…

> chance to perhaps process events and talk through the problems they have faced during the week, or just provide a safe space for them to offload their worries.
> ElizabethAnne

Extra-ordinary mentoring

At this juncture of the **mentoring role,** it is worth introducing the associated subcategory of creative and perhaps unexpected ***extra-ordinary mentoring***. The hyphen, coined by Claire, has been retained as this represents mentoring outside the realms of the ordinary student experience. It includes stories of mentors making canal-side visits, of sourcing owl pellets, of sharing episodes of Gilmore Girls, of smuggling pocket-sized pets into mentoring sessions, of successful but unconventional meetings, of meetings in person over text and meetings over zoom without mics. Such ***extra-ordinary mentoring*** has succeeded in supporting mentees with failing health, those who have lost the regularity of university, those entangled with the criminal justice system, and those for whom online support has been both a blessing and a curse. More than any other themes it reveals the need for any framework that comes out of this work to be one that inspires, enables, and permits mentors to do that which might otherwise find censure in the yearly cycle of performance management.

Bridge to the next destination.

Mentors often wrote about autistic students' potential. There is a fine line in such narrative between being a support mechanism which embodies an institutional hope in the AIM OF COMPLETING STUDIES and the need for Specialist (Autism) Mentoring to be an arena of ANXIETY REDUCTION. For some students support, like that offered by SD, to "connect with

the wider university and outside services in order to help students", is sufficient for course retainment and managing anxiety. Whilst for other students a managed leave that maintains their self-worth may be negotiated.

The next destination is not just the next exam, term or year of study, mentors play a role in employability. A trusted mentor may be called upon to proof CVs, write references, coach interviews, and inform students about accommodations that they may consider asking for as part of the recruitment process. There is also the harder skill of MANAGING EXPECTATIONS. Whilst 61% of graduates in 2017/18 found full-time work following their studies, for autistic students this is only 36% (Allen and Coney, 2021). Consequently, mentors need to prepare students for a longer road to employability with a potential significant gap in employability after one-year.

Around the two directive cores of ***whatever is needed at the time*** and a ***bridge to the next destination***, sit those dimensions in which Specialist (Autism) Mentoring can occur.

Understanding as more than listening

Arising from the mentees question that opened the second tranche of diaries the theme of ***understanding as more than listening*** emerged. This was portrayed as more than a developed skill of ACTIVE LISTENING - though that is valuable - it requires "an attitude of 'everything can be sorted' along with positivity and an acceptance and love of all things different". This sentiment, by Lady Bigfoot, hints at what later emerged as the **framing and reframing** progression of mentoring. It is more than solely the "attending and reflecting" of active listening, it is the inherent optimism that action can then be taken to alleviate barriers and challenges faced. Consequently, there is an abiding need to hold mentees in, what Claire termed, "an unconditional positive regard". This theme is foundational. In holding an UNCONDITIONAL POSITIVE REGARD mentors express a valuing of the variety that is inherent to

the autistic way of being human. This is more than a skill; it is a reflection of the mentor's character.

Creating spaces of safety

The entwining of positive regard and of active and attentive listening cannot occur in any context, they require mentors to be busy in ***creating spaces of safety***. Mentees and mentors spoke of the need for mentoring sessions to participate in "creating a space of recognition and acceptance", which Lee hoped could lead to both self-acceptance and institutional acceptance. These SPACES OF RECOGNITION AND ACCEPTANCE are formed when mentees encounter NatSav's "quiet reflective space". Here is a SPACE NOT TO FEEL JUDGED in which mentees have time to voice concerns and joys. To be open within a confidential space: to meet someone who can project, as SD put it, "no fixed perception of how things should be done". Doing so extends the PERMISSION TO BE FRAGILE SOMEDAYS.

> With their own strengths and struggles it is important to give them space to communicate these, so they do not feel they should always be coping, or feel they should always be adapting and fitting in, let them be bored, annoyed, confused, fragile as well as being strong and resourceful.
> Ana Ray

Creating these spaces is no easy task. It requires BUILDING TRUST. Mentors wrote how rapport could be made early in the relationship through common experiences. It does seem necessary that mentors are open to the JOY OF SPECIAL INTERESTS and are willing to spend their evenings dabbling in binge watching suggested shows[60]. What was essential for the BUILDING OF TRUST in diary entries was the VALUING OF MENTEES for being themselves; mentees spoke of a power in BEING TRULY UNDERSTOOD by a mentor who was trustworthy. BUILDING TRUST takes time, as Neko reflected, to "understand a person's desires, aims,

[60] In my years as a mentor, I have found new appreciation for Disney princesses, dressage, Bach, the genealogy of Game of Thrones, WWF, Top Gear, Arthurian mythos, Fulham FC, OO gauge models, wasps, Tolkien, She-Ra, local politics, Minecraft, Stephen Universe, and Studio Ghibli. Each has enriched my life, and the students have my thanks.

strengths and struggles - and to build up trust when this has often been eroded by past experiences". Hazel's experience with a mentee of taking a year or two to arrive at a to a point in the mentoring relationship that permits the open discussion of negative ways of thinking, may not be uncommon.

This context of a long-term mentoring relation provides the security in which mentees can assert CONTROL. Mentors framed mentoring as a student led process, even if this was at times an aspiration that was being brought to fruition. Several mentors revealed - in diaries and in the forum discussions that followed - that they had encountered mentees who needed, for a time, someone in their life to be directive. There is a fine line in such relationships to ensure the students feel secure without the routine of mentoring becoming a relationship of dependence.

Care was evident in the ORCHESTRATION OF SESSION PRACTICALITIES. Mentors sought the use of comfortable and convenient rooms that were "free from interruptions and disturbances" for the hour-long meetings. Where possible flexibility in meeting times was valued, with sensitivity to mentoring attendance being a burden on a busy day. A further temporal awareness was voiced in the long-term nature of mentoring.

> We usually have a lot of time with our mentees - typically, 30 hours a year for 3 or 4 years. This enables quite strong relationships to build up. Many mentees have said to me 'I've never been able to talk to anyone else in this way'. Melissa

In considering the moment of the mentoring session, mentors perhaps grasp the false dichotomy between the physical and the pastoral. An authentic autistic connection to their institutions is, after all, physically mediated.

> We do this by allowing the student to move within the office space as they feel comfortable, either sitting/rolling on the floor, in a chair, standing-or by communicating remotely. We encourage them to express themselves without judgment, to be late/early stimming/still loud/mute manic/withdrawn, and that to be ok. We listen, assist, support and encourage real people with real difficulties and challenges that are not being addressed within the body of the university. And we try to encourage them to develop a voice for change.
> Ana Ray

The usefulness of the mentor's character

As a subcategory of the **mentoring role**, the ***usefulness of the mentor's character*** was grounded in the humility of mentors' responses, particularly in response to Mollie's question. Analysis broadened out this hunt for the mentor's character from a HUMILITY in knowing what they do not know, to the capacity to be a SELF-REFLECTIVE MENTOR, to be a NEURODIVERSE CHAMPION and to be TRUSTWORTHY.

HUMILITY in this context takes several dimensions. Not only is it the humility to openly acknowledge the limits of shared understanding in a context where the wellbeing of the mentee is paramount, it is also the humility of mentors to eschew their own operating procedures by HOLDING OWN PREFERENCES LOOSELY, and the ubiquitous attitude that Melissa encapsulated in the sentiment, "we won't always get it right, humans are complex beings". Furthermore, it came as no surprise to encounter narratives of a SELF-REFLECTIVE MENTOR within the participating mentors. A capacity for self-reflection alongside a humility rooted in a joy of neurodiversity encourages examined RECURSIVE PRACTICE in which practitioners - as Nichola found - "learn as much as they teach".

Such reflective cyclical practice may be why mentees and mentors alike find themselves in the role of NEURODIVERSITY CHAMPION. For allied mentors like Lee, there is a "genuine appreciation for people who are not typical" and being in the company of autistic students is "refreshing". Whilst Nicola had an appreciation of being "kept on our toes" as practitioners who strive - not just to keep up - but to become allied proponents for neurodiverse HEIs where all can flourish.

Through being TRUSTWORTHY, the mentor's assertions that the mentee is valuable enables the mentee to grasp their own value. Trustworthiness, for Claire, requires demonstration "rather than just assuming entitlement to be trusted". It was embodied by the simple virtues of punctuality, honesty, straightforwardness, positive regard, and honest openness to one's own failings.

Two further codes, embedded in the ***usefulness of the mentor's character,*** became mainstays of conversation during master-mentor forums, those of THE INEFFECTIVE EFFECTIVE MENTOR and the need for COURAGEOUS MENTORING; these will be returned to for further exegesis below.

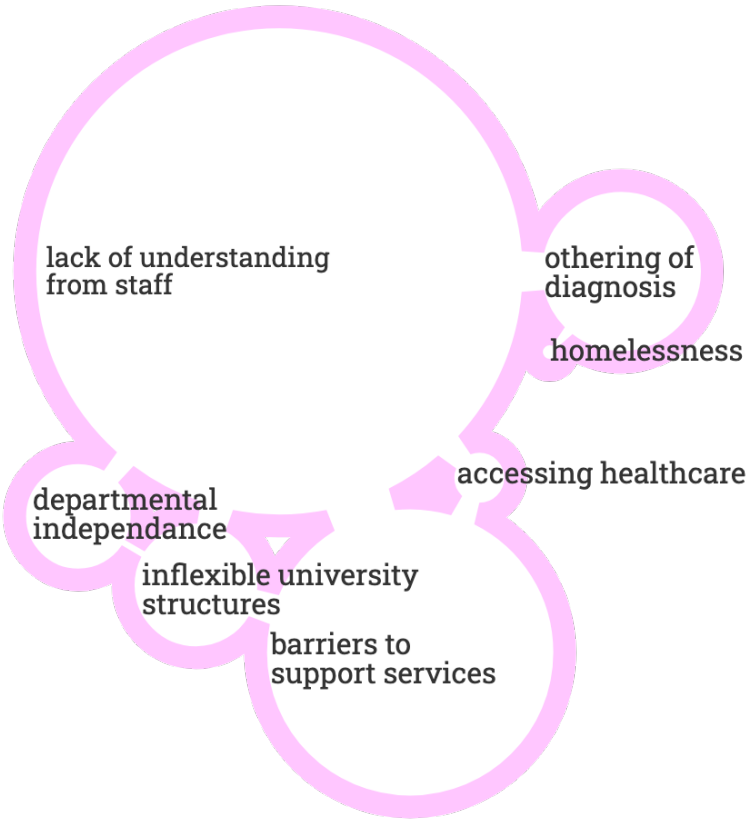
Dismantling barriers

Whilst the substance of **barriers** will be returned to in the next section, it must be noted that for some years, as discussed in Chapter 1, 'removing barriers to learning' was the sole mandate given to Specialist (Autism) Mentors (DSA-QAG, 2016). As such the **mentoring role** often aligns itself towards ***dismantling barriers***. Consequently, many mentors define their role in opposition to institutional barriers. It is hardly surprising that ire is reserved for the specific barriers that exist as BARRIERS TO PROVIDING MENTORING itself.

Barriers

It is a sad observation that autistic students encounter **barriers** to learning at their respective HEIs. Thematic analysis of dairies from mentees and mentors located explicitly recorded barriers (see Figure 28). Of the 330 mentees working with the mentors in this study, 74 barrier events were mentioned over the year.

Figure 28
Barriers reported in diary entries of participating mentees and mentors 2020/21



**area of theme is relative to prevalence in diaries.*

More than any other barrier, the ***lack of understanding from staff*** looms large. One in three reports of a barrier to study involved a member of staff. Underlying much of this conflict is the rub of the double-empathy problem in a stretched academy. The majority of staff are, as SD wrote, "supportive when they have the time and recourses to be able to do so". Sadly, there are outliers. Poppy, one of the mentees in this project succinctly encapsulates the issue faced by a mantra of "What is seen as a difficulty by an autistic student may not be seen as remotely difficult for a non-autistic tutor". There are the ASSUMPTIONS FROM staff that a student is "being awkward" in asking for needs to be met. Overworked staff may not have the time for simple meetings of reassurance which leads to DISMISSAL OF DIFFICULTIES or IGNORING REQUESTS for affordances such as not be singled in class, for notes in advance of lectures, or for clarity in assignment setting.

On occasions students may have multiple interactions with a problematic member of support staff that creates cycles of avoidance, as a mentee wrote…

> If I end up encountering a remotely challenging or abrasive member of staff then I tend to back down rather than insisting that I need an appointment. Sam

Experience becomes ingrained. Lucy believed that it is not simply the barriers that exist, but "but their impact is also felt by students with ASD who fear their existence"; the FEAR OF BARRIERS becomes itself a barrier.

As intimated in the **mentoring role**, there is an evident frustration among mentors with ***barriers to support services*** and ***access to healthcare***. On occasion it is the structure of provision offered or the need to navigate a multiplicity of supports, but it is more likely to be a palatable annoyance with restrictive funding models. Waiting times, increased support needs, limited staffing resources, the need for a definite diagnosis before funding, and lack of funding for irregular courses were all cited as extrinsic barriers. Whilst within HEIs the time and bureaucratic effort of EMAIL TO-AND-FRO that is required by students to access services was held up with disdain. The worry is that, with the bureaucratic burden and limited funding, wellbeing support becomes simply LIP SERVICE to provisions rather than an acknowledgment of the particular issues individuals encounter. Furthermore, this resonates with a wider issue; autistic students struggle to access healthcare services, and mentors are often asked for advice, reassurance, and basic first aid.

Perhaps this is indicative of institutional fragmentation. Lily Learning made the point that, "student support services is not joined up as some think, students can fall through the net"; a sentiment that was collaborated by mentees and mentors alike. Two parallel issues emerged, ***inflexible university structures*** and ***departmental independence***. Blanket regulations for extensions and deferrals are not always an adequate solution…

> unfortunately, it is unlikely that there will ever be sufficient resources to fully meet everyone's needs so there usually are compromises made to suit the majority. Autistic students are more likely to find that these compromises don't suit them.
> SD

Getting other reasonable adjustments to propagate across a large institution is itself a complex process, with mentees feeling the brunt of this institutional sluggishness. It is in such climates that ***departmental independence*** in going about things in idiosyncratic ways can stymie the progress of students. Where institutions may have staff with specialist knowledge and training, smaller departments may not - yet they perhaps feel the weight to do something more acutely owing to their immediacy to the situation. Alternatively, pressures at a teaching level can lead staff to take, what Ana Ray describes as a "hard line, thinking the student will conform", which in turn compounds student worry.

One mentor worked with autistic medical and veterinary students. When hard-line thinking meets notions of FITNESS TO PRACTICE, there is a real risk of alienation. In such context, disclosure elicits a particular fear and vulnerability around being removed from studies. She observed that this stigma has roots in a medical model, held by medical professionals, in a medical institution.

> You'd think that given the extent of medical evidence associated with gaining appropriate support, that an understanding and empathy would exist within the medical spheres for reasonable adjustments and reducing stigma, but this is not the case.
> Lee

Two mentors during the year had experience of working alongside students who have experienced ***homelessness*** alongside. In one case from the burdens of shared living, and one from parental estrangement. Whilst mentors have a role in swiftly facilitating the move of students into campus accommodation if available, the associated breaks in routine and support mechanisms places already vulnerable students at higher risk. Whilst this is a barrier to participation that may be shared with a wider team, the privileged position of trust that the mentor inhabits facilitates speed at a crucial juncture; but this has the caveat that it narrows

the students' provision to a single point of contact. There is professional judgment over imperfect mentor-led support perhaps being better that avoided support.

Finally, in terms of **barriers**, one mentor reported suicidal ideation and self-harm over the period. From the literature, it can be assumed that this prevalence is much higher and this diary tool was not the right means to enquiry further.

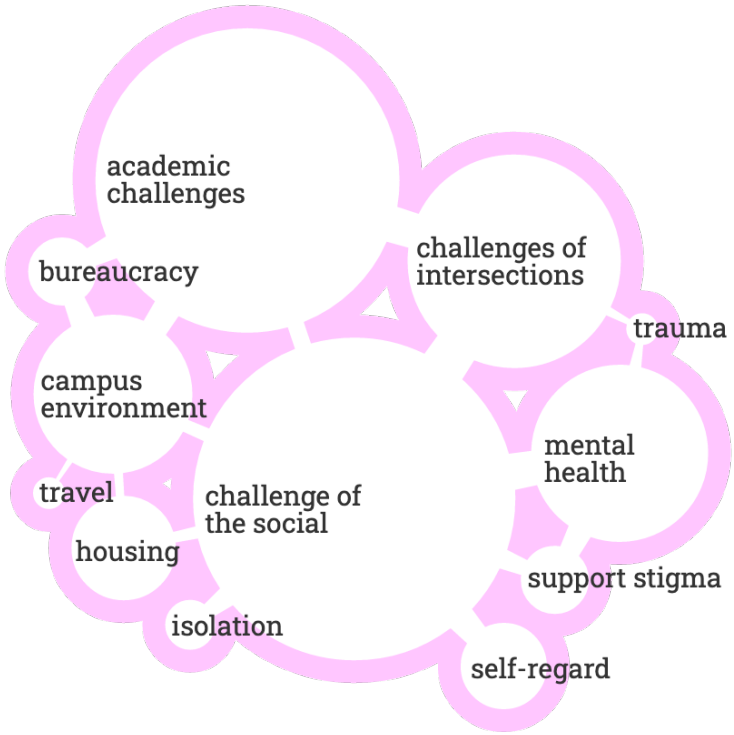
Whilst **barriers** stopped engagement, mentees and mentors also recounted of **challenges** which placed additional burdens on continuing studies.

Challenges

As in the coding of the literature, Chapter 1, a line was drawn between those phenomena that limited students' access to engaging in a university education, and those that simply made engagement harder. This is a permeable line. For some students at some times, a barrier may be a hard challenge, and conversely some challenges can become insurmountable and become barriers. To further muddy the picture, this analysis has two similar categories coded **challenges** and the emerging subcategory of ***diagnostic framing*** that is part of **framing and reframing**. **Challenges** were coded if the mentee or mentor simply stated challenges without reference to how it was approached or overcome.

Challenges emerged around five key phenomena (see Figure 29). The ***challenge of the social***, ***academic challenges***, ***challenges of intersections***, challenges with the context of associated ***mental health***, and challenges that had their loci in the ***campus environment***.

Figure 29
Challenges reported in diary entries of participating mentees and mentors 2020/21



**area of theme is relative to prevalence in diaries.*

Challenge of the social

Mentors and mentees alike commented on what can be considered as the ***challenge of the social***. HEIs are crucibles of the double empathy problem where Louise's "patchy understanding" of autistic people by the majority population magnifies autistic students worries about communication. Mentors have a valuable role in reassuring mentees as they encounter the university populous; a theme which - like many **challenges** - will be explored in the subsequent **framing and reframing** that occurs during sessions. There are though, ***challenges of the social*** that were presented in the abstract; the pervasiveness of GROUP WORK, attending SOCS, ONLINE SOCIALISING, and the discomfort of CAMERA ON POLICIES. Perhaps these challenges in which no rejoinder was given suggests in the cases of newer online issues, hesitation before seeing what transpires in the longer term; alternatively, in the case of group work, an implicit resignation to such pedagogies being used.

Academic challenges

Group work may lie at the crossroads between ***challenges of the social*** and ***academic challenges***, but the core issues illustrate the wider picture. UNCLEAR EXPECTATIONS rooted in hurried preparation cause confusion as there is no time to check understating.

> I think some of these difficulties come around from lack of clear, precise information. From my perspective as an autistic person, particularly when I am new to something, I like very clear information on what I am expected to do.
> Louise

Without this clarity a sense of panic can mount, particular around ASSIGNMENT DEADLINES. This is compounded if deadlines aggregate towards the end of terms causing times when multiple pressures come to bear.

During the rapid changes elicited by the COVID-19 pandemic, there were narratives of CHANGING EXPECTATIONS as new ways of assessment were introduced across HEIs. This observation stands at odds with the experiences of ***bureaucracy*** and INFLEXIBILITY. One of the core changes, alluded to above, is the BURDEN OF EMAILS.

> I find emails very difficult to manage and read, so I am forgetting everything or not seeing important updates.
> Mollie

Emails are the principle means of formal communication within universities. As an asynchronous mode of communication, they add a time delay into the process of getting things done. Whilst a mentor may support the crafting of emails, they are seldom there in real time to help process and interpret the response. There is then a potential for delay in responding until the mentor is met for counsel and affirmation the following week, leading to challenging issues becoming protracted over months.

The academic sphere is also one in which comfort can be disrupted; lectures and seminars are not the most predictable of events, as a mentee wrote…

> I am also very structure orientated and if a lecture was to overrun, I would feel really anxious because I am so comforted by routine.
> Lily

Whilst anxiety can be mitigated, anxiety does not come from a single source. Having multiple anxiety provoking incidents in a day can make learning untenable.

Challenges of intersections

Many students face a degree of ***challenges of intersectionality*** as their experiences, roles and frames realign within the student *habitus*. Autistic students may have an additional challenge as an autistic disposition intersects with SEXUALITY, GENDER, MULTIPLE DISABILITIES, or TRANS CHALLENGES. Mentoring spaces allow conversations to arise that may have previously been hampered by CULTURAL BAGGAGE or FAMILY ISSUES. In a global institution, mentors can be working with students who hail from places where, as Melissia observes, "neuro-diversity and gender/sexuality issues are little-recognized". Furthermore, many UK students moved home over the COVID-19 pandemic and mentors needed to rapidly bring expertise to new dynamics. Strains on family relations have been apparent as intersections are brought into the family home.

> The longer students have had to live at home after being more independent the more issues seem to have been raised in family settings. It is almost as if the upcoming [summer] break from university studies has triggered more disagreements and misunderstandings. While there were academic tasks to focus on students seem to have coped better with having to fit into family routines but now, especially for those who have been back at home for the longest, the break seems to have triggered more unrest.
> Nichola

Such unrest has a knock-on effect on student wellbeing, and yet there was little guidance to prepare and support mentors in their task. This further highlights the need for a framework such as this work, alongside robust CPD that echoes the holistic nature of the role, and a wider coordinating body to further develop the profession.

Mental health

> Co-occurring mental health conditions… often form part of a discussion about managing difficulties, especially in terms of determining what promotes wellbeing in each individual/mentee.
> Lee

Mental health is a regular refrain in mentoring sessions, particularly DEPRESSION. SD made a case for a causal link. The challenges of academic expectations, and the exhaustion from additional burdens involved in everyday tasks cause stress that has a role in "exacerbating difficulties." It is not just the pressures in the here and now, mentors are sometimes called upon to discuss past trauma and abuse. These two causal pillars lend themselves to the ***isolation*** reported; overwhelmed mentees cannot take on any more social load, fearful mentees cannot trust those they meet. BURNOUT is a real and present danger.

Mental health issues can be compounded by ***support stigma***. That is to say, the stigma that persists around receiving support provisions, of which mentoring is one. The perception that one needs help, and that others may see that need as a weakness, can play havoc with feelings of ***self-regard***. Low self-regard might manifest in students LACKING CONFIDENCE in their own academic voice, in FEELINGS OF INFERIORITY that are shared with a trusted mentor, and in the spectre of IMPOSTER SYNDROME epitomised by Anastasia as feeling "uneasy about the level of work I produce and the level I think I should be producing".

Campus environment

> During the lecture my senses felt overwhelmed... other students may enjoy the social aspect of the lecture but I can find it too overwhelming, but I do not want to miss out so I force myself to be in a lecture. But this can result in sensory overload.
> Lily

Students are in a bind. Pre-COVID-19 most lectures required compulsory in-person attendance. Whilst blended learning has enabled many students access to what was previously stressful situations from the comfort of their own house, there may be some concern over going back to doing things the way they used to be done. Though, as Poppy sagely pointed

out, “my autistic students all live at home and I think that speaks volumes already about our world.” The HECTIC CAMPUS LIFE perhaps is not the best experience for many of our autistic students. Not only is there a LACK OF DOWNTIME, but there sometimes seems to be NO LOGIC TO CAMPUS NAVIGATION, or enough of Lady Bigfoot’s “safe places hidden in the hustle and bustle”. ***Travel*** in and out of campus also has a sensory dimension with Lily writing that…

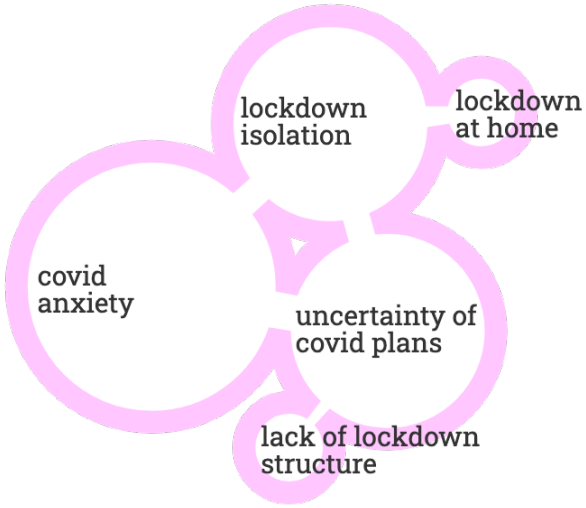
> I feel as if the factor of travelling to and from university is not spoken about. Sometimes I can get so overwhelmed by the travel that this can influence my academic studies and achievement.
> Lily

For those on campus there is the strategy of BECOMING NOCTURNAL. Though night usage of libraries is very logical way to avoid both busy campuses and the pressures of family homes, it does run the risk of sleeping through daytime classes. Perhaps this strategy can be framed as less of a response to the challenges of university life, but rather an indicator of a culture of success in which students are encouraged to do things their own way via the readily available resource of a 24-hour library.

Impact of COVID-19 pandemic

Without labouring these themes, as they may remove focus from the essential practice of mentoring, the moment of this research was encircled by the pandemic with new modalities of mentoring, breaks to routine, changes of locale and omnipresent disruption to universities.

Figure 30
Themes discussed by mentees and mentors around lockdown during the COVID-19 pandemic



**area of theme is relative to prevalence in diaries.*

Cultures of Success

As well as both **barriers** and **challenges** mentees and mentors also - but to not such a degree - gave narratives that indicated **cultures of success** within their respective HEIs. It is perhaps telling that ***thriving remotely*** takes centre stage (see Figure 31). Generously, this is indicative of research occurring during a time of pandemic; less generously, it is perhaps an indictment of the old normal that has only been laid bare by crisis.

Mentees and mentors both report the LOWER LEVELS OF EXAM STRESS of open-book, open-web assessments. The introduction of LECTURE RECORDINGS AS NORM, has been a welcome addition to the higher education landscape. Whilst mentors recounted POSITIVE EXPERIENCES OF PROVIDING REMOTE MENTORING, alongside and an un-foreseen benefit in being able to share screens in real time. Where mentoring rooms were sometimes under resourced and relied on students' laptops, a zoom session enables shared calendar planning, essay structuring, and the co-authorship of fledgeling self-advocacy with emails to staff.

Figure 31
Cultures and promotors of success reported in diary entries of participating mentees and mentors 2020/21



**area of theme is relative to prevalence in diaries.*

Accounts of ***neurodiversity positive cultures*** is a positive development. There was a very clear manifesto that…

> We do not do things for the students but help them to become independent self-advocates, careful time managers who feel supported, encouraged and valued as individuals whilst undertaking under and postgraduate studies. Lady Bigfoot

Being a mentee seems to be an area in which a positive autistic identity can be fostered. In doing so students benefit in terms of personal growth which, in turn, promotes academic learning. There are multiple incidences reported by mentors of students starting neurodiverse societies, or self-advocacy groups that have a clear role in both identifying issues faced by fellow students and ensuring that such concerns are taken to meetings with senior staff so as to inform future direction. In particular, an entry praised the mentee led NDSoc student society meeting over Discord[61].

[61] The Discord platform is similar to WhatsApp but allows customised threads to enable multiple conversations. It was originally designed for use by gaming communities, but now has been co-opted by participatory research groups such as SARN, the Stigma & Autism Research Network (Botha and Cage, no date).

Framing and Reframing

The thematic category of **framing and reframing** was assigned if a reported **challenge** was concurrent with a given reason why a mentee may be finding a particular phenomena a challenge. After all, the function of mentoring was summed up as reflecting on…

> what [mentees] actually feel is wrong, and to reframe those issues as symptoms of stress due to differences. They can embrace and be assertive about having what they need in place, rather than feeling they are wrong to need adjustments, or extra time, or support, or more guidelines, or whatever it may be.
> Lee

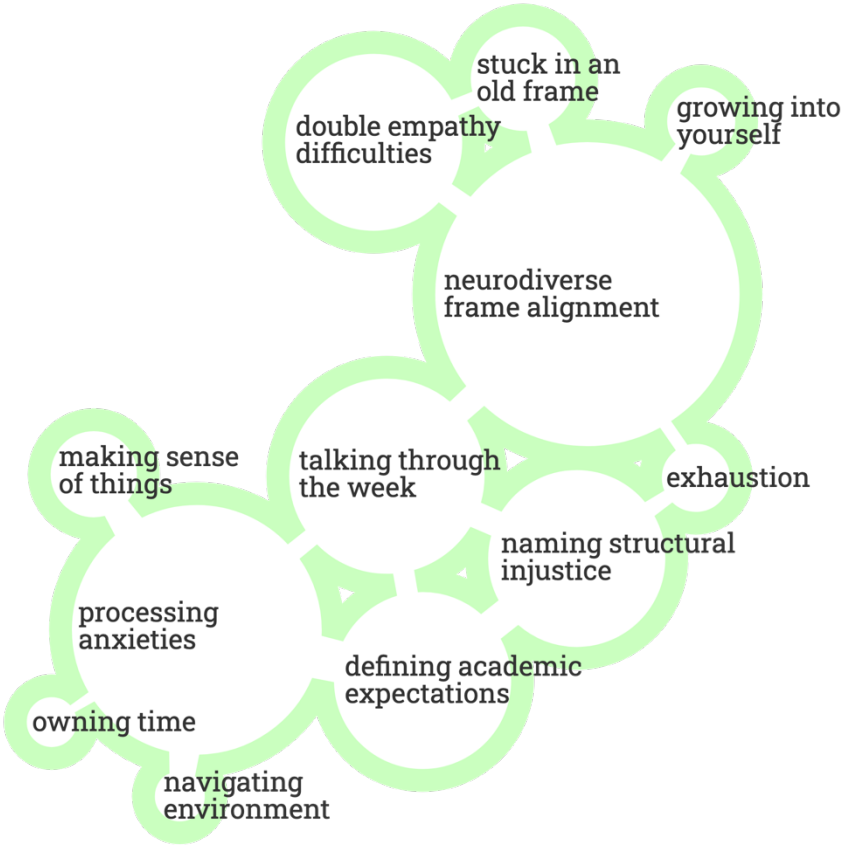
Three categories of reframing could be identified. The first was one in which mentees both reported challenges and were engaged in interpretation of the nature of the challenge. This was – in later axil categorisation - labelled ***diagnostic framing***. Secondly, plans were drawn up by mentees and mentors together to tackle such challenges as ***prognostic framing***. Finally, the mentors themselves were seen to have a distinct role in ensuring that mentees were motivated to bring about the change that was needed through ***motivational framing***. Whilst these categories emerged early in the analysis, but were only named as such six months later after the similarity to frame alignment process was grasped (Snow *et al.*, 1986). The implications of this will be returned to in Chapter 4.

<u>Diagnostic framing and reframing</u>

The naming of powers, struggles and injustices ran through the accounts left by mentees and mentors. This naming seemed to coalesce around a NEURODIVERSE FRAME ALIGNMENT with an appreciation of DOUBLE EMPATHY DIFFICULTIES, and the space given in sessions for the PROCESSING OF ANXIETIES (see Figure 32). These frames seek to get to the heart of any given issue are bridged through the simple expedience of talking through the week in a process of…

reframing the student's experience of themselves as failing (by some normative standard) - inviting them to look at things differently, think about what their values are, how awesome they are as they are, rather than constantly punishing themselves for not being 'good enough'.
Claire

Figure 32
Narratives of diagnostic reframing reported in diary entries of participating mentees and mentors 2020/21.



*area of theme is relative to prevalence in diaries.

Creating arenas for NEURODIVERSE FRAME ALIGNMENT require mentoring spaces within HEIs that encourage the exploration of AUTISTIC IDENTITY, while at the same time CHALLENGING NORMATIVE STANDARDS and naming INTERNALISED STIGMA. Mentors seek to achieve this by explicitly couching autism discourse as DIFFERENCE NOT DISABILITY. This is no simple task, but one that can emerge over years from the mentoring relationship as a point in the seek carved out to reframe a lifetime of experience.

> I am currently working with someone to gain a better understanding of self and to reframe their experiences as an autistic person rather than a substandard non autistic person. This, though, is a life's work - and for this person undoing a lifetime of built identity is ongoing and not linear. It feels very so unfair that this person carries this weight on top of the challenges of life itself. An earlier diagnosis and better appreciation and portrayal of autistic people could have helped them to develop a more positive and realistic sense of identity.
> Neko

Developing an autistic identity is a life's work. The experience of university is a small slice of that life. If mentees are fortunate enough to find the "RIGHT FOR YOU" MENTOR, they will reflect back strengths and achievements whilst reframing challenges in context of being a minority neurotype in a majority world. Such an exploration of AUTISTIC IDENTITY requires the challenging of NORMATIVE STANDARDS. Mentoring provides a stage in which to talk openly without many of these standards.

> I have one student who has been going through a family bereavement and doesn't want to upset anyone by asking the questions he has. We have used mentoring to talk about those "unspoken" things and normalised all feelings and questions as okay.
> Claire

These 'unspoken things' are often introductions to DOUBLE EMPATHY ISSUES, and the nature of MASKING autistic presentations in response to micro – and macro - alienations. It is a sad indictment on culture that students arrive thinking they are "at fault" or "in need of fixing", of having needs discounted and, as Anastasia wrote in their mentee diary; "people saying: "oh you don't seem autistic - you can talk to us just fine"". Being able to openly IDENTIFY DOUBLE EMPATHY difficulties allows mentoring to become an arena in which both the ATTITUDES OF OTHERS, and the PRECONCEPTIONS OF OTHERS' INTENTIONS can be weighed.

Others do not see what Anastasia called the "underlying panics and anxieties we feel" and discount them. Others may say things that are quite wounding and unpacking these responses might be a good use of mentoring time. This kind of experience stacks up. As an autistic autism mentor, Louise, explained, "not receiving basic common courtesies over long

periods of time build up and can affect everything". Damage done from this can skew the PERCEPTION OF OTHERS' INTENTIONS. This may require providing…

> support to reframe events to try to understand that university staff are not attacking them on purpose - but are in fact people trying to help - but sometimes with the wrong information… As a mentor you can be a bridge and need to be hopeful and optimistic that people have good intentions, but just sometimes have the wrong information.
> Neko

In such circumstances tutors offering leave of absence may feel like rejection; offering support may feel like condemnation; and offering feedback on work may feel like a personal attack. Through extending the double empathy issue as a frame in which to hold social relationships, there is a process of REFRAMING SOCIAL DYNAMICS. When successfully done mentors like Nichola have students who share stories of their own participation with "clubs, societies and strong friendships".

Perhaps the converse of this is when mentoring discussions identify thinking that seems STUCK IN AN OLD FRAME. Opportunities are seen as threats. Knowing that barriers exist becomes a fear of barriers. Trauma from having been bullied makes itself known through pre-judging others' motivations. Othering becomes an expectation of being othered. A way of framing the world as a mechanism of self-protection that worked in past contexts may not be the most helpful way of framing the present university experience. As Lee explained, there is a transformative process for students who persistently give themselves a "hard time". Through having time for reflection, these students may reach a point where they "reframe those issues as symptoms of stress due to differences they can embrace and be assertive about having what they need in place, rather than feeling they are wrong to need adjustments". An authentic AUTISTIC IDENTITY sees the need to advocate for changes in the world so as to not internalise a caustic need to be fixed.

In holding these difficult conversations, mentoring opens up a trustworthy space for the PROCESSING OF ANXIETIES. For some mentees this may be the fundamental task of

RECOGNISING ANXIETY itself and then working out in which incidents that anxiety is rooted. Some mentees may talk of FEAR AND PROCRASTINATION, how this is re-framed as ANXIETY OVER COMMUNICATION. Two corresponding codes of the ANXIETY OF HAVING TO ASK FOR CLARITY and the ANXIETY OVER BEING CLEAR lead to an understandable reluctance to contact academic staff so as to progress through studies. Of course, this creates situations where work does not get done and anxieties become looped and magnified.

Discussions during mentoring sessions may be simpler affairs, they may function…

> to perhaps process events and talk through the problems they have faced during the week, or just provide a safe space for them to offload their worries… to talk out what she has had to cope with during the week. ElizabethAnne

In this the mentor plays a role as a SOUNDING BOARD, a place for SHARING PROBLEMS and concerns as well as providing a space to SPEAK THE UNSPOKEN. Sometimes it is a place in which a good VENTING can be unleashed by the student. Though care is required in creating such spaces. SD pointed out a limitation in the recursive framing that might occur. In which, if the mentoring session is seen as a place for venting, any discussion has to become a vent.

Being a trusted SOUNDING BOARD can provide a route to exploring and the DEFINING ACADEMIC EXPECTATIONS in a context in which the mentee is not judged for academic output. The differences between school and university need to be spoken aloud. Diaries had accounts of students arriving with an expectation of lecturer support closer to the role of teacher at school than a tutor at university. The framing of university as a competitive environment perhaps was dismantled; mentees reframed the value invested in A-levels finding it meaning very little once enrolled. Mentors provided a frame in which students could find the point of an irrelevant module of study and -through regular small supports - motivated students towards course completion.

This is not simply a self-improvement exercise. Being able to frame the university experience as one that has elements of structural injustice can be incredibly freeing. Through

NAMING STRUCTURAL INJUSTICE out loud to a mentor the locus of blame is externalised. This may be in IDENTIFYING SUPPORT THAT SHOULD BE THERE but is not; it could be making plain the HYPER-SCRUTINY OF DISABILITY encountered in academic spheres; it could be acknowledging the problems caused by STAFF UNAWARENESS and the discomfort this causes; what could be the stigma inherent in ideas about DESERVING SUPPORT. In this, mentors see their own role as one who can provide contextualisation that enables mentees to continue on the journey of MAKING SENSE OF THINGS, as Melissa wrote "to reframe, to find alternative ways of looking at things, and to try and understand things from different perspectives."

> By talking through events that have happened during the week we can put a different perspective on them and give greater understanding of what has happened.
> Nichola

Prognostic framing and reframing

Diagnostic framing is only one part of the phenomenon. Simply naming and understanding **challenges** and **barriers** is probably not enough in its own right. What occurs in mentoring is an interrelated process of ***prognostic framing and reframing***. That is to say that the long-term unfolding of the students place in the new academic context is one that requires a long-term consideration of how their elected life might progress. This thematic category holds the discussions between mentees and mentors that have elements of strategizing, planning, and empowering.

> I still love that different connection: the incredibly diverse range of subjects we discuss (I now know a little bit about an enormous variety of topics), the passion with which students describe the things they care about, the shared satisfaction in overcoming barriers, the nitty-gritty of problem-solving.
> Claire

Prognostic reframing emerged around three core themes. Those strategies that are developed to enable LIAISING WITH UNIVERSITY, the developing of COLLABORATIVE STRATEGY by mentee and mentor, and those which were taken as opportunities in DEVELOPING SOCIAL UNDERSTANDING (see Figure 33).

Figure 33
Narratives of diagnostic reframing reported in diary entries of participating mentees and mentors 2020/21.



**area of theme relative to prevalence in diaries.*

Mentees and mentors discussed the processes involved LIAISING WITH THE UNIVERSITY through the planning, drafting, and sending communication to staff. Being with students as they FORMULATE EMAILS can be essential for minimising anxiety about tutor's responses and goes someway to alleviate the BURDEN OF EMAILS that was identified. One of the chief reasons for these emails seems to be in the submission of extensions or extenuating circumstances; two particular pressure points in which students may have to disclose the difficulties that they are having.

Likewise, mentors like Lady Bigfoot were asked by students to accompany them to initial meetings with staff. It is at such junctures where the value of the mentor can is in acting as what Ellie termed "communication support". Unfortunately, she also had

experience of working with agencies that forbid mentors to have any contact with university staff. Such a limitation on the mentoring role limits the efficacy of autism mentoring at a juncture when communication support is essential to flourishing in the HEI.

Universities can have a dizzying array of support available to all students. Mentors were aware that they were only one part of a greater provision and had a particular role in SIGNPOSTING mentees to the most appropriate assistance. In return mentees and mentors together advocate for better structures within their HEIs, whether this is by promoting self-advocacy in the context of the student union, with the founding of neurodiverse societies, or through setting up self-advocacy groups who meet with senior staff to bring about change.

Mentees and mentors also work together when relationships with supervisors have gone astray. Supervision relationships are pivotal for early career academics. Whilst it is possible to be moved to another supervisor, this requires the support of the whole department and potentially becomes a funding issue. Mentors also reported discussions which untangled the solitary mode of PhD attendance with the deeper need for friendship and community.

Mentees work with their mentors as an additional resource to enable them, as Lucy commented, to "fulfil their potential alongside and within the context of the neurodiverse experience". Part of this requires mentors to be flexible in DEVELOPING ALTERNATIVE LEARNING STRATEGIES: they may function as an early audience for presentations; they may provide advice on ways to set up a conductive working environment; they may provide options for revision aids that may incorporate more visual and movement-based components; and finally, mentors play an important role in giving explicit permission for other learning resources, such as online videos, to be used.

In developing such strategies mentors do not impose these upon mentees. Rather suggestions are made, withdrawn, and experimented with. These COLLABORATIVE STRATEGIES extend outside the purely academic realm. These were narrated moments in which the mentee and the mentor worked together to create strategies that would address

issues brought to the mentoring session. Among this was the strategy of breaking down tasks using Lee's approach of "providing tools that simplify tasks that might otherwise feel overwhelming". At times it is planning everyday sustenance activities[62]; for instance…

> taking a bus for the first time to a new building for a clinical practice session (can be broken down into small parts so that they are accompanied the first time to the bus, by a family member, and then at the venue by a tutor), so that confidence is gradually built in their capacity for this new interaction experience.
> Lee

Alternatively, it may be the process of organising thoughts and, as Ellie wrote in the context of strategies for MANAGING ASSIGNMENT STRESS, "helping plan time to helping break down assessment briefs". It is heartening to note that no mentors thought that assessment should be stress free, rather the stress should not escalate into anxiety. While this support was often proactive, collaborative strategies are also brought to bear with "with out of control assignments which they have not submitted and as a result withdrawn from any academic contact". Lady Bigfoot's experience is troubling, at the moment the student needs support, the tutor - perhaps understandably in the frenetic academy - has taken the class onto other things. Consequently, it is the mentor as non-expert who guides students in their breaking down and codifying of a perhaps unfamiliar subject into manageable steps.

This step-by-step co-sorting and planning is tangible in the process of students acquiring their DSA or self-procured assistive technology. Some students find mind mapping software, organisational software, apps like Brain in Hand, and shared calendars essential to flourishing during their studies. Having an unknown trainer in for a single hour may not be the best way to acquire the skills to use supplied technology. Being asked to be a single point

[62] Owing to the context of this research during the COVID-19 pandemic, there were no accounts of mentoring practice such as going shopping together for the first time, walks around parks, games of pool so that students had the confidence to go to the bar later, the sourcing of ant traps, wanderings across campus to get to the door of the medical centre, and meetings scheduled for the early evening so that mentor and mentee could walk together to the doors of a new SU Soc or club.

of contact for ACQUIRING ASSISTIVE TECHNOLOGY, in an unhurried manner is perhaps a way of mentors showing their worth during the early formation of mentoring relationships.

Finally, in terms of collaborative strategy there is a distinct role for experience mentors who perform the duty of SHARING AUTISTIC STRATEGIES. That is to say, those with a broad knowledge of the ways that autistic people navigate their university experiences can pass such knowledge onto the next cohort of scholars. Autistic autism mentors may relate their own battles and successes, whilst allied autism mentors will have to rely on the successes of students they have already known. This is not an approach that demands the same responses from everyone, rather, that…

> each person's experience is different so it is important to listen, to draw on previous experience of mentoring other students with autism, but to try to keep an open mind about what might be difficult for each individual.
> Lucy

Mentoring is an unhurried arena of learning informed by the experiences of a wider community. It is a particularly powerful tool when it comes to the discussion and development of TOOLS TO DEAL WITH SENSORY WORLD. As Sloth discerned, for students who like "to try and minimise risk of over stimulation or getting lost of panic," planning can be a "logistical nightmare". To assuage some of the burden mentors, like SD, spend time with mentees working on concrete QUIET LIFE SKILLS such as "finding the best route to the quietest supermarket"; like Ellie they discuss more abstract strategies they help manage burnout with tools "such as energy accounting or spoons theory"; or like Sloth by promoting "tuning out of the hype on social media". Several mentors reported conversations that had a focus on CREATING TIME FOR SELF, through planning out time for rest and recreation into busy schedules.

Adjacent to this is the mentee-mentor dynamic in which the mentee is given a way to SEE AND VALUE SELF. The skilled mentor is the one who can NORMALISE FEELINGS such as grief, loneliness, and frustration. Furthermore, together these dyads can start the work on

UNPICKING DEFICIT-BASED SELF-JUDGEMENT that often have origins in the stigma of having a minority identity at school.

Mentoring sessions provide a crucible in which, together, mentee and mentor are DEVELOPING SOCIAL UNDERSTANDING. It is a safe space which provides a chance to process events by talking through challenges faced. It is a place…

> to talk through some of the ways in which PNT[63] individuals may operate in any given situations, and also to translate any details or words of encouragement which may not have been grasped by the autistic student. Lady Bigfoot

As a secure stage for interpretive processing DOUBLE EMPATHY NAVIGATION can emerge. This is not simply about seeing the injustices and confusion of predominant neurotype communication, but - when needed, and only after much searching - deciding WHEN TO TAKE RESPONSIBILITY FOR INTERACTIONS that have not gone well. In doing so, not only are relationships outside of the mentoring dyad supported, but there is potential for PROMOTING AUTISM UNDERSTANDING in the communities that mentees belong.

Motivational framing and reframing

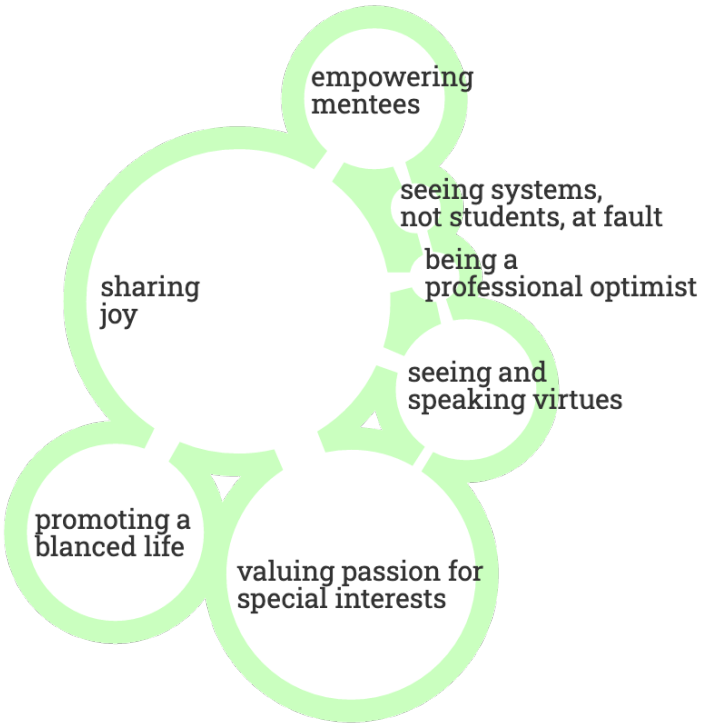
In this tripartite model of **framing and reframing** there is a distinct role for the mentor as those that have impact in the continuing motivation of their mentees through good-natured optimism. ***Diagnostic reframing*** can draw attention to the injustices of the world. ***Prognostic reframing*** provides a field in which action can be formulated. If these two were all there were, then the landscape would be bleak. With the introduction of a category of ***motivational reframing*** comes an element of hope. The mentee does not have to engage in the wearing process of self-advocacy alone, the mentor "has their back" and knows their triumphs.

[63] Predominant NeuroType

> I think also, as well as sharing motivation in terms of optimism, empowerment and the sharing of joy, there is merit in re-framing "have dones" rather than "haven't dones" where this is appropriate.
> Lucy

Motivational reframing is built around the SHARING OF JOY. Not simply in terms of academic success but in all things that bring joy, of PROMOTING A BALANCED LIFE, of VALUING PASSION FOR SPECIAL INTERESTS, of really knowing mentees that are met and SEEING AND SPEAKING VIRTUES ALOUD, and of - in small weekly steps - EMPOWERING MENTEES within their communities.

Figure 34
Narratives of diagnostic reframing reported in diary entries of participating mentees and mentors 2020/21.



**area of theme is relative to prevalence in diaries.*

Weighting of themes

All bar one mentors' diaries showed at least one example of a framing and reframing approach. Chi-squared tests were performed to test for significance between mentor's dispositions and the four core categories alongside and discussion of the mentoring role. χ^2 (1, N = 774) = 4.6081, p = .329927 indicating no significant differences in the occurrence of mentoring themes between autistic and allied mentors (see Table 20).

Table 20
χ^2 matrix of thematic incidence by mentor disposition

Category	Barriers	Challenges	Cultures of success	Framing and reframing	Mentors' role	Totals
Autistic mentor obs (expt) [dev]	32 (27.19) [0.85]	52 (61.08) [1.35]	12 (13.00) [0.08]	85 (87.09) [0.05]	124 (116.64) [0.46]	305
Allied mentor obs (expt) [dev]	37 (41.81) [0.55]	103 (93.92) [0.88]	21 (20.00) [0.05]	136 (133.91) [0.03]	172 (179.36) [0.30]	469
Totals	69	155	33	221	296	774

The small but perfectly formed codes

When thematic analysis meets the effervescence of human experience there are codes that do not always fit with broader schema. It is perhaps wise to include such themes in an analysis as, even though they may not provide a model of mentoring, nevertheless they encapsulate the directions of professionals at the top of their field.

THE INEFFECTIVE EFFECTIVE MENTOR is one of these small but perfectly formed codes. Whilst it is related to the HUMILITY needed in the **mentor role**, it is more than the simple virtue of great mentors. Rather, through being openly imperfect the mentor models a way of being that is less about daily struggle and more about self-acceptance.

> I try to be myself as I think it is important for others to know that I am not perfect or trying to be, as this creates a more relaxed and open relationship where it is OK to make mistakes.
> Neko

Neko then posits a fascinating question "is an ineffective mentor sometimes an effective mentor?". It is perhaps the difference between coaching and mentoring. Coaching is geared towards a skill set which, hopefully, can be fully imparted. Mentoring is grounded in the incomplete messy experience of being human.

Perhaps this messy experience is the core of the second perfectly formed theme, that of THE POWER OF BEING TRULY UNDERSTOOD. Nicola spoke of a mature student, who until she was in her 50s and met her mentor had never felt truly understood. Through the regular meetings and the time invested to getting to know each and every student mentors provide a keystone in self-actualisation within the university context.

It is fascinating how these two small themes from online diaries resonate with the following discussions that emerged in master-mentor forums. Perhaps it is because, for many mentors, they are ideas so embedded that they are never spoken about outside of the rare moments when mentors speak to mentors.

Forum discussions

The online forums of master mentors developed thinking based on a summary of the analysis so far (see Appendix, Document 6). Their reflections confirmed and extend analytical trends and reinforced the radically holistic sense of the art of mentoring.

> It's really hard to capture what [mentoring] is because it's so fluid isn't it?
> Neko

In an act of grounded theory transcripts were added back to the thematic analysis for further rounds of coding . In particular this brought forward themes of rebellion or reform. Overwhelmingly in this autism-majority forum there was a desire for a mentoring model that did not continue the propagation of institutional inequalities. It is not a model where a mentor takes a protégé under their wing to fit in with how things are, but it is one in which the agency of the mentee is unlocked so as to make our institutions better. In such a model, as a mentor put it.

> Things need naming. There's something that needs strategizing. There's sometimes you just need somebody in your corner as well.
> Ana Ray

This reiteration of the diagnostic, prognostic and motivational reframing elements of the mentoring process aligned with the experiences of these master-mentors.

Being fearless

> [The briefing] really made me think about fearlessness because… there is something I think about being a mentor that is about being brave and saying difficult stuff. Holding on to some really difficult stuff, because I don't think anyone can pretend that [mentors] don't sometimes have sessions where it's just agonizing to hear the pain that people are going through.
> Claire

If mentoring is to be a place of holding and transformation, then this is done in full knowledge that some “pretty awful things” will be discussed. Autistic students do not often

have easy and comfortable lives. In mentoring, these experiences can be shared with, the mentor as an outsider in the system. The funding mechanism of DSA non-medical help is one that ensures that students are supported by those who may hold different allegiances to the HEIs that they work within. While universities have grosser metrics of student satisfaction and attainment, the mentors' position is one that is dependent on the thriving of the assigned student. It takes bravery to work ethically and act when that student is better off to withdraw from studies, even if guiding that student towards that outcome will ensure that the mentor themselves takes a financial cut. The incongruities of a funding model that is assessed per student was seen to be one of the underlying commonalities of mentors. This, in turn, leads them to see themselves in a subversive role, even among those who are employed direct by universities rather than working for third parties or providing mentoring as a sole trader.

A subversive calling

With the locale of function sitting squarely on the needs of the individual mentee Specialist (Autism) Mentors are sometimes required to navigate the fine line between the pastoral and academic. At times they may be working in the background to support students during formal complaints.

This core weighing of interests permeates how mentors see their profession. This may mean that teaching rebelliousness becomes intertwined with the function of good mentoring. Several mentors discussed a conception of the university itself as an arena in which young adults may learn to flourish. For students with perceptual issues, or histories of being bullied for self-expression, an inclusive university may be the first place in which mentees can make the decision to put down parts of a lifetime of masking. This is mentoring as something more than just listening, it is something more than continuing good practice within institution, there is something more elective, formative, and perhaps dangerous. As such…

> there's an awful lot in there about encouraging that bit of risk taking and subversion that comes as part of a growing up process - that they're kind of ready to do anyway, and if you kind of push them into that a little bit a lot of the work kind of does itself.
> Claire

There is something in Specialist (Autism) Mentoring that lends itself to countercultural conversations. The onus is not upon fixing the autistic student. The onus is on mitigating the suffering caused by the majority, or as Sloth - an autistic autism mentor with ADHD - succinctly put it, "I suffer with monkey-brain-stupid-people". In doing so they linked the majority population and an obsession with pack-like behaviour with a life that has not been thought out. Master mentors expressed the need to help students explore the limitations of majority culture and to support discussions that could, perhaps, provide the hope of a better future.

Cherishing advocacy

Alongside this reform-minded subversion, mentors in the forum identified three aspects within the process of developing self-advocacy: giving permission to self-advocate, the context of self-advocacy and the lightness of motivation.

Permission to advocate

Some mentees arrive in the mentoring room with histories of over support from educators, school Teaching Assistants, and sometimes parents. If advocacy has always been done for you, rather than by you, then there is a long road to self-advocacy. This is not to say that self-advocacy is the only form of advocacy but, as Ana Ray put it, the mentor has a job in "teaching them to become the loudest voice in the advocating room". At its simplest it is teaching mentees to be able to say 'no'. At its fullest it is through providing a safe and secure location and trusted mentoring relationship in which perceived injustices can be dissected,

identified, contextualised, planed for and supported to resolution. This emerging framing and reframing model may be a powerful way in doing so.

Advocacy at the right time

This stepping into self-advocacy was seen as being constructed within the students own prior experience.

> I could go ahead and say, "tell this person that your autistic and what you need". But actually, if they've had a whole series of experiences when they've told somebody that they were autistic and then that person's attitude towards them has changed. Who am I to say go do it? We'll just explore that and when they're ready they can choose.
> Neko

While mentors may wish for a day when their services are no longer needed because we live in a kind and understanding neurodiverse utopia, the harsh reality is that the majority of students arrive at university having experienced stigma and marginalisation[64]. Expressions of self-advocacy cannot be formed in a vacuum; it requires the processing of the traumas that has led to the position in which advocacy is warranted.

Motivating mentoring and knowing when to push

Mentors in the forum held the motivating aspects of mentoring lightly. Experience of knowing that they did not know everything led to a concern over overly robust motivation that may push for an assumed need. Motivation required a thorough knowledge of the student and their context. It cannot be done casually, rather it should involve a personal struggle within the mentor to ensure motivation is both authentic and wanted. It is only at the point when the mentee has elected a direction, be that a particular stated objective or a direction of growth, that the mentor gears up gentle practical motivation that, as Neko clarified, "is more than going, 'Yay. Go for it'". It is about being alongside people.

[64] As a student once told me, "The problem with school is it's full of kids, and kids are not nice."

Maturational time

Discussion in the forum settings observed that, for some mentees, going to university was a chance for young people to reinvent themselves. Mentors know that many autistic students have experiences of being excluded or bullied.

> They've either not kind of had the opportunity to 'do' teenage because they've been focused on other stuff; surviving secondary school, and maybe haven't had the peer networks, they haven't done the 'finding their tribe'.
> Claire

Mentees find that university presents an opportunity to engage with the signs and symbols of adolescence. Mentors, like Clare, saw a role in encouraging the exploration of identity; a ring-fenced time in which mentees can explore the permissions needed in working out what to do as independent young adults. If these young adults, have a "missed teenage phase" a good mentor can provide a neurodiverse frame for finding their own tribe. This may be though signposting groups with shared interests; but the mentor may choose to take the provision of opportunities to nurture identity further in discussions about sexuality and how to have those discussions with others.

<u>Non-binary and trans-students</u>

Autistic students are far more likely to have LGBT+, non-binary or asexual identities than the majority population (Weir, Allison and Baron-Cohen, 2021). As the campus is quite often the first home away from home, and the mentor the first enduring non-judgemental relationship, it is unsurprising that…

> an awful lot of students come out to us being non-binary gender or transgender at university; because it's the first time they've ever had it presented to them as an option.
> Claire

Knowing this it would be immoral to not provide places of safety in which students can develop their own ways of being. Mentors in the forum considered this pastoral care as a

powerful tool in removing barriers to learning. Student who are struggling with questions of identity may well be the students who also struggle to get academic work done.

Spaces of safety and acceptance

All mentors in the forum spoke about mentoring provision as that which provides spaces of safety and acceptance.

> Whenever I get a new student when the first thing that says, this is a free and open space for you. We can do whatever. Whether you want to talk about this week. Talk about last year. Talk about something that's happening tomorrow. Even if you just want to sit here and hum, it's a safe, free space for you.
> Sloth

Perhaps, for many mentees, such provision is the first time in which they can take the lead in their own self-determination. Though it is not simply about the individual, mentees know the mentors often see many autistic students. In this they do not see themselves as the outlier but in a place where they can belong. Several mentors spoke of mentoring adjacent communities that had emerged in their institutions.

> These safe spaces as a good way of finding your tribe. At [= =] a couple of autistic students, our postgrads, they set up their own [= =] So You Think You're Autistic Group for people that have been newly diagnosed.
> Ana Ray

Whilst not all autistic students want to meet with other autistic students, there was consensus that it was probably an even split. These wider meetings, that are sometimes mentor facilitated, create an access to other spaces of safety within the university.

One mentor elaborated further, through modelling spaces of safety and acceptance in the mentoring room, mentors might be able to persuade mentees to scheduling "me time" into their daily routines.

> You say “I do need to take an hour a day or a week or a month, just to… let everything come out.” Whether it's singing, dancing, painting, running, having that protected space for your brain. A protected space to let out the over-excitement and happiness out […] It doesn't have to be a negative space. […] Make that date with yourself. That's why I say to everyone, because you know you're not always going to have someone coming in and go “right here's your space, what do you want to do with it” […] If you let life control you your life becomes out of control.
> Sloth

Through providing a core experience of acceptance, mentoring can lead to self-acceptance. In doing so the students' lived experience is contextualise and validated through a neurodiverse paradigm. Perhaps, it was speculated, this reframing is the first step towards recovery from past traumas.

The speed of reacting to trauma

Master mentors were all too aware that the mentees that they meet may be processing all kinds of trauma.

> That's 'The' thing that you can't fix… you can't help them unravel everything all at once, because it's so messy, there's not everything that you can approach now. Sometimes it might take a year might take two years.
> Ana Ray

Rather than proposing fixing such things, mentors discussed the need to be able to 'hold' such narratives. Through creating these spaces mentors extend, what Ana Ray termed, a “permission to be fragile”. Universities can be framed as places of success and triumph, but they also need multiple framings of being real human scale places in which there are times to reflect on experiences in a wrong and imperfect world.

Mentors in the academy

There was an acknowledgment that some students arrive at university having had lots of direction from others, be that in education or in their wider lives. The long process of gaining skills, tools, and strategies of independence takes time. The university context of this self-direction causes tensions. The mentor is required to scaffold emerging self-advocacy in

real time. As was evidenced in the diaries, mentors may be requested by their mentees to support the drafting emails, to be present alongside meetings with tutors, or to find or be advocates for formal complaints. This real-time scaffolding sits at odds with the perceived role of the mentor by other university staff; summed up by Neko as being limited to "sitting in this room imparting wisdom to this autistic person". Mentoring is more than this; it requires action - and hopefully a little wisdom - outside of the containment of mentoring rooms and engaging with the learning community.

The mastery of difficult conversations

Discussion about attitudes of sexism, racism or homophobia that may be held by a minority of autistic students must refrain from what Ana Ray depicted as 'being like everyone else in criticising everything that they do'. If handled poorly, there was concern that difficult conversation could be perceived as hyper-critical. This in turn becomes internalised by the mentee into self-imposed rules about what is and is not allowed in the mentoring space. Done right, Claire's idea of the role of 'safe container' is enhanced. This requires a mentoring relationship where mentees can share worries, thoughts or beliefs that may be beyond the capacity of the mentoring relationship to deal with in the here and now. Rather such revelations are held carefully to be returned to over the mentee's time within this long-term relationship.

The careful removing of scaffolding

Sloth spoke passionately about strategies that they had employed to ensure that scaffolding was gradually removed from mentees as they took on self-determination. In doing so they co-created shared calendars with a high granularity of detail and then, after consultation, would remove one explicit instruction and check back to see that everything was okay. They spoke of occurrences in which routines would continue without prompts and

occasions where it would not. This co-reflexive strategy seemed a powerful tool to build towards independence, towards "handing back control". Key to this seems to be purposefulness. Giving control back so the purpose can be found.

> So, I always say to people, if you haven't found a purpose in your day… find a bit of time to find a purpose.
> Sloth

Places of misunderstanding

Mentors felt that there may be a particular issue with the medical model from medical and adjacent departments. Master mentors all had their roots in a social model of disability, which informed acquisition of a neurodiverse operating paradigm. The majority of mentors voiced an uneasiness with their interactions with medical and adjacent departments. Whilst diaries revealed the discrimination inherent in models of 'fitness to practice' of medical schools, forum discussions took this further with issues encountered by psychology students.

> I have a particular bugbear with the psychology department, who have the least understanding of everyone when it comes to autism or learning disabilities. When it comes to mental health, they've got a bit of an understanding. But, when it comes to autism is like a whole new world […] First let's just have a bit of empathy. This isn't a student that's making an excuse, because they went out and got drunk or… they cannot be bothered, this is a student that is trying their damnedest to be there but there's something that they can't get past.
> Sloth

A tendency towards pathologization from departments that study pathologies is perhaps to be expected but not encouraged. The experienced mentor will have to develop strategies for arming students with the necessary cognitive framework to be able to survive and thrive, despite the prevalent epistemologies of the subject studied. Then, with the establishment of many more autistic early career researchers, the edifice can be tackled from within.

Bureaucratic piracy

In order to keep their registered status, independent mentors have to perform "DSA box ticking". Whilst this bureaucratic process ensures that basic checks and accommodations are in place, it perhaps did not fill the mentors in the forum with joy. With a student first approach, it seemed that some bureaucracy was engaged with only so as to ensure continuing mentoring.

Within university contracted mentors there is a parallel avoidance of systems. There was a narrative of a university disability services wanting to have an email from students to say that they had attended, when they had attended. It seemed that, on this occasion, a two-pronged strategy was deployed. Having mentees question the "pointlessness" of it, coupled with the mentor ignoring it, led to the system being scrapped.

For autistic autism mentors this may posit particular joys and pressures.

> We do what we just have to do. Which is really interesting as an autistic mentor because I find that part of it makes me go "I love doing something other than what I'm told to do. This is so exciting."… But also there's a bit of a struggle as you're also going "I really want to follow the rules here".
> Claire

During one forum the concept of bureaucratic piracy was floated. Just as piracy is a way of surviving when trade routes had been co-opted by power, so bureaucratic piracy is that which seeks to ensure student survival when the structures of funding seem stacked against them. Not only this, but there is also a further layer of bureaucratic piracy that comes into play, it is not simply for the benefit of students. With the number of autistic autism mentors, the pointlessness of some systems of mentor management experienced need addressing.

> I look at things from some random angle, and no one else can find it half the time. And this is where I can struggle. If someone tries to micromanage me I can get frustrated because I'm like, "I've got you the final outcome you want, I've just done it my way. Show me a valid reason."
> Sloth

Lived experience is questioned. Lived experience can cause managers to be "skittish" in institutions that require resource allocation. In such situations it is an apropos accommodation for both autistic and allied mentors alike to present a measurable goal orientated approach to management, rather than the actual fluid "messiness" of mentoring.

Stages of being a mentor

The forum discussions brought to light the journey for progressing through stages of mentoring.

<u>New mentors</u>

Almost all the master-mentors of the forum spoke with a little dismay about some new mentors who come into the profession lacking the appropriate tools. These are new mentors who may use language of "deficit, disorder, failure", perhaps picked up from counselling backgrounds, and apprehensively approach their mentees as something that requires fixing.

> The amount of stigma I've seen in as ASD specialist mentors when they're not ASD themselves drives me nuts. I think this is where this sort of [participatory] research is key, because actually it shows them, there is another way of doing it. You don't just read a textbook and therefore understand someone. You've still got to think about the process and the person and listen.
> Sloth

For early career mentors who do not have the lived experience of autism there is a very steep learning curve which may limit their impact. It was suggested in the master-mentor forum that this could be something that arises from the recruitment of mentors from counselling, psychology or medical backgrounds that have an implicit bias towards a medical model of cure and fixing, rather than one that inhabits a neurodiverse paradigm.

> They don't need to be done-to. They're fine, just as they are. You just need to help them bring out the qualities of their own that will help them find their own solutions to whatever they're facing.
> Claire

There was consensus that a conceptual grounding needed to be more than simply parroting the social model of disability but is required to be one in which a neurodiverse paradigm was openly discussed and expected whilst the language of deficit was expunged. Once that is in place, the new mentor would need equipping in something akin to Maslow's hierarchy[65] so that needs can be addressed alongside integrated wholeness (Maslow, 1943).

Following these two fundamental prongs of affirmative language about autism and a knowledge of student needs, is an expectation of self-reflective mentors. Though developing such an attitude is not without its perils.

> It's very dangerous isn't it, operating in a vacuum. That is dangerous. I do think there are pockets of one person not being not engaging with other mentors or engaging with latest thinking.
> Neko

For isolated mentors, either working as sole-traders or in small institutions, there is - as yet - no wider body to ensure and provide such a culture through autistic-led mechanisms.

Established mentors

There was some discussion about the steps needed to grow into the profession. Chief among this was the need for mentors to 'relax' into the profession by easing the need to prove that mentoring was worthwhile[66]. This was not seen as something that could happen in isolation, but something that required a greater community of mentors to be able to meet together with a common understanding that it was a profession based on relationship.

[65] It is freely acknowledged that Maslow's hierarchy is a blunt tool and perhaps research is required as to how the construct needs to be more porous and better aligned to autistic dispositions.
[66] I am acutely aware of the tension of between this and doing a PhD in how worthwhile mentoring is.

> I want that to be part of the culture and the ethos, that we're just building relationships with people and we're not in this position of "we know and you don't know" [laughter] and just to help people relax really a little bit.
> Neko

Those who are starting to 'get' what mentoring is will be developing a deep understanding of how to work with independent young adults. Part of this is the, as Claire put is, "sitting back and watching proudly or fearfully [..] and just being there to catch them if it goes wrong".

At this stage the forum observed that division may occur within groups of mentors during wider disability team meetings. Ana Ray identified that there can be two camps of mentors, those that seem to 'get' the autistic experience, and those that 'talk on about nonsense'. Perhaps they are not yet aware of the 'extra work' that the going to mentoring needs from students, of the demands that are placed upon any minority group, or of the sensory needs that could be a daily assault on the autistic student. This second group are the ones that are yet to become master mentors. They are yet to humbly embrace their own flaws.

Master mentors

Perhaps the defining characteristic of the master mentors in their self-conception of being the "imperfectly perfect" mentor. The forum were all mentors who had developed a strong concept of their own place within the neurodiverse institution of the university. They had developed strong relationships with the students that they saw on a regular basis. Furthermore, the deep honesty of such relationships allowed them to see their own gaps in perceptions and conceptions.

> "Humility and bravery". The humility to know that you don't know everything about autism just because you've mentored 100 autistic students and bravery to challenge…
> Claire
> … and I think the fact that you don't ever know everything. That you're always learning. There's always something new. It's being receptive all the time and open. Knowing that just sometimes you might be getting it wrong…
> Anna Ray
> … and the confidence to own those mistakes. You know a lot of students I work with; they've never had anyone say to them, "Oh, do you know I think I made a mistake there".
> Claire

Such humility allows master mentors to function as an ally who happens to have some expertise, rather than the expert who wants to be an ally. As such they embrace the radical individuality of themselves and their mentees and seek to work alongside them for the betterment of their HEI.

> It doesn't have to be "I'm an expert, you're the person I mentor". You know you can actually be really good allies and work with each other. If you can get as a mentor to the working-with rather than doing-to, I think that's master mentor stuff.
> Claire

Professional accreditation

> Oh, can we have professional accreditation. That'd be brilliant. Please. How come mental health mentors get UMHAN and some kind of accreditation and we don't get anything? That's just rubbish.
> Claire

Mentoring of mentors

Whilst the mentoring of mentors is uncommon, there was evidence of master mentors ensuring the provision of supervision within the small companies that they ran. It was acknowledged that this was a weakness in the funding structure, particularly for those freelance sold trading mentors. It was suggested that supervision plays an important role in

ensuring that developing mentors move on from earlier stages where they need to prove their worth, to grow into mentoring through long-term relationships.

Collegiate mentoring

All mentors spoke, not just about the mental health needs of mentees, but about the border, overlap and interplay between types of specialist mentoring. The preventative goal of Specialist (Mental Health) Mentoring was seen as 'troubling' and 'offensive' when spread to the ethos of autism mentoring (Matthews, 2020, p. 18). There was a deep frustration that such approaches arise from a limited apprehension of the autistic disposition, and as such would flounder on the crux of the double-empathy problem (Milton, 2012).

One master-mentor considered the insight that autism specialists should be bringing to their colleagues. Specialist (Mental Health) Mentors who work alongside Specialist (Autism) Mentors have access to collegiate working that promotes autistic interpretations of students' presentation of sensory issues.

> Say somebody who has experienced the world and has had huge sensory issues. And they haven't really been believed. And they've had to internalize a lot of this stuff as they should just suck it up and get on with it. And therefore, have some mental health needs. Then actually if you're a mental health practitioner, and you don't understand that that is the impact of that, then you might just tell him to suck it up as well.
> Neko

Aside from frustrations that pivoted around the lack of understanding from specialists in nearby fields, there was also deliberation on the interplay between mental health provisions and autism mentoring in the context of students in and coming out of crisis. The lack of joined up provision was lamented.

The provision of mentoring

There was real concern over the practices of some institutions that tightly follow DSA guidelines and remove mentoring provision if mentees miss more than two sessions without cancelling in advance. Students live rich and complex lives. Such an overly officious interpretation, while protecting the incomes of mentors, was not seen to be in the mentees best interest. Consequently, nearly all mentors admitted to 'fudging' the paperwork by authorising unsent cancelations. This ensures that the balance between mentees autonomy and the continuation of provision but unfortunately does so at the expense of the unpaid mentor. There needs to be an overt stating that the deployment of mentoring hours cannot, as Neko put it, 'makes them feel backed into a corner' at a time when starting anew at university may make mentoring feel 'a bit suffocating'. Ceding control to the student is key to this, but it conflicts with the provision of mentoring through zero-hour contracts. If a mentee is not seen, then the mentors' financial stability is risked. But mentors were definite, the loci of control when providing mentoring needs to reside with the mentee. It is this locus of mentee control that permeates the following discussion.

Chapter 4

Discussion

A path through Specialist (Autism) Mentoring

The breadth of findings in this thesis requires a navigated discussion. To this end there follows four entwined discourses approaching the phenomena of Specialist (Autism) Mentoring in the UKs HEIs. Discussions then converge to find expression in a loose reflective Framework for Reframing in Specialist (Autism) Mentors for praxis and ongoing professional development. These discourses reflect the four concerns of the research questions (see Table 21).

Table 21
Research questions by discursive element

Discursive element	Principle research question
The "where" of mentoring: Location and fragmentation	What is the prevalence of Specialist (Autism) Mentoring provision in UK universities?
The "what" of mentoring Roles and dyads	What do mentees ask about mentoring? Do mentors hold theories that explain mentoring?
The "why" of mentoring: Holisticity and imperfection	What is discussed during mentoring sessions? Does the reported experience of mentoring in diaries resonate with mentees?
The 'how" of mentoring: Framing and reframing.	What should be foregrounded in a framework for Specialist (Autism) Mentoring provision in HEIs? Is the proposed framework seen as useful by those who may encountered it?

The following discussion will start with considering the 'where' of mentoring in a consideration of the location and fragmentation of provision in the profession. It will then segue to the 'what' of mentoring with the consideration of the phenomenology of a constructive role via backstage dyads, the management of stigma and other assorted forays into Goffman. Considerations will be brought together in the 'why' of mentoring by looking at a theoretical interplay that is grounded in the findings of the diary. This then plays into the 'how' as a model of framing and reframing mentoring is proposed. Finally, such work will find an outcome - not as a definitive exegesis - but as a loose framework for mentor development in five parts.

Despite being rooted in last century, Goffman's work is particularly apropos in the light of the findings of this thesis that weave – to use the title of his seminal works - 'frame analysis' with both 'stigma', and mentees 'presentation of self in everyday life' (1968, 1969, 1974a). Perhaps the gravitation towards such a theorist is that, like Goffman's work, mentoring cannot be reduced to a small number of themes, rather it takes daily interaction and holds it up for scrutiny so as to develop frames in which the experience of being a potentially stigmatised student can be set in order. It is in Goffman's *Frame Analysis of Talk* that his consideration of misunderstanding chimes with the negotiation of the double empathy problem (Goffman, 1974b). Requiring cultural competence or cultural interpreters to mitigate misunderstanding foreshadows Milton's interactional expertise so that – as a whole – 'the nuances of one another's perception and sociality' within a relationship such as a mentoring relationship can be divined (Milton, 2014a, p. 72). Potentially this may address mismatched understanding in a profession wherein at least a two-third majority are allied practitioners sitting across a dispositional gap from their autistic mentees.

A lens of autism gain

In the unpacking of the phenomenon of Specialist (Autism) Mentoring, it is useful to occupy the stance of *autism gain*. Whilst this analysis considers the specific instance of specialist mentoring of autistic students in UK HEIs, it will have wider impact. A lens of autism gain, as a subset of disability gain, can encourage great practice in other forms of mentoring. Disability gain contends that institutions - through accommodations made for disabled members - become better places for all members (Bauman and Murray, 2014; Goodley, 2014; Thompson, 2018); galleries with spoken headset tours are better for anyone who uses them, buildings that are wheelchair accessible are also pram accessible. Likewise, autism gain contends that institutions that strive to ensure autistic belonging also create structures of clarity and compassion that help others belong. HE systems that are grounded in

autistic participation as a part of their universal design, will be better systems for all. Such a positioning places autism gain as a robust conceptual enticement to convince institutions to move beyond deficit narratives by appealing to their spreadsheets.

One could convincingly argue, that autism mentoring can inform mentoring across the board through both its breadth and its perspicacity. Many students find themselves as a misunderstood minority. Many students have to deal with the anxieties and worries of campus life. Many students have perceptual needs that need to be supported. Specialist (Autism) Mentoring is a particular phenomenon in which all these needs intersect. Being an practice at theses crossroads means that autism mentors have expertise in many fields, consequently, it positions these mentors with a vantage inform mentoring in other HE contexts. Furthermore, in serving the needs of a cohort which can be deeply sensitive to the social and sensory environment, autism mentors can point other mentors towards practices of sensitivity and understanding. The complexity of the embodied autistic relationship with their immanent sensory world suggests that good autism mentors are - by definition – skilled in cross perceptual care of all; so they may be gainfully recruited to be a source of sage advice across campus contexts. The alternative of hiving off autism mentoring into its own unique and sacrosanct walled-garden is counterproductive for both mentees, mentors and their institution. Rather, mentoring that is good for autistic students could give shape to mentoring that is good for all students. This has the potential to be an *autism gain* in our institutions.

The "where" of Specialist (Autism) Mentoring

Before turning to the substance of Specialist (Autism) mentoring in the UK it is important to contextualise this provision. Specialist mentoring is a phenomenon contingent on university culture, and economic and political constraints.

A fragmented field

Specialist (Autism) Mentoring emerged in the UK university context as a response to policy and funding opportunities, and the very real needs articulated by autistic student advocates. With the demise of the quality assurance group, DSA-QAG, in December 2019 and the necessity for online mentoring that followed the COVID-19 pandemic, the landscape Specialist (Autism) Mentoring has changed (Disabled Students' Allowances Team, 2019b). At the time of writing, the revitalising of the 'gem of a policy' that is the DSA opens a much-needed opportunity for Specialist (Autism) Mentoring to reconstitute itself around guiding principles (Holmes, 2021; Cochrane and Holmes, 2022).

This picture of fragmentation it's not one without merits. Through the diaries of mentees and mentors, the interviews with mentees and the forums of mentors, vibrant microhabits of good and great practice were present. With little oversight there is a freedom for what became conceptualised as "brave" mentoring, seeking to equip students with attitudes and skills of advocacy to challenge the institutions of which they are part. Any move to unify the fragment field of Specialist (Autism) Mentoring through developing a reflective framework must be one that ensures such professional liberties to act holistically across students' needs are not curtailed.

Freedom of Information request from the SFE

Nowhere is this picture of fragmentation more evident than in responses to the FoI request from Student Finance England. There is a paucity of data available. A worrying indictment in a funding body which one would reasonably expect to have and use data to predict demand for services. The data that is held by the SFE aggregates Specialist (Autism) Mentoring with Specialist (Mental Health) Mentoring. Whilst, from an operational point of view, this simplicity allows for an allocation of funding, it provides very little steer for the recruitment and training of both mental health and autism specialists alike. Furthermore, conflation at operational level obscures the outcomes inherent in both types of mentoring. It is true that, for many autistic students, their route through university has mental health dimensions contextualised within the autistic disposition. Both forms of mentoring have common ground in seeking to remove barriers to learning to enable the continuation of students within their studies, but the practice can be quite different. Mental health mentoring aims for prevention and alleviation of relapse in the individual (Matthews, 2020). To extend this core calling of prevention to autism mentoring takes a very dark turn[67]. Autism mentoring, as will be suggested here, has a role in ensuring advocacy so that students can tackle issues not in the individual but in the community in which they belong. If funding reflects an unspoken policy that places that loci of intervention in the individual, then there is a disservice to the social context of autism. Issues that stem from a double empathy problem cannot be solved on simply one side of the social equation.

Optimistically, perhaps conflation of SFE data can be interpreted as the pioneering work that has been done within HEIs emerging from a singular funding model[68]. The emergence of Specialist (Autism) Mentoring as a distinct provision over the last decade has been led by dedicated mentors following the wishes of their mentees in the field.

[67] As a mentee told me many years ago, "Prevention of autism is a bit gulag-y".
[68] With the notable exclusion of Cambridge University who funds supports internally via a Reasonable Adjustment Fund (University of Cambridge DRC, no date)

What the freedom of information request does reveal is that 19,518 students are in receipt of either Specialist (Autism) Mentoring of Specialist (Mental Health) Mentoring, with some 694,750 hours of mentoring allocated to them. While not all the hours will be taken up by students, reports from mentors as being busier than ever is testament to the continuing emergence of a profession as a key pastoral provision within our institutions. With an eye to the future, an estimated £37m will be needed to enable full uptake for the 16,685 autistic student in HE in 2020/22 (HESA, 2022a).

The gatekeeping of mentors

This fragmentation of Specialist (Autism) Mentoring was evident in the scoping study. In investigating the UK's 169 degree-awarding bodies, a trawl through university websites revealed a field ripe for obfuscation. Most universities gatekeep access to specialist mentoring behind Disability Offices, broader Welfare Departments, or hubs of Student Services; though 4% of institutions have either autism specific provision or named Specialist (Autism) Mentors on their website, but this needs to be the norm, not the outlier. There is good practice to be optimistic about[69].

Two core observations were made. Firstly, disability offices are often situated behind labyrinthine automated email support systems. These allow dedicated staff to get on with their daily work without being distracted by interested researchers; but in doing so these systems add institutional insulation that creates silos of practitioners while obscuring available support from prospective students. Secondly, universities are not the sole providers of Specialist (Autism) Mentoring, and many students are required to source and engage the services of a mentor from third parties. Both barriers to mentoring are particularly

[69] This requires a note on positionality, I am a Specialist (Autism) Mentor myself. In the following unfolding of the roles and requirements of Specialist (Autism) Mentors it is apparent that optimism - whilst maybe not a defining trait - is perhaps a prerequisite for getting up and doing a job that every day requires engagement with educational systems. As a researcher in the field of autism studies, I need to believe that things will get better for the autistic community which we serve. Optimism is a default as the alternate is too close to despair.

problematic at times of transition, when support is perhaps needed the most (Schindler *et al.*, 2015; Hotez *et al.*, 2018; Cage, De Andres and Mahoney, 2020).

Specialist Mentoring provisions in UK higher education

Analysis of the scoping review suggests 1:240 UK HE students should be receiving Specialist (Autism) Mentoring[70]. The freedom of information request to SfE revealed mentoring funding for 1:130 students, which suggests that the ratio of Specialist (Mental Health) Mentoring to Specialist (Autism) Mentoring in 2019/20 is close to even[71]. Yet for Specialist (Autism) Mentoring there is, as yet, no national body or need for professional accreditation as there is for Specialist (Mental Health) Mentoring (Disabled Students' Allowances Team, 2019a).

With 16,685 autistic students disclosing to their HEIs in 2020/22, and 7939 taking up specialist mentoring, it seems that many are unable, unaware or unwilling to access mentoring (HESA, 2021b). Furthermore, these are students who have disclosed a diagnosis of autism and does not encompass the as-yet undiagnosed. Having only 55% of autistic students in receipt of funded mentoring posits questions for the future research projects. Are the mechanisms for receiving mentoring not adequately signposted during transition into university? Do barriers to needs assessment disenfranchise specific demographics? Are these students who do not wish the stigma of support? Perhaps, most critically, it is beholden to individual HEIs is to ensure they are openly offering higher education in which these remarkable students can flourish.

[70] 95% ci varies from 1:480 to 1:160
[71] 54% MH to 46% Autism mentoring

An uneven picture of provision

> Student support services was not as joined up as some think, students can fall through the net.
> Lily Learning

The scoping review of HEIs paints an uneven picture of the national Specialist (Autism) Mentoring provision in which a number of UK HEIs reported both markedly higher and lower than expected provision of mentoring (see Figure 18, p.155). Such analysis compounds the observation arising from the freedom of information request that the field of specialist mentoring had emerged from the economic outplay of a funding model rather than a planned provision with smaller institutions more likely to use third-party providers with fewer ties to the host institution.

This undulating landscape of provisions in UK HEIs is one in which about half of mentees see a mentor who is part of the institution in which they study. For the other half there is an indirect link. The forum of mentors identified risks in mentoring that is disconnected from institutions. Without adequate avenues of communication in place the capacity of mentors to act as a co-navigator and negotiator through HEI bureaucracies and systems is curtailed. Bridging the institutional distance may require extra impetus from external mentors to ensure that gaps in integrating into existing institutional strategies for extensions, exam accommodations, and wellbeing support are addressed. Finally, it places the burden of access to mentoring on the students and their families. In creating a barrier to access, aspirational goals of autistic students' independence may be limited from the outset. Reports of large NMH suppliers limiting mentors from communicating directly to university staff is a worrying indicator of the siloisation of what should be holistically positioned support (MacLeod and Green, 2009). Furthermore, the shackling of mentors' operation within institutions provides a service that compromises outcomes and runs the risk of minimising the future reputation of the profession; particularly when the shackled come with the lowest tender.

Early aftershocks from the COVID-19 pandemic

> By allowing students to access support in various ways and allowing them their choice of medium - messaging, voice call or video call (and sometimes a mix through the session) I have had success with students opening up far more than they do face to face.
> Nicola

Whilst this work does not want to dwell solely on mentoring during the pandemic, there are potential aftershocks that will continue to challenge and change mentoring practice in the years to come. The move to having online mentoring as a possibility has freed mentors to work between institutions more easily. Students, in return, seem to value mentoring in whatever form it takes. Diaries chronicled the advent of online mentoring and suggest that principles of good practice enabled rapid development before SFE led diktat was officially agreed.

Rising diagnosis

> I believe that if a university environment supports and promotes a positive autistic identity such as neurodiversity, that students with autism can hugely benefit from this both within their academic learning and personal growth.
> Ellie

With the continuing upward trend of autism diagnosis in the UK we have not yet reached autism stability within our university communities (Russell *et al.*, 2021). Though the rate of increase is slowing, the absolute number of autistic students coming to university continues to rise (HESA, 2021b). It could be contended that autistic students are studying at a pivotal time. The period of rapid increase in numbers that required swift changes in higher education is, probably, coming to an end. Institutions are not always great at swift changes, and so the last decade has been a time in which autistic student advocacy has been sorely needed and a biome in which the emergence of mentoring provision, which sees itself as both brave and slightly subversive, could occur. There are very tentative indicators that a more

stable autistic population in our HEIs in the last couple of years has given autistic students the solace of belonging as part of the fabric of university (MacLeod *et al.*, 2017; Cribb, Kenny and Pellicano, 2019; McLeod, Meanwell and Hawbaker, 2019; Lei and Russell, 2021).

The role of the mentor

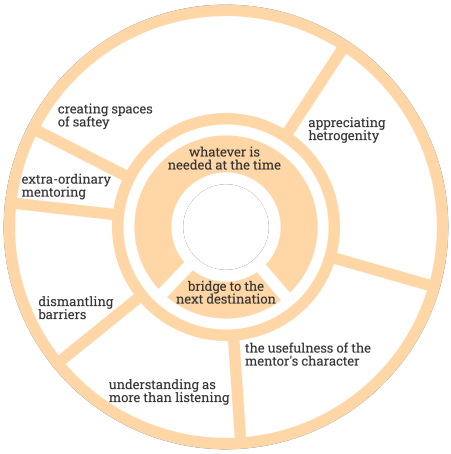
In diaries mentees and mentors narrated multiple constructions of the role of the mentor. The context of forums that dwelt on fearlessness, the cherishing of advocacy, and the creation of spaces of safety might lead to speculation that there is a pragmatic use of the mentor's role that is contingent to whatever corner the mentor needs to defend. As such, the following observations are intended as a launchpad for multiplicity, rather than a narrowing to one specific way of being a mentor.

A mentor's role spans multiple domains held in tension. There is a future looking hope in the core provision of whatever is needed at the time, and in being a bridge to whatever the students next destination is; there are the underlying values of the mentor's character; and the position the mentor holds - and is seen to hold - within the academy.

<u>The temporality of mentoring</u>

The model of the mentors' role that emerged from diaries had an interplay of two fascinating core concepts, those of providing whatever is needed at the time, and being a bridge to the next destination (see pp. 173 & 174). What is apparent in the temporality of both is the omission of the past. Whilst mentors are acutely aware of past dismissals of mentee's experiences, there is a wariness about

Figure 35
A model of the themes of the mentoring role from mentees' and mentors' diaries 2020/21.



**size of pie of theme is relative to prevalence in diaries.*

becoming mired in the past rather than developing fulfilling ways of being. Mentoring, in the specific context of Specialist (Autism) Mentoring in HEIs, was seen by mentors to exist in the domain of the present and the outworking in the near future.

> I spend a lot of time talking to students about the need to reframe, to find alternative ways of looking at things [people can] get 'stuck' in a particular way of being or feeling, and it doesn't have to be like that. It's a hard concept to learn though, and harder still to put into practice!
> Melissa

Conversely, this concern with the present and future is not a practice that can be rushed. There is need for an enduring relationship in which a slow and gentle approach to negotiating the reframing of past hurts.

> It takes time to unpick years of deficit-based judgements that have been thrust upon autistic people over the years.
> Neko

<u>The values and character that the mentoring role instils</u>

Specialist (Autism) Mentors who can hold these enduring transformative relationships do not materialise in isolation. Whilst skills may stem from the of values new mentors, there is the honing that occurs through the daily encounters of the job. This development throughout a career is entwined with the mentor's own disposition creating rhizomic tendrils that may come to fruit in individual meetings with individual mentees. For autistic autism mentors, who numbered a third of this study, embodied experience becomes a node of reflection in encounter with mentees. For allied mentors, they may bring their own neuro-divergence or position in the predominant neurotype…

> each person's experience is different so it is important to listen, to draw on previous experience of mentoring other students with autism, but to try to keep an open mind about what might be difficult for each individual.
> Lucy

Interestingly, no statistically significant differences in themes discussed were observed between dispositional groups. Autistic and allied mentors seem to talk about the same things. Such a convergent multiplicity suggests mentor's values are 'not arborescent' - they cannot be

modelled in tree like structures - for to do so would invite a hierarchy which in turn would give privilege status to other hierarchies (Deleuze and Guattari, 2013, p. 15)[72]. While in no way being an exhaustive list, the forums and diaries of this project indicate the place for an appreciation of the heterogeneity of autistic presentation, a capacity for being self-reflective as a mentor, a sincere delight in the success of others, kind optimism and positivity, the vulnerability to be an ineffectively effective mentor, courageousness, and fearlessness, and finally - above all – the humility of any mentor. It is from this value laden milieu that an abiding encounter that becomes a support emerges.

Understanding and professional humility

The role of mentoring hinges on understanding, brought to genesis in this project through the elicited question of a mentee-hypothesiser, Mollie; "Do you actually understand us? Or do you just listen?". A mentoring relationship is one in which there will be multiple encounters with the reciprocity of the 'double empathy problem'(Milton, 2012). A 'problem' in the sense of an equation that requires solution, rather than 'problem' in the sense of a judgement of disruptive nonconformity[73]. With allied mentors the negotiation of a shared reality across a dispositional divide is a given. With autistic mentors, this negotiation still occurs across the division of personhood but does so with the added nuance and texture of shared experiences.

> I am autistic - I think this gives me an insight into some of the experiences that other autistic people may experience - particularly around sensory and communication styles and preferences.
> Louise

[72] There is a temptation to analyse the phenomena of Specialist (Autism) Mentoring in terms of assembly theory; and while this may bring insight as to what mentoring is, the necessity of developing a pragmatic framework composed of monadic goals for mentor development sits at odds with an epistemology that tends towards notions of oneness.

[73] Unless mentees and mentors alike enjoy a little disruptive nonconformity, then, by all means.

> If you mean "do we understand what it is like to be you", then no - but no more than anyone else can understand what it is like to be anyone else (even if we are also autistic, which I am).
> Claire

The best mentors are those who approach their mentees with honest consideration, knowing they are encountering worldviews that may not be founded in the same acknowledgment of salience. This creates a radical exigency within the greater concept of mentoring; that perhaps the fundament of Specialist Mentoring is bridging of worldviews, of *weltanschauung*, rather than the installation of social norms.

Within the long-term mentoring relationship, the negotiation of shared worldviews seems pivotal to enabling conversations in which mentees feel themselves to be known.

> Interestingly, one of my students recently said it was the first time in her life that she had felt truly understood (and she is a mature student in her 50's).
> Nicola

This gentle negotiated shared understanding of the mentee is deeply transformative for students who have grown up with what Anna Ray termed "expectations of conformity" and Lee conceptualised as the "normatives that create isolation and alienation for people with divergent needs and experiences". In being understood mentees find the acceptance and sense of belonging that shores up the longing to continue studies (Cage, De Andres and Mahoney, 2020).

In diaries and forums there was a recognisance of understanding as being more than the act of sitting in a room and listening (see p.175). Whilst skills of active listening are valued as an ingredient in mentoring relationships, mentors strived for more than engaged questioning and a restating of narratives (Weger *et al.*, 2014). This starts with Lee's "clarification on details or feelings, or experiences to make sure I understand what a mentee is communicating as fully as possible". From clarification understanding is built, but mentors go further, in NatSav's method of "actively listening and accepting". Understanding by mentee and mentor sits within an overt acceptance of autistic presentation and embodiment.

In the overt acceptance, there is an undoing of Hacking's invocation of isolated 'non-Vygotskian' autistic being in a mentoring context where the 'internalisation of social relationships' is given grist (Ian Hacking, 2009). Autistic students, oft marginalised and excluded, are radically included through a mentoring relationship that embodies Lady Bigfoot's "acceptance and love of all things different".

This love of difference permits mentors to have an abiding unconditional positive regard for the mentees encountered. It enables them to appropriate the therapists person-centred work by being 'be ready to meet the other, whoever they may be' (Mearns *et al.*, 2000, p. 90). Such love appears rooted in the professional humility enfolded in Jake's mantra of "sometimes I understand, sometimes I just try". It is this humility that enables the "patience and willingness to listen" coveted by Rosie in her mentors.

Humility requires resilience. Good mentors know that they do not know everything, yet they operate in universities where not knowing can be seen as anathema. There is a vulnerability, not just of zero-hour contracts and precarious commercial networks, but in being professionally-unsure and openly deferring to the expressed needs of students.

Humility and being openly unsure is a requirement for effective mentoring. All mentoring, whatever the context, exists within a gradient of power. Mentoring as an orientation towards 'local culture' requires one who stands within that culture (West, 2016, p. 24). The manager inducts the recruit into the organisation; the surgeon directs the novice's acquisition of skills; the supervisor discusses lessons outcomes with the newly qualified teacher; peer mentors are across a gradient of experience; even in reverse mentoring the mentor is elevated by dint of their membership to junior ranks and accorded a degree of authority over a senior mentee. Specialist (Autism) Mentors - whatever their relationship with host universities – are conferred authority by dint of the role. Conversely, the role is to both make known and reforge invisible structural tethers and to employ them in the task of empowering their mentees. Such work requires humility, to be an authority that dismantles

authority. This is more than translating or making known the prevailing institutional culture, it is helping build a joined-up academic culture that no longer needs translating by moving away from 'hegemonic view of what constitutes 'normalcy'' (Milton, 2013, p. 2).

This does not seem to be a mentor guiding a mentee. That is, what Goffman considers to be a cycle of passing; wherein a stigmatised individual moves from 'unwittingly passing', to revealed passing, to 'passing for fun', to routine passing, to disappearance (Goffman, 1968, p. 100). Rather, it is mentoring with the intent of making the individual known. And while the mentee may wish to mask outside of the mentoring room, inside the room there is the possibility for a relationship that develops authentic ways of being together.

Positioning mentoring within the academy

Constructs of authority, humility and authenticity cannot be considered without regard to the habitus of student, the habitus of the mentor, and the field of HEIs in which these relationships grow. While all participating mentors worked in concert with university disability offices, not all found them supportive. Occasionally, issues were not acted upon in a timescale that supported the weekly mentoring meeting. Rarely, but sadly not never, the disability office became yet another party in need of an intermediary to clarify communication to students. For the rest, it can be assumed that no comment belies a benign institutional neglect in which mentoring can function rather well.

In the forum one master mentor raised the pressures coming from large mentoring providers. There were two concerns: firstly, that such providers can use their size to enable them to bid for provision without having mentors in place, and secondly such larger NMH suppliers have - presumably following complaints from HEIs - limited their mentors from directly contacting staff at the host university. Mentors, of course, circumnavigate this by spending mentoring time aiding mentees to advocate from their student email accounts.

Potentially, this does not aid the student to the same extent that embedded mentors do through weaving the student into informal conversations and backchannels.

There is a further precariousness in a funding model that promotes zero-hour contracts. Embedded mentoring provision with a salaried position is rare. For the vast majority the tying DSA funding to individual students brings professional vulnerability. One in ten students do not complete the year[74], and should a mentee leave then the mentor has to reconsider their economic ability to continue (Office for Students, 2019).

Mentoring services require some basic needs to be provided for by their HEIs in order to fulfil their mandate. If mentors should be creating spaces of safety within institutions, then the physicality of the spaces is important. The COVID-19 pandemic and the shift towards remote mentoring has, at least temporarily, removed a little of what Jake recounted as the "stress around finding suitable spaces to meet at the university has gone". For mentors operating outside of a direct relationship with the student's HEI, there is vulnerability in meeting without space granted by the institution. Whilst recent guidance has made this need for space that takes 'account of confidentiality, accessibility, health and safety, and lone-working requirements' explicit, for third-party mentors good bonds with disability offices will need to be independently forged to ensure access these suitable meeting rooms (SLC, 2022).

This is more than having a room in which to hang your coat, professional specialist mentors can create havens in the frenetic corporate-academic machine. When supported by faculties they provide an ethical impetus that gives permission to create quiet spaces that extend 'room for both others, and otherness' (Berg and Seeber, 2016, p. 59); to find the safe places that Lady Bigfoot found, "hidden amongst a world of noise, hustle and bustle". Such a

[74] It is quite heartening that the continuation rate for UK autistic students since 2012 has been between 88.1% and 90.5%. Whilst this is still lower than students who do not report a disability, which has ranged from 91.4% to 92.3% it is far better than the 38.8% graduation rate reported a decade ago in the US that still informs some narratives (Newman *et al.*, 2011).

consideration of academic time sees the built-in slowness of the mentoring process as an ethical act that allows inclusive practice in a system that leans towards haste.

This slow-mentoring amongst the bustle permits time for students to reflect on how their campus experience. Many mentees and mentors passed comment upon relationships with academics, disability offices, and wellbeing services and provisions. This often places the mentor at the nexus of communication as the student negotiates their own needs. For those mentors employed by their host institution, connections with disability advisors enabled funding to be sought, wider mental health support to be accessed, and a chain of process to be followed whilst requesting support from academic departments. However, the time lag was an issue, particularly for mentors working one-step removed from the institution. An account of a fridge request to keep essential dietary supplements for an eating disorder revealed an inflexible system wedded to process. Good communication between mentors, disability services and academic is key.

This raises a concern over the current mixed economy of in-house and third-party mentoring. It is not to suggest that third-party mentoring cannot be effective, but there is an additional burden on the mentor to integrate. This can be compounded by reported edicts from large third-party providers for mentors not to be in contact with academic staff. If Specialist (Autism) Mentors are to act as communication support, this raises obvious conflicts. Furthermore, they are removed from the layers of support afforded in-house mentors by disabled staff services. Aside from the protections extended by the HEI, one autistic autism mentor revealed that they were part of a neurodiverse researchers' group, and one was part of an autism support group for autistic staff and students. Such mutual support seems essential to belonging within the academy.

What is evident in its absence across is any system of mentoring supervision, for in-house and third-party mentors alike. Whilst mentors may work for disability offices, they often do so at arm's length. While this means that they are often agile enough to provide the

individualised holistic support that is needed, they are entrusted with an implicit policing of their own boundaries. This is a systematic weakness. Specialist (Mental Health) Mentoring providers like UMO provides compulsory, accredited supervision for their mentors. It can be surmised that such a provision may promote good boundary keeping and hand-over between provisions and assuage in mentors a fear of flexibility in their practice. Perhaps such an arrangement is overdue for all specialist mentors. Furthermore, particularly for those working outside their host university, supervision might bridge the institutional gap, providing security and insight into disability practice.

A performative dyad of mentoring

Slow mentoring is a relationship between two persons who are taking on specific, but potentially hazily understood, roles. For established mentors they will have already created a mentoring-performance in which to engage, but for new mentees and early career mentors this is not the case. Well-established fronts will be tried on as they settle into their roles[75]. As fronts are often selected from existing roles within institutions, professional mentors may have issues in being assigned a position within a university. Whilst not being tutors or lecturers, mentors are often conferred a room of their own. Neither are they management or administrators and yet they are often permitted access to useful institutional systems. These established institutional elements of 'sign-equipment' allow mentors to perform a role that does not necessarily have to be understood by the wider community (Goffman, 1969, p. 39).

In the field of business formal mentoring has an element of public performance in as much as mentoring relationships are known to colleagues. Conversely, Specialist Mentoring

[75] As an older mentor, it has really been no surprise to find myself saved in mentees' phone contacts once as Dumbledore and twice as Yoda.

takes place out of view of such attention. To dabble with the organisation of the intimate in Goffman, Specialist Mentoring is a backstage rehearsal.

A foray into Goffman; mentoring backstage

A dramaturgical analysis of the performance of Specialist (Autism) Mentoring perhaps explains the perennial fixation of room allocation in the life of a mentor. Such a space on campus provides a retreat for autistic students and a 'back region' in which the performance of being a student can be dropped. Scripts of a personal front can be honed, and the costume of student-as-character can be refined. In having a room that is visibly campus but, 'cut off from it by a partition and guarded passageway... a performer out in front can receive backstage assistance while the performance is in progress and can interrupt his performance momentarily for brief periods of relaxation' (Goffman, 1969, p. 115). On the campus the black box of mentoring becomes its own curated sign-equipment; the door ajar, looking into a cosy room affords a sneak-peak into the mentoring reality[76]. A region set apart within universities to ensure autistic mentees can buffer themselves from the academic and social demands that frame the university stage. In this removed room mentors can pass on a genuine appreciation of 'negative capability', the ability to live with the doubt and uncertainty that engagement in the untidy field of human relationships (Smith and Alred, 2017, p. 109).

This theorisation of mentoring comes with a word of caution. Being a backstage and thereby hidden provision, Specialist (Autism) Mentoring runs the risk of further obscuring autism from public sight. Whilst this preserves the dignity of students and can sidestep issues of stigma that overt interventions bring, care is required in setting up and running mentoring provisions so that autism is not sub-contracted out of the university. There is an onus on

[76] This projection of a slice of the mentoring reality leads to mentors stewarding the look of their offices and, of late, their zoom backgrounds. A silent contretemps has been held between chaplaincy and mentoring services in one institution over who got to keep the Victorian chaise lounge, not because of any need of a piece of furniture with dubious structural integrity, but because of the look of the thing.

mentors to prepare mentees for radical advocacy that allows them to declare, “we are autistic, and we are here”. Perhaps there is still hope for an ‘autopia’ yet to come in which mentoring is seen as simply one among many encounters in a neurodiverse space (Beardon, 2020).

Dyadic mentoring and making stigma known

When considering the backstage quality of the mentoring room, it is a short step to reflect on Goffman’s concern for presented codes of authenticity from professionals, of whom Specialist (Autism) Mentors can be counted. These are chiefly: ‘formulae for dealing with tickly situations’; supporting other autistic students; ‘the type of fraternization with normals that should be maintained’; which acts of prejudice ‘he should blink at’ versus the prejudice that should be openly attacked; if and when to mask, and when to seek accommodations; and how to voice autism pride (Goffman, 1968, p. 133).

Such codes may stimulate the mentee towards a critical attitude to situations with a ‘special aliveness’ to the ableism and alienation that permeate the social sphere and a hard voicing of the betrayals that they have been subjected (1968, p. 136). Autistic students, as Neko observed, “often come under more scrutiny than those who aren't”. Offers of help for imagined needs can be proffered and become microaggressions stemming from, what Louise identified, as “patchy understanding”. Such behaviours from staff and students calcify an out-group alignment that creates a ‘shadow’ which requires resistance; autistic students are ‘not a type or a category, but a human being’ (Goffman, 1969, p. 140). Week by week mentors reinforce resistance by embodying common humanity.

> I would hope that as a human being I understand you as a fellow human being. Andrew
>
> I don't feel that there is a divide between myself and the students I work with (not in a way that means I don't know my boundaries), but in a way that means I don't think there are unfathomable distances between us, particularly if I listen well and don't expect to understand everything that person experiences. Neko

This push-back against out-group alignment can manifest as mentees give voice to, what Hazel termed, a "dismissal of difficulties". Having a place in which these can be vented provides a place of safety in which mentees 'openly question the half-concealed disapproval' they encounter on campus (1968, p. 148). Goffman's analysis is not all bleak; group affiliation and alignment can develop an authentic autistic identity that skirts the emergence of 'militancy' and a desire for segregation (1968, p. 138). Negotiation of in-group and out-group tension suggests why a mentoring journey may need to be embarked on. The mentee may find some mileage in humour as a 'lubricant' for their mentor's awkwardness[77] (1969, p. 141). There was evidence of mentees setting up neurodiverse support groups which as a folkmoot through which to develop and discuss prejudices that should be resisted, and those that should mealy be blinked at.

Having considered how the backstage phenomena of Specialist (Autism) Mentoring presents and how the role of a trusted and humble mentor is constructed through a deeply holistic provision, it is wise to dig deeper and to consider why such provision is needed, and why it is a task that seems to pivot around the framing and reframing of student experience.

[77] "It's kleptomaniacs that take things… literally". Anon mentee.

The "why" of Specialist (Autism) Mentoring

Mentees and mentors alike spoke of the barriers and challenges encountered by autistic university students. In reductive terms mentoring exists so that these barriers and challenges can be removed or assuaged. A more nuanced debate emerges from diaries and forums. Mentees and mentors constructed mentoring as a space for autistic identities. In a relationship that attends to all that is needed for a flourishing student life, a bridge between ways of being and the home institution is built. As such, Specialist (Autism) Mentoring resides past the three dimensions of student experience of barriers, challenges, and cultures of success, and instead creates a transformative bridge building space in which the process of framing and reframing experience can assemble.

Space for Autistic Identity

Whilst both Goffmans' analysis of stigma and the framing of the mentoring room as a particular dyadic backstage sphere can describe the phenomenon of the mentoring relationship; further consideration is necessary to make known the interplay between stigma and the challenges of poor mental health of autistic students often encountered by mentors (see p.187).

If autistic disposition is constructed as part of an identity rather than a deficit, then poor mental health is not inevitable. Rather stressors for poor mental health reside chiefly in the victimisation and the expectation of rejection that autistic people experience as a stigmatised minority (Botha and Frost, 2020). From this it may be argued that provisions, such as Specialist (Autism) Mentoring that, as Bil wrote, "contribute to break down stigma". It does so by promoting better mental health through the processing of moments of victimisation and by the projection of an expectation of belonging within the university.

Two participating mentors recounted processes of re-framing aspects of mental health conditions as neurodivergence. The field of mental health is prime territory for the pathologizing of experience that itself builds loops of stigma and complex trauma (Gates, 2019). While in no way seeking to undermine the severity of mental health conditions, it is possible to reframe daily experiences. Anxiety arising in perfectionism can be framed as the desire to do things well. Issues with motivation and procrastination can be reframed as taking time to think things through or to deal with other more pressing matters. The need to rest and recharge is not a sign of weakness if framed as a responsible reaction to a too busy world. Being conscientious to a fault is still being conscientious.

> By claiming the positives of often negatively categorised labels it becomes more manageable to filter out what might be experienced specifically as negative and to focus on managing those aspects through reflection or support, rather than the whole issue which is often inherent and contains positive attributes.
> Lee

Stigma and the medical model of medial courses

Chief amongst diaries and forums was the institutionalise stigma on courses that themselves are vested in a medical model.

> A few students I work with are studying either medicine or veterinary medicine and there is a consistent sense of stigma around them seeking support, or even disclosing anything much about their needs and differences for fear of meeting with issues around 'fitness for practice'.
> Lee

This is stigma rooted in a medical model held by medical professionals in a medical institution and requires particularly nuanced navigation by mentees and mentors alike. Medics require reflective tools to avoid the modern Hippocratic oath's 'twin traps of overtreatment and therapeutic nihilism', but both overtreating and undertreating alike are predicated upon treatment (Mamede and Schmidt, 2014). This treatment predicate permeates formative medical education. As such perhaps there is a need for the mentoring space to be open to autistic medics as one in which this potentially identity-corrosive duality can be

formulated in a way that does not internally fester. With the increasing pressure on the medical profession and the decline of support such as the firm apprentice model, DSA funded Specialist (Autism) Mentors under the NHS bursary scheme are uniquely positioned to bolster support (Moore, Kinnear and Freeman, 2020). Such mentoring needs to find ways to unravel alienation compounded by an expectation of the care of caring professions;

> you'd think that given the extent of medical evidence associated with gaining appropriate support that an understanding and empathy would exist within the medical spheres for reasonable adjustments and reducing stigma, but this is not the case.
> Lee

Resource allocation and the medical model

A course rooted in the medical model is not the only structural HEI pressure upon internalised stigma. Vestiges of medical models in the deployment of supports can lead to,

> barriers being put up by students themselves who do not think they need or deserve support. There can be a stigma attached when someone has support of any nature.
> Nichola

The current system of resource allocation via the DSA is one that relies upon the production of medical evidence to service gatekeepers. In applying for a 'Disabled' Student Allowance at the start of a university career a student can have their first encounter with a disabled identity that might be "allowed" in, and may also reject autism as a fostered identity based on 'ascribed characteristics' (Watson, 2002, p. 511). In turn DSA and transition support in the form of early mentoring are avoided until a later moment of crisis.

> The DSA system is fraught with anxiety, and overwhelming difficulty for many students and results in support being given at a late stage for many.
> Lady Bigfoot

It is telling that no mentee or mentor, in written diary submission or spoken forums, referred to the DSA in anything other than its acronym form. The omission of the word disability speaks volumes about the uneasy balance that is made between a potentially stigmatising outing to gain support, contingent self-regard, capacity to mask, and an authentic autistic

identity. Such an omission of the language of disability is the 'contradiction of diagnosis' as mentees and mentors construct autism as a difference that warrants support, but without inherent medicalised impairment (Gates, 2019, pp. 48–49). Such self-identifying constructs liberate through internalising belonging within 'indeterminacy' and evading a binary notion of discrete packages of disabled or not (Singer, 2017, p. 44). Mentoring creates a space…

> to reframe their experiences as an autistic person rather than a 'substandard' non-autistic person […] but undoing a lifetime of built identity is ongoing and not linear. […] to develop a more positive and realistic sense of identity. Neko

It is clear that an authentic, liberating, autistic social identity is linked to improved mental health (Cooper, Smith and Russell, 2017). Acceptance of an autistic identity by self, and others, predicates a better quality of life in measures of employment and education (Cage, Di Monaco and Newell, 2018). In this there is a bind for the mentor; promoting liberating autistic social identities may invite stigmatising responses.

> We talk about ways to promote self-acceptance at least, and ideally ways to promote acceptance in their institutions, but really this involves too much risk for most students to engage in raising issues that promote better awareness of the social and cultural aspects of neurodiversity, instead of being medicalised. Lee

Resource allocation by the institution and the risk of advocacy can focus on resilience training through developing adaptive behaviours (Adams, 2021). The mentor must be aware; resilience is a two-edged sword. Whilst psychosocial resilience itself cannot be faulted, a focus on resilience without the radical edge of 'troubling identities' omits the field in which resilience is needed (Goodley, 2005, pp.337, 342). Resilience is required when you are required to live with an unjust system. Perhaps autistic students can become harbingers of change in their institutions. A university that expects its autistic students to sit quietly and simply persevere rather than advocate for change is not being the best university it can be. It would deserve to be troubled. Mentoring with a model of replicating some mythical norm of student habitus rather than student agency to bring about change is missing a pivotal piece.

This suggests times wherein the mentor may take up allied advocacy. Staff understanding can be addressed by HEIs. Mentors have professional insight and - at least in the forums of master-mentors - a predilection for fearlessness and subversion. They are uniquely placed to mitigate the risk of student's self-advocacy as specialist and supportive critics. In this role they can become a keystone in bridging an institution in which a construction of identity is informed with mentees experience of this construction.

To find a bridge

Conception of student mentoring contrasts the specific academic subject learning with the broader 'life learning' of mentoring (Nora and Crisp, 2007, p. 343). Seminal writing on university autism mentoring finds support workers using the language of bridging about their own roles as communication facilitators (MacLeod and Green, 2009). From the diaries solicited for this thesis, this model can be developed (see p.174). The role of the mentor is in…

> being a bridge that people travel over to their next destination.
> Lilly Learning

Such a notion of mentoring constructs it as being less what mentors do, more what mentors are. Rather than the *doing* of communication facilitation, it is in *being* the one who stops, listens, and becomes part of the act of communication. By building the backstage place of easier communication the mentee is prepared for roles and given the confidence of a mentor understudy.

Furthermore, mentoring is not articulated as a destination, but a conduit to whatever lies next for the mentee. It is a bridge over three or so years that sits on piles of the next hour, the next day, or the next week. While the experience of university can have deeply pivotal moments for the student it is only a small slice of their life. As such mentees and mentors considered the need for holistic mentoring so that independence and self-advocacy can be

taken onto the next destination. Mentoring needs to have scope to address all that limits playing the role of student.

To provide whatever is needed

> Mentoring often needs to cover many, many different things. It is often really important to connect with the wider university and outside services in order to help students.
> SD

Systematic analysis of the prior literature on the autistic experiences of university suggested three core domains of barriers, challenge, and narratives of success. In such a schema, barriers are phenomena extrinsic to the student and that limit engagement. Challenges are those phenomena that limit flourishing but find their loci in the negotiated relationship between student and the whole of the university experience. Narratives of struggle expose institutions who without capacity or inclination to improve.

> [A mentee] was given a patronising response that basically said "we did what we're required to do" and did not acknowledge the issues she had experienced as an autistic student or suggest that her comments might be incorporated into the schools interaction with autistic students in the future.
> Ana Ray

The drive to provide what is needed by autistic students can place the mentor in a precarious position. If the mentor is external to the institution, they may have their impact curtailed through policies that limit their direct interaction with university staff. Should they be employed by a HEI that does not adequately understand the role of mentoring, the processes of yearly appraisal may place the institution above the student. It could be argued that the current model of zero-hour funding attached to student – despite its precarity – provides an arena for opposition when the need arises. Knowing that you work for the student, and not for the institution, can justify a more confrontational stance as co-advocate. There is an evident tension in this precarious confrontation, it is both required and easy to get

wrong; perhaps it is of no surprise that the forum of master mentors returned time and again to themes of fearlessness and humility.

The extensive brief of the mentor

It was clear in from diary responses, mentee interviews and the master mentor forum that mentoring is a deeply holistic endeavour (MacLeod and Green, 2009). The practice is more than that of goalsetting and study skills. Rather it includes elements of system negotiation, advocacy, tech support, crisis management, travel planning, counselling, therapy, grief counselling as well as being a realm of essay planning and deadline management. It is about co-building and extending the 'prosthetic environment' that supports the autistic individuals flourishing (Eyal, 2010, p. 36). Despite this extensive emergent mandate, there is little evidence of supervisory practice. Furthermore, CPD seems scant and is reported to often focus on mentoring basics rather than delving into the detail that experienced practitioners require. Finally, and as yet, there has been little to no dialogue as to what would encompass a mentoring framework to suggest directions for professional development. It is my hope that this thesis, the recommendations, and the framework below starts such dialogue within the Specialist (Autism) Mentoring profession.

The ineffectively effective mentor

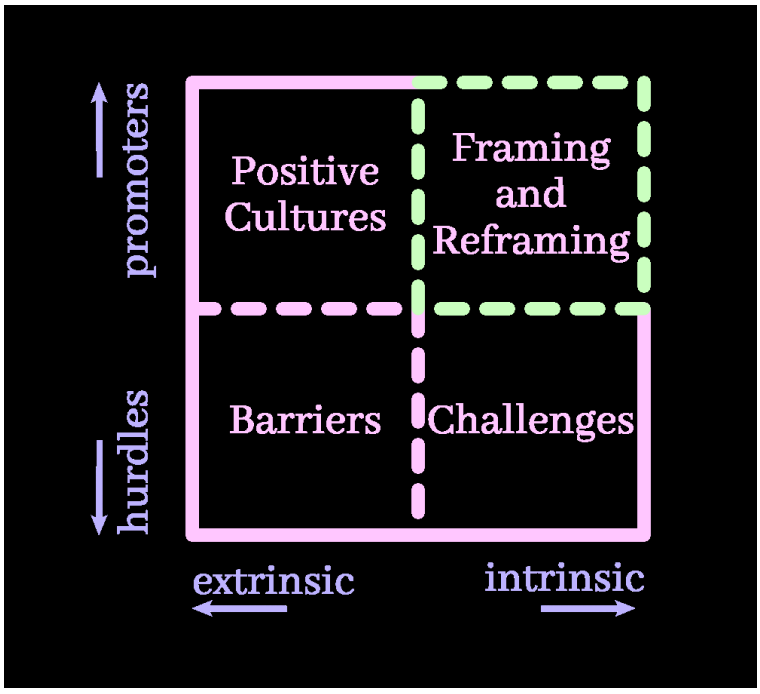
Alongside this precarious advocacy, the emergence of a holistic provision reinforces the need for courageous and humble mentoring. For mentoring to be a relationship in which the autistic student can flourish, there needs to be an open and honest revelation of the mentor's self. In being explicit about this mentors avoid becoming a professional service provider that cannot let go of 'the evidence based frenzy' that pathologizes difference, and instead can negotiate the dominant social paradigms with their mentees (Gates, 2019, p. 136).

Mentors need to be able to “get” their mentee. It is not simply listening; it is understanding the person in front of you and being open to being understood in return.

The practice of framing and reframing

Within the thematic analysis of guided diaries, it became apparent that mentoring itself operated in a fourth field of a supported negotiation in which challenges were often reframed in terms of opportunities, barriers were called out for what they were, and students found a place from which to start advocating for better university cultures; Figure 36.

Figure 36
The fourth field of autism and university



At its best, mentoring becomes the moment in the week where - backstage from campus life - salience can be negotiated as students find a way of framing their thoughts towards success.

> By talking through events that have happened during the week we can put a different perspective on them and give greater understanding of what has happened.
> Nichola

This location of the action of mentoring in weekly understanding gives a strong lead to how mentors can envisage their participation in this relationship. Mentors are charged with removing barriers to learning, and the chief means by which they go about this is through providing space for the framing and reframing of culture, challenge, and barrier.

A model of mentoring in which a protégé is inducted into the culture of a new institution, fails to explain what has been observed in the diaries and forums of this project. Whilst Specialist (Autism) Mentors clearly provide elements of study skills, time management, and the navigation of labyrinthine institutional bureaucracies. The task is not limited to that which already exists within university culture. In such a model of mentoring, mentees and mentors do not rest with the institution as it is - but strive for an institution that could be.

It might be argued that such mentoring exceeds West's categorisation of mentoring models along the dimensions of traditional/reform and focus on few/many aspects (West, 2016). Along the few/many dimensions, Specialist (Autism) Mentoring clearly has a focus on many aspects of the student's campus life, but there is perhaps evidence that such mentoring can permeate further. Mentoring sometimes is not simply just about the 'game' of the university. It is about the mentee's growing *habitus* as they develop a 'system of dispositions' sitting within the intersections of multiple fields of encounter (Bourdieu, 1993, p. 46). Tentatively, this is more than a focus on West's 'many aspects' with its examples that limit, say, teacher mentoring to mentoring within the particular field of the school and classroom (West, 2016, p. 27). Rather, Specialist (Autism) Mentoring is more than just about the university and the students place in it. Likewise, 'reform-minded' mentoring is couched in terms of the reform of the mentee and their 'effectiveness, practicality, educational merit,

and acceptability of decisions', not the reform of the institution of which they are part (West, 2016, p. 27). Accordingly, a focus on institution culture, challenge and barrier is not sufficient, and so Specialist (Autism) Mentoring inhabits the fourth space and potentially 'transforms and transfigures' the fields of the student (Bourdieu, 1993, p. 15). This space of transformation and becoming is not the preserve of just the Specialist (Autism) Mentoring; it is beholden to anyone walking a mentoring path alongside marginalised students.

This does lead to the question, if Specialist (Autism) Mentoring doesn't sit within an agreed framework for what mentoring is, is it really mentoring? As Specialist Mentoring has been titled as such, it has become a '"collective representation" and a fact in its own right' within our HEIs (Goffman, 1969, p.37). Perhaps this demands a reconsideration of West's categorisation adding a dimension as to how the institution is changed, and not just limiting the effect of mentoring to simply the mentee.

Echoing Snow and Benford's frame alignment

Within the theme of framing and reframing, three distinct processes were observed (see p.191). The identification of positive cultures, challenges, and barriers of diagnostic framing mesh with the prognostic reframing of plans to tackle or leverage such experiences and the motivational framing that holds this process together.

> When a student persistently talks about themselves as being in some way wrong/giving themselves a hard time I will encourage them to **reflect** on what they actually feel is wrong and to **reframe** those issues as symptoms of stress due differences they can embrace and **be assertive about having what they need in place**, rather than feeling they are wrong to need adjustment.
> Lee (emphasis added)

Perhaps it should not be surprising that the diagnostic, prognostic, and motivational elements of mentoring are conceived within a schema that lends itself to theories of social movements. Mentoring as framing and reframing extends its action to the outplay of an institutional culture as well as the habitus of the individual. The mentee-mentor dyad has the

potential to be a relationship in which greater collective action can take root. This does not mean mentoring has to be oriented to collective action, rather social action is a budding rhizome that may often fruit within this particular corner of neurodiverse experience.

Frames not only 'help to render events or occurrences meaning', but through collective assent mobilise mentees in their own relationships and provides backstage rehearsal in garnering 'bystander support' and challenging antagonists (Benford and Snow, 2000, p. 614). The mentoring dyad does that which is writ large in social movements.

Snow and Benford elaborate on three tasks of framing: diagnostic framing for the identification of a problem and its loci; prognostic framing in suggesting solutions, strategies, and tactics to a problem; and motivational framing that serves as rationale for action (Snow and Benford, 1988, pp. 199–204; Benford and Snow, 2000, pp. 615–618). This thesis is alive to the language of mentees and mentors that was not just of framing, but of reframing. As such it does not see this framing process as a singular monadic event, rather it is part of a multiplicity of recurrent, self-reinforcing, and reciprocal interweaved conversations.

Snow and Benford's conceptualisation of frames grew out of a dissatisfaction with social movements conceived of as either vehicles for the transmission of action or as mechanisms for resource mobilisation. These approaches 'tend to treat meanings or ideals as given' (Snow and Benford, 1988, p. 198). Though analysis of mentoring occurs at a more local level of the conditional matrix than that of social movements, addressing any 'mismatch of salience' requires treating meanings and ideals as anything but a given (Strauss and Corbin, 1991, p. 163; Milton, 2017a). Framing functions through the assignation of negotiated meanings. Such negotiation of meaning inherent in the practice of specialist mentoring bridges mismatches of salience when the discussed interpretation achieves a kind of 'frame resonance' (Snow and Benford, 1988). That is, mentoring is at its most effective at moments wherein mentee and mentor 'get' each other, see the game of the academy field, and then set about inciting each other to bring about change.

In the findings of this project there is a particularity of frame resonance in the neurodiversity movement. It must be emphasised that this developed envisaging of mentoring does not necessitate adherence to one particular social movement and is adaptable as - and perhaps when - subsequent autism emancipation cultures coalesce.

The "how" of Specialist (Autism) Mentoring

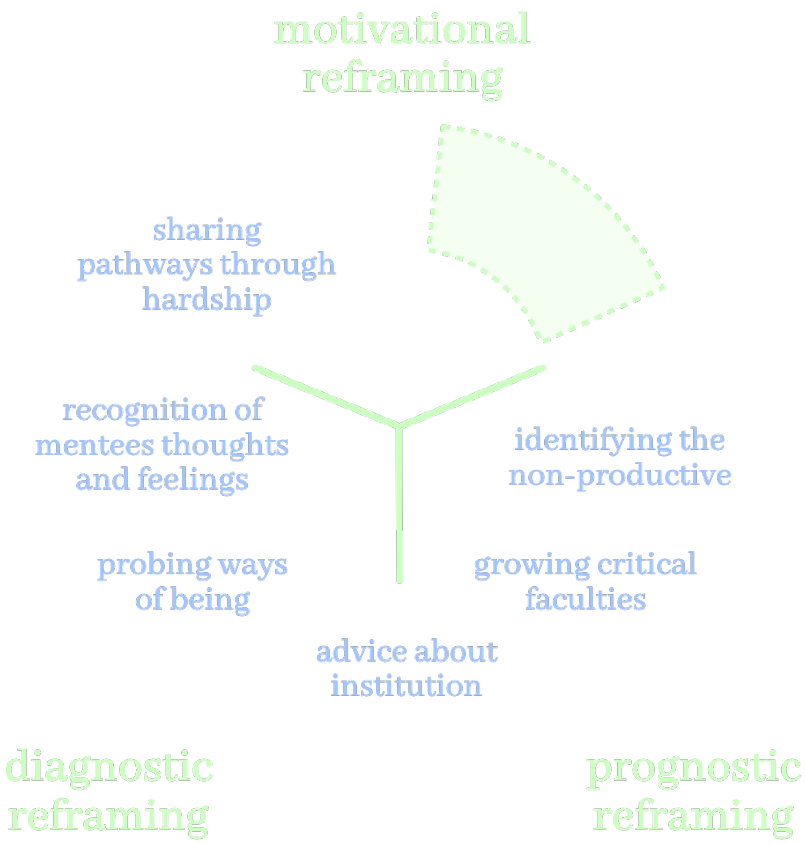
Developing a framework for Specialist (Autism) Mentoring requires a progression from the considerations of what specialist mentoring is happening across UK HEIs and why such mentoring is necessary to one that conceptualises how this mentoring unfolds. It is possible to present a theory grounded in the experiences of mentees and mentors that underpins Specialist (Autism) Mentoring. This theory hinges upon a process of the framing and re-framing of experiences in the domains of diagnostic framing, prognostic framing, and motivational framing.

From six dimensions of mentoring to three

Before delving into a conceptualisation of the framing and reframing mentoring, it is vital to map out such a conceptual pathway alongside that of established models. Previous analysis of Specialist (Autism) Mentoring has hinged on mentoring models rooted in the six dimensions of The Complete Mentor Role (see p.77-78). It is possible to tease apart several indicators of incompatibility in such a model within autism mentoring sessions at HEIs in the lack of consideration of free time, a mismatch of salience, the location of agency in the mentor, and finally the neglect of a motivational dimension.

It is possible to project the three prongs of diagnostic, prognostic, and motivational mentoring onto Galbraith and Cohen's 'complete mentor role' (1996). It is acknowledged that these are probably slightly flawed semantic maps, but what is immediately apparent is the dearth of the motivational aspect in the established complete mentoring role (see Figure 37).

Figure 37
Comparison of mentoring-as-reframing to Galbraith & Cohen model of mentoring (1996)



An element of the complete mentor role is structured around confronting 'unproductive strategies and behaviours' may not mesh with the mismatch of salience that specialist autism mentoring seeks to assuage (Galbraith and Cohen, 1996, p. 7). There is an unpleasant ableism in assuming that what appears from the outside to be an unproductive strategy or unproductive behaviours has no use. Furthermore, the language of the complete mentoring model is one that addresses 'the unproductive' as a pivotal issue that requires patching up through the application of the mentoring relationship. Aside from the inherent ableism of normative work expectations, there is a problem in demeaning 'the unproductive' as it degrades necessary down time. Furthermore, sat alongside notions of probing ways of being and sharing parts through hardship this 'complete mentor model' places the agency of a mentoring relationship with the mentor, rather than the mentee. If mentoring has a role in

developing of agency, it must contend with its own power structures, else slip into yet another oppressive dynamic that marginalises autistic ways of being.

Furthermore, adherence to Galbraith and Cohen's 'complete mentor role' neglects the motivational framing of Specialist (Autism) Mentoring found in this study. Mentoring, and not just Specialist (Autism) Mentoring, can be less temporarily bounded to the short now. Rather, in having a mind towards motivation, mentoring becomes a vehicle for flourishing – and not simply surviving - in an institution. Where survival requires a focus on the short now, flourishing requires a shared envisaging of a future in which the mentee can find their place.

Framing and re-framing

It is this focus on flourishing that gives credence to the process of framing and reframing that was so evident in mentee and mentor diaries and the forums that followed. All autistic autism mentors, and all bar-one allied mentors recounted elements of framing and reframing. Here is a remarkable and encouraging consensus between two dispositions. With the autistic experience of double empathy misunderstandings, it would not have been surprising to have found autistic mentors developing different ways of mentoring than the mentors from the predominant neurotype. Rather, at least in this investigation, there is evidence that allied mentors have reached the same model of mentoring as their autistic counterparts. Specialist (Autism) Mentoring, as a relationship that probes for understanding and explanation, does not seem dependent on the dispositional matrix. That is to say that autistic autism mentors and allied autism mentors seem to develop similar modes of operation despite quite limited training, the heterogeneity of mentees, and the relative isolation from other mentee-mentor dyads. Perhaps what is occurring - to coin a new term - is *neuroconfluence*. A hermeneutic field in which autistic people and their allies create means of scaffolding engagement with, or in resistance to, the predominant culture. Both

dispositions bring insights to negotiate and, like the confluence of rivers, something more robust is shaped without in anyway diminishing the tributaries. Autistic mentees and autistic mentors negotiate dispositional similarities, autistic mentees and experienced allied mentors negotiate dispositional differences; both tributaries seem to follow the same course and meet as a confluence in research such as this. In Specialist (Autism) Mentoring, owing to the necessity of mentee understanding that sits at the heart of the relationship, autistic mentees take their mentors into a practitioner space in which the othering of disposition should not be a limiting factor.

> That puts one or other of us in the 'other' group and good relationships are not formed that way. I like a more rounded human connection and like difference. Neko

This conceptual neuroconfluence of mentoring by framing and reframing has resonance outside the tight domain of Specialist (Autism) Mentoring. It perhaps seeks to challenge mentoring which has been predominantly about personal reformation and assimilation into existing institutional cultures, and instead considers the mentees place as those who can advocate for better institutions. Such a model of mentoring has much to offer in institutional fields where discovery, invention and innovation are prized.

A second foray into Goffman; Frame Analysis and the daily round of mentoring

Perhaps it is quite unsurprising that the language of frames should arise as a concept within Specialist (Autism) Mentoring. Frames and the interplay of social identity is one of Goffman's analytical sojourns in his work in stigma. In the theme of talking through the week mentees reflect on the 'daily round' that requires techniques of information control in multiple social situations through which an autistic person negotiates acceptance (Goffman, 1968, p. 113). This acknowledges the burden that is placed upon autistic persons as they mask in their daily round. The dyadic relationship of mentee and mentor forms a special arena as the stage in which mentees may first be able to express their authentic autistic being

to someone outside their immediate family. These moments in which a lifetime of masking is put to one side and the feared rejection does not materialise are perhaps fundamental to growing confidence towards other relationships in which the mask can be set aside. As Goffman intimates official relationships possess an unequal dynamic. If the mentor holds the 'secret' of an autism diagnosis they are in a position in which to socially blackmail those that disclose (Goffman, 1968, p. 118). Accordingly, standards of confidentiality – particularly with regard to the mentor's communication with faculty members – requires a sound moral compass.

Goffman's concern with frames is grounded in the successive keying of small-scale frameworks. In the mentoring dyad, keys of a 'set of conventions' go through a process of keying to become transposed patterns that can bring further insight (Goffman, 1974a, p. 43). Discussion on Disney princesses frame archetypes of behaviour; patterns for caring for pets can reframe relationships with parents; meetings off campus reframe what it means to be a student, and so on. 'Laminations' of keyings are aggregated within the rim of the frame and 'tells us just what sort of status in the real world the activity has' (Goffman, 1974a, p. 82). Laminations produce lens that enable us to develop multiple understandings that frame our experience. So, mentoring discussions about the mundane and the eccentric become important as they ricochet around through keying, re-keying, framing, and re-framing lived experience. It is in such a manner that frames are analysed, and the rehearsal of shared frame alignment occurs[78].

While Goffman provides a fascinating frame for framing, there is a potential disconnect in his analysis. In the consideration of frames, we must also turn our mind to the out-of-frame. In doing so micro-interactions can be placed in the context of events that are also in the room. Goffman acknowledges that here there is a construct of appearance

[78] If the mentoring model developed through this work was more strictly Goffmanesque, it would perhaps be formulated as "keying and re-keying"; but rather this project follows the words of its participants and so "framing and re-framing" stays.

management so as to enable the individual to appear alert to the in-common frame with capacity to disattend to competing events 'out-of-frame' (Goffman, 1974a, p. 201), but this construct does not resonate with or permit an autistic presentation; nor does it acknowledge the relationship in the moment between salience, the frame, and the out-of-frame. Instead, by demanding appearance management in professional settings, it skirts towards the accretion of additional layers of stigma upon those who do not wish to engage with a pretence of 'normality'. The mentees and mentors surveyed did not seem to hold such reserve, instead being more concerned with a professional space for the presentation of autistic authenticity.

In UK universities autism positive badges and apparel are becoming tentative expressions in student garb, echoing the reframing process in which autistic communities can find their belonging on campus. Such an unlearning of concealment so to voluntarily disclose fits into what Goffman calls the 'moral career' (Goffman, 1968, p. 125). Which, in this context, harks back to Newman's beau ideal of the university for the 'exercise and growth in certain habits, moral or intellectual' (Newman, 1842, p. xi). The phenomenon of voluntary self-disclosure of autistic students in the academy through signs and symbols perhaps gives us hope that the neo-liberal shift towards certifying learning has not fully had its way. Furthermore, it can be hesitantly postulated that such signs and symbols are perhaps the emergence of a neurodiversity framing which has taken root which may herald 'a kind of rehabilitation, a restoration of personal dignity' (Bourdieu, 1993, p. 5).

Co-opting Snow & Benford's frame alignment in the negotiations of mentoring

Like the framing process of social movements, Specialist (Autism) Mentoring is one in which 'actors are viewed as signifying agents actively engaged in the production and maintenance of meaning' (Benford and Snow, 2000, p. 613). Furthermore, the constructionist

distinctiveness of social movement's framing processes is echoed in the framing and reframing of mentoring. If that is true, then two words of caution are required.

Firstly, in co-opting the of phenomenologies of protest and change and utilising them for relational interaction there is a potential that adoption of such a model may result in more radical mentors. Conversely, and particularly in the light of the themes emerging from mentor forums, those radical mentors may already be here as masters of their craft. These forums sought "master mentors" who generated themes of fearlessness, of bureaucratic piracy, and of cherishing of advocacy (see pp.205-209). In particular, these subversive aspirations found a focus in the need to carve out spaces of safety, deliberation and acceptance, a truly radical endeavour inside institutions where 'economic justifications dominate, and the familiar "bottom-line" eclipses pedagogical and intellectual concerns' (Berg and Seeber, 2016, p. xviii).

Secondly, these three domains of mentoring practice - diagnostic, prognostic, and motivational - should not be considered in isolation. Each is highly dependent and entwined with the others. It is more a case of the same rhizome of mentoring germinating in three particular shoots according to need. These domains of practice have no real beginning or end, to borrow from Deleuze and Guattari, they are 'always in the middle, between things, interbeing, *intermezzo*' (Deleuze and Guattari, 2013, p. 26). This can be seen in extraordinary mentoring.

> A natural sciences student had been very disappointed that she couldn't do the owl pellet dissection in 'real life' and that the lecture was only observed by students - so I supported her to follow up with her tutor, source her own owl pellet from a local wildlife charity, store it in a university freezer and do her own dissection in her own time.
> Claire

Opportunity is framed and reframed in the pause between diagnosing the disappointment, the prognostic planning occurs in the midst of tutor communication, and the motivation that arises through sharing the burdens of execution. The mentor acts between the

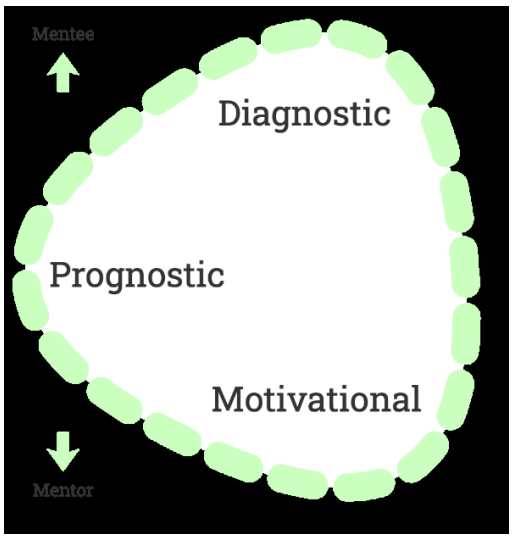
moments of the mentee's yearning and the mentee's action. There is folly in separating out the plan from the issue, the issue from the motivation, the motivation from the plan. The mentor requires a framework to prepare for the unknown and reflect on the accomplished but, in a single mentoring session, the distinction can be very fluid. It is this reflective and developmental need of mentors that the following model addresses in what was named in the master mentor forum, a Framework for Reframing.

Given Specialist (Autism) Mentoring's core duty to remove barriers to learning, there is perhaps an inevitability in adopting of frame alignment theory. Many barriers are external to the mentee, and therefore the mentor requires a deft hand in both the reconstruction of the social structures of the university and the renegotiation of mentees' relationships with these structures.

Praxis and a three-pronged model

In stepping from theorising to operationalising, a consideration of the loci of agency within this adopted model of frame alignment is required (see Figure 38).

Figure 38
The loci of Diagnostic Reframing, Prognostic Reframing and Motivational Reframing between the mentee and mentor.



The diagnostic task of determining and analysing their local context is one that falls to the mentee. That is not to say that the mentor does not play an important role in ensuring that the mentee has the language with which to conceive of barriers and challenges, but it is not the mentors place to impose doctrinal bonds. The prognostic framing of how to approach such a field is one that can be shared by both mentor and mentee. The mentoring room provides a backstage in which the dyad can discuss, plan, and start to enact strategies to ensure a flourishing life at university. Finally, the onus is upon the mentor to ensure that the mentee has the security and support to go enact their elected strategies. This gentle - yet insistent - motivational aspect of Specialist (Autism) Mentoring is perhaps key to enduring, successful relationships.

Diagnostic mentoring

> Reframing as not having to be ashamed of struggling but just accepting it and acknowledging the challenges.
> Lily, mentee.

Mentoring praxis is outworked through the seceding control of the identification of the potential roots of struggles, barriers, and challenges to the mentee. There is a unique place for the mentoring dyad to be a relationship in which such systematic roots can be explored. Within a trusted relationship with a holistic scope, transformative conversations of framing can emerge. Mentees bring frames of laminations developed in their experiences, whilst skilled mentors will know when to introduce or debate ideas that may challenge mentees understanding or when to open dialogue to "act as sounding board" to aid the student in finding clarity. In the diaries the content of the mentoring meeting ranged from the identification of processing of mentees anxieties, through reframing experience within a neurodiverse paradigm, to the naming of structural injustices on campus and in society. Analysis and contemplation on the intersections of personal identity and the identity of others,

met the framing of misunderstanding within the double empathy problem. Together diagnostic tools were employed on academic expectations, the discernment of relationships, death and dying, philosophies, politics, and faith[79]. It is not that a mentor should have a deep knowledge of all subjects, rather than mentor requires an appreciation that mentees need this backstage in which to both clarify and try on worldviews.

At this juncture it is worth noting that - as in predominant majority - there will be a few cases of students holding views that are ableist, xenophobic, homophobic, or misogynistic. This may prove a challenge to the mentor as it may to many. The mentoring dyad provides what might be a unique class of relationship that the mentee has not encountered before. The mentor, hopefully, will continue to meet with this student and not avoid them or reasoned discussions on topics that may both be rooted in and bring about alienation. This is not an agreement to simply disagree, it is a commitment to an enduring relationship from which a more tolerant and compassionate worldview might emerge.

As well as holding value in its own right, this broader context of framing of meaning making integrates and interplays with the personal identification and processing of anxieties. Many participating mentors discussed how mentees would "talk through the week". In terms of incidence in the dataset, this sharing of recent events occurred second only to the discussions around developing social understanding. Holistic Specialist (Autism) Mentoring ensures time to frame any events of the week through a diagnostic endeavour that seeks to identify and make clear causes and effects. This may emerge in dialogues through which students process their encounters and experiences, it may be railing against injustices, or it may be conversations in which the unspoken worries that may confuse us all can be said aloud.

[79] It has been said - in jest - that the only difference between university chaplaincy and specialist mentoring services is that the mentors talk more about God.

Through being perceived as an autism specialist, the mentor has the privileged of an expectation of understanding. Anxiety felt by students around the changing of schedules, social exposure, clarity, communication, and organisation can be considered without the laminate of concerns over the mentor creating further 'invalidation trauma' (Gates, 2019, p. 15).

Participating mentors identified what might be thought of as the double clarity problem. This could be thought of as a subset of the double empathy problem in which the autistic disposition and the predominant disposition do not uncover the same salience in encounter (Milton, 2012). The double clarity problem manifests as both a desire to be properly and fully understood, and in return to properly and fully understand. In the university sphere this manifest through reports of mentees repeatedly doublechecking understanding with their mentors, mentors co-advocating for clarity from staff, mentees identifying content gaps in their studies and mentors directing them towards study resources. The anxiety of not being understood can lead to overly detailed emails clogging inboxes. Mentors noted the task of co-writing succinct emails.

This double clarity problem - and the invalidation trauma it belies - is a common example of wider mentoring conversations that seek to negotiate anxiety, fear, and terror. Mentees and mentors talked of external triggers, those events which tip accrued laminations into responses of fight, flight, and freeze. Whilst discussions about such causal moments will not extinguish their occurrence, it reframes these occasions as part of a - hopefully positive - greater narrative of mentee identity. These triggers can be framed within a neurodiverse paradigm as a response from a minority mode of perception, permitting the framing of unjust structures rather than incapacity.

Such unjust structures require naming. Students may not have considered the language of stigma, normative standards, or internalisation. By offering such positions in conversation mentoring can be the crucible for the development of self-advocacy (Holgate, 2012; Roberts

and Birmingham, 2017; Accardo *et al.*, 2019). Through providing a space in which to rehearse conversations that challenge stigma, students develop their own tools for dealing with the twin pressures of disability hyper-scrutiny and disability naïveté. Mentees and mentors both revealed narratives of stigma born from staffs' over-interest and from under-interest. There was no expectation that staff should get it right all the time, but there was evidence of frustration by mentees over staff who are simply 'unaware of the kinds of struggles autistic students face' and the discomfort in these interactions that this engenders (Gillespie-Lynch, Bublitz, *et al.*, 2017). Conversely there were also narratives of well-meaning but heavy-handed interventions which had not consulted the student and their needs first. Having a mentor enables conversations where these frustrations with individual and systematic weaknesses in staff training and responses can be aired and identified, before becoming grist for the prognostic mentoring process (Chown *et al.*, 2018; Davidovitch *et al.*, 2019).

It is likely that this research project, occurring as it did over the COVID-19 pandemic, identified structural weaknesses that may not have been apparent before. The need to quickly rearrange the whole mode of teaching and assessing exposed issues for all that had previously been confined to autistic students. Mentees spoke about the anxiety of last-minute confirmation for events and timetable changes and the breakdown in trust that it elicits was - for them - not an artifice of lockdown that was something that had become a more common experience during that time (Defeyter *et al.*, 2021). University regulations for assignment extension processes for essays that required the social burden of contacting doctors were swept away by self-certification. Likewise, resistance to having lectures recorded evaporated overnight as universities invested in both technology and training for content delivery. It can be argued that those institutions who were already considering the diversity of their student population with blended learning, open-book examination and disability technology were those who were in a better position to rise to the challenges of the pandemic (Chadha, Maraj

and Kogelbauer, 2020; Crawford *et al.*, 2020; Shew, 2020). This is the disability gain of a neurodiverse paradigm. The multiplicities of universal design for learning embedded in the curriculum that ensured the participation of autistic students may have promoted the participation of all students during times of crisis.

Whilst not wishing to tie mentoring to any particular social movement, the current ascendance of the neurodiversity movement has much to say in terms of the valuing of all capacities interacting 'in mutual respect for each other's differences, gifts and deficits' (Singer, 2017, p. 28). Furthermore, for the individual autistic student it may lead to framing that seeks to depathologize autistic presentation. Through seeing autistic being as simply another way of being human ensures that the long process of unpicking deficit by self-judgements can begin. 'Comparison of self to others' can be a barrier to wellbeing (Lei and Russell, 2021, p. 8). It was the experience of mentors that many students will become caught in damaging cycles of the self-imposition of self-improvement (LeGary, 2017). The mentoring relationship is one in which internalisation of imposed judgements may be challenged. This is not the mentor imposing their own analysis on the situation, rather it is time in a week that is set aside for the mentee's own analysis of the presentation of self and the identification of structures which lead to masking and burnout.

Contingent with a neurodiverse paradigm is the reflection on the intersections of multiple identities, of which being autistic is just one. Mentors related discussions on the themes of ethnicity, politics, faith, sexuality, and gender; not only of their own mentees but in discussions about mentees friends and colleagues. University may, for many students, be the first encounter with diversity. An autistic tendency towards perfectionism in these new friendships, potentially emerging from perceptual difference and a lifetime of invalidation, may find expression in the backstage of the mentoring room. Here, with a trusted mentor, they may seek to explore presentations of their own identity and rehearse responses to the identity of others.

These rehearsals are not simply performative, they are analytical. Students may identify the microaggressions they receive from friends, flatmates, and staff. This may be diagnostic framing of language used about autism, or social manipulations such as ghosting or gas-lighting. It may be the microaggressions of a the lack of patience that does not empathise with the struggles that a student may be having (Como *et al.*, 2020). For many students these microaggressions will be compounded by those directed at their intersecting identities of ethnicity, gender, and sexuality. Not receiving simple "common courtesies" wears away at nascent sense of identities. Should a mentor be able to create a space in which such microaggressions are absent then they may well be providing a sanctuary that allows the experience of university to be assimilated, processed, and endured.

With marginalisation and deficit narratives as stressors, masking behaviours are perhaps somewhat inevitable (Pearson and Rose, 2021; Sedgewick, Hull and Ellis, 2021). Such masking carries a cost of physical and mental exhaustion, anxiety, depression and feelings of being an imposter (Hull *et al.*, 2017; Sedgewick, Hull and Ellis, 2021). There is a role in the diagnostic framing of mentoring to identify masking and the particular underlying factors that are causing it be burdensome. Such there might be a possibility for instinctual masking to become an active, and elected masking to be minimised with an appreciation of the risks this may entail. In supporting mentees to 'identify, evaluate and manage their masking behaviours' mentors can uncover the possibility of safe situations in which masking may not be necessary (Sedgewick, Hull and Ellis, 2021, p. 220).

By discussions in which mentees examine revelations of the self the mentor provides the context in which that self is valued. The exploration of positive self-regard can be a profound journey for any student and mentoring can facilitate the 'building of trust and support' through radical acceptance that occurs even when the student does not accept themselves (Ridout and Edmondson, 2017, pp. 6–7). Through the framing of the university experience by the sharing of stories of other stressed and overwhelmed students the mentoring

session becomes a lodestone in normalising mentees' experiences (Roberts and Birmingham, 2017, p. 1046). Furthermore, the building of trust can be an experience which reflects back trust that has been broken through less than perfect educational supports.

Many mentors spoke of the normalising of the experience of misunderstandings through analysis of an event through the double empathy prism. Mentees would bring experiences of the week to the mentoring session and be given time to process and frame such experience in terms of mutual misunderstandings. Experiences were related of being discounted through being judged on abilities in impression management; solitude was mistaken for isolation and isolation for solitude; lack of understanding led to the dismissal of difficulties; differences in communication stood in the way of having needs met or successfully self-advocating; and preconceptions about the intentions of others ascribed to malice what was mere incompetence. Enabling this to be framed, not as solely the fault of the student but of differences within the disposition and perceptual reality of all those in encounter, ensures that students do not take on the burden of self-recrimination and doubt.

Such reframing of events via the double empathy paradigm is particularly necessary in the sphere of academic expectations, and the anxieties that the structures of authoritative judgement inherent in assessment may instil. Framing the process of higher education as something distinct from the more controlled experience of school can be beneficial. Lecturers are not necessarily teachers and do not have the same duty of support, yet they are authoritative sources of information and potentially wisdom. Other students may have come to university as it is simply the next thing to do in a journey towards employment, rather than a choice to learn a subject that is loved. Coming to terms both with the neoliberal market-driven HEI industry and the realisation of other students motives can be necessary for the mentee to resolve the 'mismatch expectations and reality' of their day to day experience (Fabri and Andrews, 2016, p. 6).

Double empathy miscommunications may be specific. Diaries and forums returned time and again to the notion of clarity and the role of the mentor as a trusted source of information. There is a role here in the mining of salience. Several mentors referred to situations in which a mentee was struggling with motivation in a time-consuming module of study that was framed as being irrelevant or uninteresting. There is some skill required in gentle conversations that allow students to renegotiate their perception of learning.

This gentle faculty of carving out moments of perspective is at the fore during the many discussions of mentees had with their mentors about group work. Tutors belief that group work is a panacea for teaching in higher education fails to consider disabling interactions that may occur. Incidences of frustration over group members who do not clearly communicate, or even engage with work seemed common. Furthermore, experiences of failure within such a pedagogy can become internalised with narratives of social failure. The mentor suggests analysis of such group interactions so as to ensure that the failures of the group are framed as group failures and not simply as self-failures. Co-advocacy may need to be developed to ensure resultant concerns are affectively conveyed to the course convener.

Not only is there a particular burden in digital communications with academics such as emails and online forums; but there is the field of quasi-academic self-presentation in WhatsApp study groups and social media. It is often within these more informal groups that the first steps towards of friendships can emerge. Mentees may ask for direction on how much and when to disclose and be involved in conversations around the potential for stigma. The discernment of relationships seems to hold a special place within conceptions of Specialist (Autism) Mentoring. This is not the social skills imposed on autistic pupils during their schooling, which may often be unwanted (Barnhill, 2016; Accardo, Kuder and Woodruff, 2019). Rather it is the development of social understanding within a relationship of mutual trust and respect.

Fearless diagnostic mentoring provides an example of the blurred territory between diagnostic framing, prognostic framing, and motivational framing. Confidence to identify power inequalities and the consideration of responses to these inequalities with the backing of a trusted ally in a position of authority. It is not simply enough to name the barriers that limit autistic students, through the prognostic reframing in mentoring these students can develop the aptitude to bring around change in their daily encounters.

Prognostic mentoring

> We have to meet each student where they are, seek to understand their unique challenges and then help them find strategies to overcome those challenges.
> Nicola

Mentors have a pivotal role in the negotiation of individualised strategies for flourishing on campus. For those new to the profession there is a need for developing a sensitivity towards which strategies to offer. In the diaries early career mentors made reference to autistic autobiographical accounts that portray the experience of university (Hurley, 2014; Beardon and Worton, 2017; Liu, 2021). Whilst more established mentors talked about the process of developing specific strategies that take the students agency seriously.

> Choosing what will be a useful strategy to focus is a collaborative process- so I might think of a particular tool/resource/strategy that from my experience could be useful for this student in this moment, but it's always best to reflect that as an idea and see what they think, or to ask if they have ideas for what works well for them.
> Lee

The daily churn of deadline setting, reassurance, planning for the next weeks work, sleep hygiene, and messy flatmates are reported in the diaries in condensed form, belying an underlying assumption that such strategies are ubiquitous within mentoring. This poses a problem for the new mentor; how do they meet their role of negotiating strategies when they are not aware of strategies that exist. While CPD that might address such a need is a

requirement for all DSA funded mentors, participating mentors in report a paucity of such courses.

There was evidence of mentors working alongside other members of well-being teams from which they may seek advice on developing strategies. Master-mentors in the forums were acutely aware of their location within such clusters of shared wellbeing practice. Mentors, particularly those who were employed within university institutions, were also acutely aware of the limitations of wellbeing services[80]. Whilst signposting the students in need of counselling support was seen as a possibility, there was an acknowledgement of the limitations of a six-week counselling course compared to that of an ongoing specialist mentoring relationship as differing tools for differing needs..

Counselling is not the only support available at university. Some mentors take an active role in scheduling study skills sessions for mentees, whilst a few hold a dual role as study skill practitioners and are confident in moving between both fields. Being able to step between such provisions maybe a powerful tool in enabling students to "get stuff done". Not all study skills techniques promote autistic strengths. Study skills strategies of chunking information may appeal, but may be counter-productive in terms of gestalt processing (Bogdashina, 2016). Strategies that leverage pattern recognition, an 'attention to detail', a 'commitment to be accurate', a 'remarkable ability to think divergently' and 'remarkable powers of observation' may need to be brought to the fore (Bublitz *et al.*, 2015, p. 2; Fabri and Andrews, 2015, p. 26; Van Hees, Moyson and Roeyers, 2015, p. 26; Barnhill, 2016, p. 4). There may be double empathy misunderstanding in the process of notetaking, mentors may still need to approach lecturers to ease the stigma of recording so that salient points can be processed later (Accardo *et al.*, 2019). Clarity needs to be given over plagiarism, particularly in terms of collusion when students' kindness or naivete may result in them sharing work that

[80] With one mentor experiencing a university culture in which senior management were questioning the need for wellbeing charters.

then gets replicated. Time monitoring may be required, but with the knowledge that time for decompression after social activities is a requirement that should not be confused for procrastination (Van Hees, Moyson and Roeyers, 2015). Furthermore, the mentee can utilise the mentor as an accountable figure to report incremental work so as to be held to a number of deadlines. Developing writing procedures may need negotiating to ensure that there is space for draft writing and self-criticism. Should students take a once-and-done approach to representing their creation of meaning, skilled mentors can probe to ensure this stems from well-conceived accurate communication, rather than distorted perfectionism (Gillespie-Lynch *et al.*, 2020).

In the diaries and forums there was a suggestion of how particular prognostic academic skills might be used in the non-academic sphere. Undoing striving for the perfect occurred in conversation about social relationships as well as academic tasks. Having time to rest, particularly during lockdowns, benefited academic and social interactions. Skills in breaking down tasks to manageable realistic targets did not just get an essay written, it got the shopping done or a trip the doctors organised. For students with cooccurring ADHD, supported organisation to acquire a prescription that aids organisation can be key in having a good month both academically and holistically. Sharing the burden of acquiring and setting up technologies like reminder apps both aids in the completion of daily tasks as well as in the completion of assessments (Fry, 2016; Granville, 2020).

This globalisation of prognostic skills and planning comes with the caveat, there must be a work-life balance. Transferring academic organisational skills to everyday campus life sees the university experience as a series of tasks that needs to be completed, rather than a time that can be enjoyed. Saying that, a mastery of organisational proficiencies enables special interests and passions to be a source of comfort rather than anxiety, it allows "side-hustles" to become a source of economic well-being, and it allows a social life to flourish alongside time for recuperation.

If the social sphere is reframed as a choice within a work-life balance, the events that need to be endured may become the topic of discussions of social dynamics. In a space of safety and trust, the mentee can bring their observations of encounters during the week and the mentor may suggest possible interpretations which may aid in double empathy navigation.

> Social situations are particularly tricky […] but by re-framing events they have developed a greater understanding of social dynamics and now successfully participate in clubs and societies, making strong friendships as they do. Nicola

Such discussions promote a validity of the autistic experience, and in doing so provides the foundations for autistic students to share their worldview with friends. This backstage rehearsal of unmasking during mentoring can be transformational. It is not simply a backstage for the presentation of an autistic self, it is a rehearsal space in which scripts for confronting the microaggressions of the predominant neurotype can be drafted.

A part of this development of social understanding - as distinct from social skills - is the reframing of relationships not as a spontaneously emerging event, but as that which can be built and planned for. This seems particularly true in the relationships that autistic students have with their academic staff. There were multiple accounts of conversations in which academics' need to enact university processes was reframed through the acceptance that these academics are trying to help but may lack either the power or the understanding to enable the student's desired outcome. Mentors need a robust understanding of such university processes themselves so not as to bring further disruption to the student studies.

The weaving of social and academic fields on campus is not always easy to navigate. It requires reflective skills so that manageable challenges can be assessed and approached. This is the development of individualised holistic strategies by…

> finding a balance between acknowledging stress (not pushing) and identifying suitable challenges (a little push out of one's comfort zone). It is often worth discussing this balance with mentees so they decide what realistic, manageable challenges might be worthwhile.
> Lee

This goalsetting may be in terms of academic outcomes, social outcomes, or independent outcomes. In diaries mentees and mentors reported scenarios of transport, pubs and clubs, lecture halls, seminars, and halls. Such goal-oriented mentoring has pedigree in past research though the majority of mentors in this project seem to have a preference for the language of reframing over goal (Martin *et al.*, 2017; Ridout and Edmondson, 2017; Thompson *et al.*, 2018). The difference between a goal-oriented model, and that a framing and reframing is subtle. Goal-oriented mentoring takes the reality of the time bounded nature of a university experience seriously. Framing and reframing mentoring may be an approach that is intentionally open-ended, emerging as it does as a holistic provision (MacLeod and Green, 2009). Whilst goals are to be completed, framing is an enduring attitude. Perhaps a goalsetting approach augments framing when the object is that which cannot be easily reframed. The sensory assault of campus might sit within this category. A noisy café will always be a noisy café, a smoker's area might not be easily avoided, the florescent lights of a portacabin corridor might not be a strategic priority for the estates department. Goals can be set to frame endpoints of pain or discomfort. These goals of bounded endurance are augmented by a process of negotiating framing. Five minutes in a café alongside with noise cancelling headphones. A new route to class or a good cologne can be liberating. Discussing attendance and the freedom to wear sunglasses indoors can both reduce sensory disturbance and promote projected identity. Strategies such as these will become part of a mentor's toolbox as they learn from their encounters with students who thrive despite sensory distress.

Specialist (Autism) Mentors may want to particularly consider prognostic strategies in the navigation of campus space with students transitioning into their institution. Whilst mentors must be wary of the stigma they may project by walking the campus with students,

some new mentees may find benefit in the shared exploration of space until it becomes familiar[81] (Mitchell and Beresford, 2014; Perepa, 2018; MacLeod, 2019). There may also be the need to spend time sharing maps and planning walking routes together as there was evidence in diaries of campuses that were not coherently signed. Additionally, there may be the need to reframe the transition between classes across campus as a moment of freedom and a breath of fresh air rather than an anxious and over hurried transition. Furthermore, strategies may be co-developed that consider specific or generalized working environments in which distractions can be managed. Finding places to work on campus can be a stressful experience (Casement, Carpio de los Pinos and Forrester-Jones, 2017; Berry, 2018). Having a mentor to discuss possibilities and potentially explore new facilities can give some students the reassurance to find corners of the campus where they can comfortably work.

Likewise, mentoring time can be spent in travel planning for events held off campus, for returning home, and for planning adventures. For some students finding a quiet route to get to a supermarket at a non-busy time maybe instrumental for building independence. Whilst for others the first festival, trip abroad, or holiday with friends maybe the signifier needed to prove to families - and themselves - that they can live their own lives.

Mentoring, and the routine in the week that it can instil, may serve to proof mentees against "going nocturnal" and perhaps also lessen anxiety over non-normative sleep patterns (Anderson, Carter and Stephenson, 2018). Whilst a nocturnal pattern of engagement with studies may serve to minimize anxieties over sharing learning spaces like libraries with other students, it can impact on lecture attendance. The more intimate mentoring dyad can itself be a valuable strategy of accountability of attendance or, potentially, absolution for oversleeping.

Further to the prognostic outworking of sensory adjustments, travel planning and campus negotiation, mentees and mentors also may frame a quiet life. That is to say that the

[81] It has been my experience that most mentors have their own version of elbow-patched tweed-jacket academic camouflage.

normative expectation of constant studying and socialization can be reframed as a slower, pleasurable journey in which there is time for the joy of learning and the encounter of others. Part of this may be through dialogue that assesses the place of social media within student life. A mentor may be asked to help cull notifications on phones, be asked for advice on the identification of spam mail, or participate in conversations about the presented life of others in social media feeds. Such strategies seek to ease demands on executive functioning through simplification a benign neglect of all but the most important information sources, and might be of benefit to all students[82] (Kim, Kim and Lee, 2021).

As well as virtual space, the mentoring partnership may also delve into analysis of the university system itself. Knowing that many lecturers are there for their research skills, rather than their teaching skills can serve to reframe teaching styles that are not contiguous with the 6th form or college experience. Seeing staff as experts in their field, but not necessarily experts in teaching, allows a degree of interpretive freedom to classroom experience. Likewise, an analysis of the university system as an institution with its own economic needs may permit mentees to tolerate the more hectic nature of the academy. Furthermore, framing of the student loan system as, for instance, a graduate tax system or a just way of allocating funding may minimises anxieties about repayment. Such a framing of the structures of higher education itself may aid with transition into university life, which in turn predicates degree completion (Cage, De Andres and Mahoney, 2020).

Aside from reflection on these greater patterns, mentees and mentors also plan for moments of crisis. There may be times in which the sensory overload of learning cannot be fully mitigated. Should these times coincide with other demands on the student, then moments of meltdown may occur. To know that this meltdown is a potential, and to have considered steps through such events may act as a preventative. Such contingency plans,

[82] There is a special place in mentoring hell for university sports facilities that start messages with the words Important or Urgent.

which may include seminar room egress and retreat to spaces of safety, can be developed and shared authoritatively with appropriate staff.

Places of sanctuary seemed key in the diaries. For some students this may be provided through appropriate accommodation on campus, or through the use of facilities such as university libraries. The sanctuary of the spaces is one that requires negotiation as they are often shared. As such they may require mentoring time in which to unpick previous laminates of framing that may have accrued from sharing spaces with others at school and at home. Further reframing may occur which acknowledges that mentees may well be better at independent living than their flatmates. Gestalt perception has a deep awareness of mess, and though such holistic processing may become overwhelming it can also allow mentees to create living spaces of calm[83]. Likewise spatialised sequential thinking that moves from specifics to generalisation may generate novel approaches to household tasks[84] (Bogdashina, 2016).

Sadly, with perceptual differences, minority status and the double empathy misunderstandings that can occur, autistic students may become homeless. Two out of the 330 mentees seen by participating mentors experienced homelessness during the year. Further research as to the housing vulnerability of autistic students is sorely needed. As yet information on student homelessness - regardless of neurotype - is yet to be collected (Mulrenan, Atkins and Cox, 2018). During these episodes of homelessness, the security of a mentor who can quickly investigate and advocate for university housing provisions can become pivotal to continuing student engagement. Likewise, the prognostic reframing of housing stressors and difficulties may proof against a homelessness in the first place.

[83] As a mentor I have had many discussions about *hygge*, the Danish philosophy of coziness and contentment. As this did not emerge from diaries and forums it remains a topic for further consideration.
[84] Over many years mentoring I have been taught the art of domestic engineering including recently, how pizza boxes can be used to enlarge recycling bins and how Pringle lids fit on Gü pots to make small food containers.

Suicidal ideation, attempt and survival must also be attended to. Whilst only one mentor briefly recorded this it can be assumed that, with the hight correlation of autism and suicidality in the student population, many other mentors have encountered it in their career (Eisenberg *et al.*, 2007; Jackson *et al.*, 2018; Office for National Statistics, 2018; Camm-Crosbie *et al.*, 2019; Gunnell *et al.*, 2020). With findings that talking to at-risk populations about suicidal ideation may reduce ideation and promote treatment seeking, mentors require training in how to approach these discussions with confidence (Dazzi *et al.*, 2014; Blades *et al.*, 2018). Mentors may also be the first to whom suicide attempts are disclosed. In this there may be a responsibility to emulate the findings of family research through reacting in ways that limit shame and feelings of burdensomeness whilst promoting a sense of belonging (Frey and Fulginiti, 2017). This is exemplified in Ridout's conception of a Wellness Recovery Action Plan. Together the mentee and mental explore 'safe wellness tools', develop lists of activities to enable day-to-day wellness, identify early warning signs of crisis, record and share crisis plans, and plan for post-crisis reconstitution (Ridout, 2018, chap. 11). It is in these cases that the need for prognostic elements of reframing is apparent. It is not enough to be able to analyse a worldview, neither is it enough to have an optimistic mentor simply cheering you on, rather, in the trusted dyad of mentoring feelings of brokenness are transformed into daily strategies that might well be just enough or may even be the start of a fully lived life.

Motivational mentoring

> Noticing successes you may not have noticed, that you have achieved things you used to not be able to do.
> Rosie, mentee.

This facet of mentoring was identified by Temple Grandin who raised the need for mentors as a figure who will 'motivate them to succeed' but has received little subsequent attention despite its identification in a pilot study (Grandin, 1990, p. 1; Siew *et al.*, 2017). Moreover, this conceptualisation of motivational framing and reframing is a tentative

departure from previous conceptions of mentoring (see p.257-259). Pitched right, and it is a relationship which comforts and spurs to action; pitched wrong and the mentor is a nuisance and mentoring is an additional torment that saps initiative and determination. This is not crass, reward led motivation that generates the 'discomfort of authenticity' (Murray, 2020). Tentatively, it might be suggested that this is - instead - the quiet, overt valuing and reinforcement of intrinsic motivation. Mentors provide

> motivation in terms of optimism, empowerment and the sharing of joy, re-framing "have dones" rather than "haven't dones" where this is appropriate. This can build confidence and shift the focus from what can sometimes be a constant pressure to achieve, to be better, leading to feeling that no amount of work, however much, will be enough.
> Lucy

It is around this very simple facet of sharing joy that the motivational aspect of mentoring becomes apparent. University is usually the first time in which students live independently. As an often-misunderstood minority, autistic students need someone who can both see autistic success and who know them well enough to be able to speak to their own success. It is the motivation inherent in

> taking any instance, finding the silver linings and moving forward with a positive outlook and feeling of accomplishment.
> Sloth

There is a fine balance for mentors in avoiding framing university just about academic work, whilst also being there to sharing success and celebrating achievements. These achievements may be academically impressive, or they may be the ones that resonate for those within the profession;

> a student moved into halls for the first time this term, said it was the best month of his life and said our conversations helped make it so.
> LillyLearning

Conversely, having a professional for whom distress, worries and needs do not have to be explained can 'make a critical difference between well-being on the one hand and major distress on the other' (Beardon, 2021, p. 39). This fundamental acceptance of a different perception of the world from the majority abates distress, loneliness and anxiety (Griffith *et*

al., 2012; Cage, Di Monaco and Newell, 2018). This is not pom-pom wielding cheering from the side-lines. Though there may be times and mutual inclinations when this is beneficial, this is enduring motivational mentoring that turns up every week as a fearless space for "holding some really difficult stuff" whilst at the same time being that "protected space to let out the over-excitement and happiness out" (see pp.205-206, 210-211).

In this the enduring accepting relationship is critical, experiences of university are neither static nor particularly contiguous, there are good weeks and bad weeks;

> some weeks [students] have felt accepted as they have participated in something that made them feel good… but that can change weekly.
> Nickie

The experienced mentor creates sanctuaries of acceptance so that the inconstancy of peers can be modulated. Ensuring that "not receiving basic common courtesies" does not build up laminates of exclusion through the simple expedience of giving these common human courtesies (see p.193). Mentoring, grounded in the mentors' positive regard for their mentees motivates and protects the work of identity formation. It takes the diagnostic reframing of both an autistic identity and the community in which this identity grows and provides the backstage for expression. Motivational mentoring becomes a launchpad for confidence and self-esteem through the framing and reframing of selfhood.

> It seems fairly crucial to learn how to do this. Many things feel different once you adopt a different way of looking at them. Particularly important is the idea that something can be viewed in a more positive way, that enables someone to feel better about themselves.
> Melissa

Core to this task is the overt speaking of virtues. Mentors provide perspective through gentle reminders of the successes that have brought the students to this point in their university journey. As Rosie, a mentee in this project explained, "It's so useful to have someone with the big picture, negative emotions feel less overwhelming in the big context". Mentors have the perspicuity to relate and make clear how mentees have grown into and through their university life. Having an adult that is not a parent brings in a new type of

relationship (Siew et al., 2017). Mentors get to see the kindness, the compassion, and the fortitude of the autistic people that they meet with every week (MacLeod, 2016). In reflecting this back to the mentee confidence, self-esteem and self-actualisation can be nurtured which may ease the burden of the daily steps needed to navigate HEIs (Holgate, 2012; Sayman, 2015; Vincent, 2019; Lei and Russell, 2021).

Furthermore, there is a secondary reframing…

> of traits that often are judged negatively by others, for instance introversion, planning, catastrophising, etc. All have great advantages, and in reflection, when you can identify the advantages you can also identify when it is not working well.
> Lee

Through the transmutation of mentoring conversations socially maligned narratives of deficit are set in context. Introverts can be amazing leaders, procrastination can be an arena for creativity, rumination is the groundwork for philosophy, sadness is an apt response to a broken world, inertia can be wise contemplation, being quiet brings group insight, being focused is separate from avoiding demands. With epistemic tensions between the medical model of autism diagnosis, the social model of autism provisions and the post-social models of autistic ontologies there needs to be a wariness against over pathologizing behaviours and attitudes (Shakespeare and Watson, 2001; O'Dell *et al.*, 2016). Good mentors can provide the check to external condemnations of ways of being and the internalising of majority mores that could limit autistic authenticity.

This is particularly pertinent in the value that mentors place upon the sharing of passions and special interests within the mentoring space. Firstly, special interests are mechanisms of comfort they enable 'a safe zone' for deepening relations not only with the object of the interest, but with trusted people in their lives (Simmeborn Fleischer, 2012, p. 12).

> I have found that it is really useful to give a designated time to this topic as it can help the mentee to feel calmer and more focused. It can either be done at the start of the session, the end or as a strategy to help when a mentee is starting to feel particularly anxious about something.
> Andrew

Not only does this validation of passions create spaces of comfort, but there is a realisation of the importance of the interplay of subjects studied and a focused interest (Hamilton, Stevens and Girdler, 2016; Boven, 2018).

> The students I work with tend to have a strong interest and passion for the subject they are studying. It's really great to see and makes the job even more rewarding.
> Andrew

This selection of the language of "strong interest and passion" seems to indicate again the wariness around the potential for pathologization of special interest (Murray, 2020). The academy is the perfect field for rich reconceptualisations of symbolic interaction with the bodies and assemblages encountered. Couching this disposition of object-orientation in terms of limited capacity really has no place within mentoring and perhaps no place within the conceptualization of university (Cole, 2021). Rather these interests and passions indicate the failings of the neoliberal edifice of higher education. Such passions for learning might be pivotal in the decolonialization of curriculum through promoting contents, modes and means of learning that is not centred around neuronormative ideals.

Through the relational context of sharing interests and passions in mentoring sessions the joy of a well-conceived worldview can be tempered with the more mundane. A sensitivity towards fascinations that - whilst comforting - may lead in directions away from core course competencies, that miss criteria for marking schemes (Martin, 2006). The 'temptation to delve' into study above the desired social, or the focusing of attention on one loved module to the exclusion of others can be modulated by a reframing of balance in work and life (Gurbuz, Hanley and Riby, 2019, p. 624).

> It has been lovely to see some students I work with thrive in their passions. Lots of students have side hustles and projects that they sometimes feel need to take second place to academic study. Trying to bring a balance into their week that allows time for all of their interests/commitments has borne fruit this year - a student receiving paid commissions for art projects, one using a personal passion to inform an innovative dissertation project, etc. - really exciting.
> Claire

This fruit is a clear indicator why motivational framing needs to be part of the mentoring model. A simpler model of only diagnostic and prognostic mentoring would only identify and addresses issues and could even cause a harm through the externalising of difficulties into the systems at play in HEIs. Whilst systems need changing, those that bring about change need relationships in which they can - for at least an hour every week - not have to fight. Motivation framed mentoring modulates 'militancy' and self-segregation (Goffman, 1968, p. 162). The motivational aspect of mentoring may, at time, be acting through places of sanctuary. Advocates cannot be angry all the time, but neither should they fall into despair at the intransigence of the systems. Professional optimists bear hope. Specialist (Autism) Mentors who have been part of the profession for some time have a wisdom of perspective that can be shared. Change towards more just systems does happen in our HEIs; it takes a while, but it does happen.

It could be tentatively suggested, that this reconceptualization of mentoring with a dimension of nurturing intrinsic motivation echoes Alfred Lord Tennyson's portrayal of Ulysses' charge to Mentor to ensure that Telemachus grows into 'offices of tenderness' (Tennyson, 1842). Mentees belong to institutions in which they may find themselves taking on mantles of leadership. Having mentors who overtly express pride in mentees' achievements when no one else is around to do it seems key.

The fun of it all

Lastly, words need to be said about the fun of it all. The joys that are shared, the virtues that are spoken, the value that is given to passions, and the optimism of the professional, all build together to sustain an enduring supportive relationship. These are mentoring relationships that do not flounder on the 'cold, formal and impersonal' rocks of overly professionalised mentoring relationships (Roberts and Birmingham, 2017, p. 1047). Instead, a deep abiding mentoring relationships provide the security for silliness and absurdity without which out universities would be poorer.

Returning to the research questions

Before drawing conclusions, recommendations and suggesting a Framework for Reframing it is wise to briefly return to the research questions laid out in Chapter 2:

Table 22
Project phases by primary research question

	Phase	Principle research question
1	Scoping survey of university disability departments.	What is the prevalence of Specialist (Autism) Mentoring provision in UK universities?
2	Online guided diaries by mentees and mentors.	What do mentees ask about mentoring? What is discussed during mentoring sessions? Do mentors hold theories that might explain mentoring?
3	Semi-structured interviews with mentees.	Does the reported experience of mentoring in diaries resonate with mentees?
	both 3 & 4 and offboading	Is the proposed framework seen as useful by those who may encountered it?
4	Forum of "master" mentors	What should be foregrounded in a framework for Specialist (Autism) Mentoring provision in HEIs?

Accurate assessment of the prevalence of Specialist (Autism) Mentoring is marred by record keeping at national and some institutional level that conflates all specialist mentoring provision. Furthermore, provision seems inconstant across institutions as analysis suggests that only a weak relationship between size of the HEI and the amount of Specialist (Autism) Mentoring taking place. With these caveats in mind an estimate of 1:240 students are in receipt of mentoring, though this only seems to account for a 55% take up amongst autistic students. Furthermore, there are indicators that some students do not arrive at university with mentoring in place, rather accessing it at their first point of crisis.

Mentees as autistic hypothesisers shaped dairy responses in terms of a double empathy negotiation which elicited mentors' humility. Not only did this uncover the profound need for centring autistic people at the crux of the production of knowledge about autism supports, but it resonated with many practitioners' own conception of mentoring as a liberation from societal misconceptions of the young adults they extend care and compassion for. In doing so

it was revealed that the mentoring space is truly a holistic space in which the whole gamut of people's life can be dissected, negotiated, and navigated in an enduring mentoring relationship. Mentors conceive of this holistic practice as providing whatever is needed at the time in a backstage rehearsal for the becoming of student being. As such mentees are prepared as best as they can be for whatever lies ahead.

Such a description of mentoring sits well with the interviewed mentees themselves, not only as a rich description of the phenomenon of mentoring, but in a delight at their own place within such research. They are not alone. The forum of master mentors, which were chosen without recourse to their disposition, emerged as a majority autistic forum and brought ideas of fearless, imperfectly perfect, vulnerable, or piratical mentoring to the fore. The uneasy balance between the specialist professions of mental health and autism mentoring was weighed. Additionally, the brute reality of providing holistic support whilst ticking the boxes to ensure support continues was laid bare.

These ideas were mapped out in a Framework for Reframing. The forum of master mentors was instrumental in developing a sense of where key concepts seen in the mentoring diaries sat in a mentor's professional journey.

Conclusions

A Framework for Reframing

The following Framework for Reframing takes the rich description founded in mentees questions, expressed in a year's worth of mentors' diaries, and refined by the forum of master mentors, and seeks to find a way in which the reframing process occurring in of good mentoring practice can be upheld with a knowledge base and an understanding of the operational role.

Why a framework?

Frameworks in the field of education serve to provide models for designing and redesigning systems. Broadly, these frameworks can be categorized by their systematic and relational loci. Integrated Course Design and Backward Design seek to contextualise situational factors that unite learning goals, activities and context (Wiggins, Wiggins and McTighe, 2005; Fink, 2013). Conversely, the Accelerated Learning Framework and the 5Es framework use a cycle of learning based upon taxonomies of multiple intelligences whilst Universal Design for Learning or Inclusion have wider conceptions based in student need (Smith, 1998; Rose, 2000; Engleman and Bybee, 2001). It may be that for educational practitioners, if outcomes are good, a choice or a mix of frameworks doesn't particularly matter. Perhaps frameworks themselves are simply constructs that provide practitioners with a bedrock with which to frame complex issues.

There are few proto-frameworks for Specialist (Autism) Mentoring in goal-setting and holistic mentoring (MacLeod and Green, 2009; Martin *et al.*, 2017). Both models have constraints; mentoring through goal setting is effective but has the potential to become narrowly focused, whilst holistic mentoring can become mired through the lack of a starting place. It is hoped that the following, based as it is in a frame alignment process provides a

starting point for holistic mentoring in which goals can become part of the iterative process of reframing and motivation.

This developing of a Framework for Reframing in Specialist (Autism) Mentoring is acknowledged as just the first of many potential models. It does not profess to be the only way, rather it is a suggestion of a framework based in empirical findings which requires implementation and subsequent evaluation for it to be worthy in promoting universal design on campus. I dearly hope others will take up the mantel of such a challenge to create a professional ecosystem in which the needs of students can ultimately be met through the development of quality mentoring under different international funding models.

A loose Framework for Reframing in five areas

The following five areas are offered as reflective framework for Specialist (Autism) Mentors within the bounds of UK HEIs. The knowledge and understanding of diverse student experience. Operationalising the mentoring role (see pp.233-238). The craft of framing and reframing in three domains of diagnostic mentoring, prognostic mentoring, and motivational mentoring (see pp. 265-273, 273-281 and 281-287 respectively). Each element of the framework has resonance for new, developing and master mentors (see pp. 215-218). Pathways within the framework may be chosen by reflective mentors as they navigate their way through establishing and mastering their craft.

Figure 39
A proposed Framework for Reframing in Specialist (Autism) Mentoring with potential areas for CPD

The potential impact of A Framework for Reframing in Specialist (Autism) Mentoring

Mentoring is amorphous. It is suggested here that the provision of Specialist (Autism) Mentoring took on the trappings of mentoring, simply because it was named as such. It became a '"collective representation" and a fact in its own right' (Goffman, 1969, p.37). Practice that unfolded from a loosely designated provision intended to 'remove barriers to learning' mentoring became more than a method to align individuals to a local culture; it has become a phenomenon that seeks to change the predominant culture in HEIs in the nurturing of independent autistic students who can advocate for their own needs.

This project lays out a novel Framework for Reframing in Specialist (Autism) Mentoring in five parts. The knowledge and understanding of diverse autistic student experience; harnessing and operationalising the mentoring role within HEIs; and the craft of framing and reframing in three domains of diagnostic mentoring, prognostic mentoring, and motivational mentoring.

For students this approach to the development of the profession can only lead to better mentoring that support their needs and enables them to progress in their chosen fields of study. The Framework for Reframing's core tenants of framing and reframing are tools of empowerment. With that in mind, some autistic mentees will become researchers that will hopefully, in their own time, dispute this first foray into a framework. A framework that promotes self-advocacy must be open to the consequences of that self-advocacy. While the two pillars of autistic hypothesisers and autistic-majority forum of master mentors bring validity to these findings and framework; the impact of it will become apparent if the bodies and systems that may arise from it have authentic autistic leadership baked in. Then, perhaps, we might build better universities where narratives of normalisation no longer hold sway.

HEIs in turn may find the Framework for Reframing valuable in the identification and recruitment of master-mentors so as to ensure a provision that is worthy of their students. More widely this work has raised concerns over the fluctuating provision of mentoring between institutions, and the limitations that third-party mentoring providers may encounter or reinforce. The development of neurodiverse universities is perhaps essential to creating other robust institutions that are capable of weathering crisis. The COVID-19 pandemic laid bare some institutional resilience that was founded in disability accommodation. Furthermore, with the publication of Arriving at Thriving, there is a tantalising herald of some actual joined-up abutment of schools EHCPs, DSA provision in HE and supports for following employment in the creation of a system that 'supports disabled people from the classroom to the workplace' (Hector, 2020, p.9). As a cornerstone of the higher education pathway Specialist (Autism) Mentors need to be part of this reimagining.

Insight into the black box of mentoring

For disability service providers this Framework for Reframing provides an insight into the black box of mentoring. It is a framework that values the mixed economy of autistic and allied mentors. As a framework that values loops of reflective practice it is positioned as a tool for development rather than a tool of capability. The framework's scope ensures that planning for CPD can cover the breadth of mentoring need, and in this makes an overt call for a national body to support the development of the profession (see Appendix, Document 9 - A proposal for a National Body of Specialist (Autism) Mentoring). But more than any of this, it is a framework that values the originality and creativity of its mentors and - most importantly - gives explicit permission for mentors to act holistically.

The potential impact of this work is broader than simply the field of Specialist (Autism) Mentoring. As Universal Design for learning, instruction and for our campuses

suggests that multiplicities enrich the academy, then the gain that the emergence of Specialist (Autism) Mentoring requires us to consider wider mentoring practices. The echoes of diagnostic, prognostic, and motivational dimensions of the framing and reframing process of Specialist (Autism) Mentoring connects mentoring as a whole with the frame alignment of social movements. It suggests that brave mentors in other contexts roles in not just inducting protégés into the predominant institutional culture but must also having a mind to foster mentees so that they can re-shape that self-same culture.

Taking mentoring in a novel direction

Furthermore, the dimension of motivational mentoring in this thesis take mentoring in a novel direction. Mentoring is shown to require a quiet acknowledgment of capacity, that has been uncovered with those who are too often subjected to errant narratives of incapacity. By ensuring quiet support that nurtures intrinsic motivation the mentee is provided not only with a backstage to develop the presentation of the self, but a backstage in which the authentic self can be valued by a trusted other. What is seen is the context of Specialist (Autism) Mentoring may well be applicable to other mentoring relationships as it assuages the incessant striving that occurs in institutions under pressure. It reveals that the holistic messy experience of belonging to any institution pivots on being valued, not creating value.

For autism studies, this Framework for Reframing suggests a support provision of a large number of UK students. It goes somewhat to fill the lacuna which is research into higher education autism support. Perhaps too, it will inspire other researchers to turn the critical eye of university inwards. It is this research is hope that, by creating university space that encourages the success of autistic students we will move towards a critical mass of autistic autism researchers who will take our studies on to the next step.

Finally, if nothing else, this project has changed my own practice as a mentor. Through the rare opportunity of being able to discuss the idea of mentors with other mentors I have come to acknowledge a profession rather than just my practice. More than ever, the need has become apparent for a profession firmly established and confident in its capacity to bring lasting change to the students we work alongside and the institutions that host us.

Limitations of this study

In a project such as this there are interleaving limitations. Foremost among these is the level of participatory means as a PhD project, the bias towards good mentoring, and the historical hiatus of the Covid-19 pandemic.

Participatory PhD projects

There are obstacles and constraints imposed on participatory paradigms by the PhD. Underlying participatory methodologies is the meaningful participation of the groups studied in the whole research process, from the generation of research questions, through hypothesising, onto the generation of research tools, through pivotal and substantive involvement in the analysis of data, to the exercise of power in the production of outcomes. Whilst a PhD - through the application of a little creativity – might be able to be radically participatory in much of its process, there remains an unavoidable hesitation in declaring any project participatory PhD as it has only one name on the title page. In the instance of this project, autistic oversight and impetus was developed through autistic mentees working as hypothesisers, autistic expertise provided a check on research tools, and an autism majority forum of master mentors went some way to balance the scales of the profession. This is all an important step towards ensuring authentic autistic participation in the production of knowledge about supportive encounters[85]; but it perhaps misses the hallmark of autistic co-analysis that a project coming from a wider team might possess.

[85] An unintended side-effect of this project has been a desire to reframe the language of *support*, with its implied top-down nature, with something more akin to supportive encounter.

The bias of good mentoring

This project may not be in a position to critique bad mentoring. Participating mentors involvement in ongoing diary keeping would lead to a built-in bias against any mentor who was simply going through the motions. It is not that these mentors do not exist, one master mental spoke about colleagues who did not "get" their student. Perhaps a future project is required to see the prevalence of these practitioners.

This bias towards the good mentor does posit an interesting question. Should a framework, which maps out the paths for self-reflective mentors, be guided by those not optimistically hopeful and competent? It could be contended that, if measures were made to capture the disillusioned mentor, that the resultant framework would be weaker. Rather the incision of so many joyous and positive voices might be reflective of a compassionate profession thriving in our HEIs; and where thriving is not happening, perhaps a framework that highlights the best of us might be of use.

Pandemic tunnel vision

The pandemic itself changed for a while the content of mentoring. Mentoring meetings became a vessel in which contagion fear, change uncertainty and even apocalypse anxiety was held. Whilst analysis sought to ringfence such huge concerns, for a year of this study mentors brought hope and reason to terror and despair through the window of a zoom call. This shifted the balance as a pandemic tunnel vision took over. Talk about mentees' futures was given a new context. Campus life and the trials it brings was replaced by a life both easier and more limited by parental concerns. Findings and frameworks may be tinged with an element of crisis concern that – one hopes – will pass.

Future directions in the field of research about Specialist (Autism) Mentoring

Turning the eye of research inward

As research organisations HEIs are uniquely placed entities for self-reflection. Universities have the resources to turn the eye of research inward. In doing so data and conceptualisation can create structures in which a neurodiverse community of learners can thrive.

Autistic led research programmes into higher education

The field of higher education, and the habitus of autistic student are both profound subjects to study. The homogeneity of all learners is made apparent through the lens of the autistic experience of campus life. With the minority status of autistic students participatory action research that steps through partnership and gives control to autistic citizens renegotiate the *status quo* (Arnstein, 1969). In envisaging more autistic led research programs a reflective process can be engaged which links the universities 'local context' to embedded 'social relationships' (Baum, MacDougall and Smith, 2006, p. 854). By blurring the lines between the researcher and the researched participatory action research in this field would further serve to empower autistic students in their own in education. With the current need for a decolonialised curriculum, a departure from the neuronormative is warranted. For autistic led research to grow there is a requisite for more autistic researchers. Specialist (Autism) Mentoring has a part to play in supporting students through their studies so that more may emerge as researchers in their own field.

Supporting the recruitment of autistic Specialist (Autism) Mentors

> How do we equip new autistic mentors to become mentors. I have a new mentor who talks to me as an autistic mentor… they want to know if they're doing it 'right', what are the rules they should be following.
> Louise, briefing conversation

Becoming a new mentor is a daunting prospect, this is magnified if your own mentoring has been of rich and deep quality. Whilst initial training is available, the real training seems to be in experience. Consequently, our autistic autism mentors are ideally placed as evidenced by this project's blind selection of an autistic majority forum of master-mentors. To a assuage anxiety, this work sets out to delineate many of the potential needs and pitfalls of mentoring and a framework for reflection should guidance be sought.

The need for an evidence base for structures of supervision

Currently there is no funding mechanism to ensure that supervision for Specialist (Autism) Mentors. Not only does this create a weakness in the advancement skills and aptitudes in individual mentors but could be seen as unethical for a profession that is exposed to the trauma of vulnerable students' lives. When mentoring students in crisis the independence of the mentor's position can become isolating. What is lacking in the profession is the mentoring of mentors.

What is apparent is that the skills required for supervision are contained within the community of Specialist (Autism) Mentors. Supervision can be the mentoring of mentors. Utilising the same model diagnostic, prognostic and motivational reframing can nurture new mentors, and support established specialists. What is absent is a evidential body to unite practitioners and HEIs as they seek funding that would enable such practice to flourish (see Appendix, Document 9 A proposal for a National Body of Specialist (Autism) Mentoring).

Inquiry into the barriers to accessing Specialist (Autism) Mentoring

There are still barriers to accessing DSA funded Specialist (Autism) Mentoring. The funding structure excludes students from abroad. There is very little knowledge about such funding in transition arrangements from secondary schools, 6th forms, and colleges. For many years application for mentoring support seems to have been driven by parents, rather than by students who know and appreciate possible means of supporting their studies. Furthermore, the inequalities of autism assessment, socio-economic inequalities and ethnicity may also contribute to unequal access of support as they do university entrance. Finally, the research community should be turning and internally towards stigma within university provision.

Areas of proximate research

In addition to further research that is required in the field of autism mentoring in HEIs, this project has also revealed proximate fields with pressing need for research. Little has been directed at the phenomenon of autistic students and homelessness. Its prevalence in the diaries suggests a need that requires addressing, yet there is no data that addresses student homelessness, never mind the particular needs that cause autistic student homelessness to arise. This is a high priority.

In more generalised terms, follow up research is warranted following the OfS's findings of the receding metrics of progression and continuation when autistic students demographics are brought in line with statistical modelling. It seems – without access to the models used – that autistic students may be more likely to succeed despite intersecting challenges. Analysis may well reveal pathways to achievement for all.

Post-neurodiversity – neuroconfluence?

It has been suggested that this modelling of mentoring in framing and reframing is one that is not contingent on any particular movement. The neurodiversity paradigm is currently in ascendancy, and rightly so as it seeks to tackle the historical and systematic injustices perpetuated against the autistic community. One thing apparent to those who study autism research is the rise and falls of theories, customs, and cultures. Consequently, this conception of mentoring as a process of frame alignment writ small sets it as a phenomenon separated from such movements. In doing so, this framework may have an enduring impact as autistic culture and advocacy continues to flourish.

The emergence of a framing and reframing model of mentoring from mentoring relationships both across and within dispositional dyads perhaps hints at what might be next. Universities, as fields of public discourse are becoming, at least in the UK, places in which many autistic students find belonging, meaning, and academic success. With the growing number of autistic postgraduate students there is a need to develop teams across neurotypes. Whilst the solitary nature of the PhD student is a particularly entrenched system, radically inclusive teams of early career researchers that find resilience in diversity are becoming a reality. Specialist (Autism) Mentoring has its place not just as a provision which can be shaped by ideas shaped in the mingling of neuroconfluence dialogue but one that, in-turn, provides the next generation of researchers to develop neuroconfluence space.

Autism Gain

The development of a framework for Specialist (Autism) Mentoring in the UK HEIs speaks to a wider context. In the development of the model of framing and reframing there is potential to transform other understandings of mentoring in other contexts. This is a form of

mentoring that seeks not just the reformation of the individual as they encounter a new institution, it is the reformation of the institution as they are joined by the new advocate. Perhaps this is an example of autism gain.

Mentors across our universities - be they academic development mentors, the mentors of nurse or medic training, the school-based mentors of teacher training, the departmental mentors charged with the pastoral care of postgraduate students, the peer mentor projects of buddy schemes or constellation mentoring in the USA, reverse-mentoring that enables senior management to be informed by the student body - can all be informed by the framework here. Barriers can be removed, challenges framed and reframed openly without stigma, and flourishing cultures of success can have ample mentoring soil in which to take root.

Recommendations

For mentors

- The foundation of a national network for Specialist (Autism) Mentoring. This body should have authentic structures for autistic leadership and have a remit to ensure the provision of the following recommendations should this leadership assent (see Appendix, Document 9 - A proposal for a National Body of Specialist (Autism) Mentoring). Alongside academic publishing, training, and teaching, this forms a strand in an intend post-doctoral applications.
- A CPD tendering and dissemination strategy to ensure mentoring providers have access to quality training that addresses the multiplicities of the holistic practice of mentoring

For universities

- Research into the 55% take up of Specialist (Autism) Mentoring; potentially leading to a focused national campaign to schools, FE colleges and sixth forms highlighting mentoring as one of many supports available under the DSA.
- The development of post-graduate level university modules for the estimated 60 new mentors starting each year; rising to 120 if full mentoring for all autistic students is met.
- HEIs, via their Disability Services, should be required to provide minimum conditions for Specialist (Autism) Mentoring:
    - Rooms - backstage and appropriate for sensory needs.
    - Contact with tutors and, with the caveat of student consent, parents.
    - University email and resources for mentors.
    - Provisions of supervision as a hallmark of good mentoring.
    - Access to institution specific CPD.

Publications from this work

Irvine, B. and MacLeod, A. (2022) What are the challenges and successes reported by autistic students at university?: a literature review. *Good Autism Practice (GAP)*, 23 (1): 49–59.

Potential and intended publications

Short report – A Framework for Reframing

A short accessible report laying out the Framework for Reframing, intended as a reflexive tool for mentors considering developing their craft.

Paper: The domains of mentoring: What does holistic really entail? Specialist (Autism) Mentoring in UK universities.

An academic paper aimed at providers defending the holistic nature of a specialised practice with in the universal design of campus life.

Paper: The craft of reframing in Specialist (Autism) Mentoring.

An academic reflection aimed at practitioner-researcher

Methods paper: Autism majority forums and the rebalancing of minority voice.

Analysis of the impact of neurodiverse positive groups of mastery.

Book: “An attitude of everything is possible”: The craft of Specialist (Autism) Mentoring in UK universities.

To mentors:

> “You have to be prepared to think outside the box in every session, you can never judge or think something is silly because the autistic brain is a magical thing and a progression of human thinking.
>
> Just because it doesn't initially make sense to you, or you can’t completely grasp the issue of the student doesn’t mean it is "abnormal"…
>
> It just means you need to work harder to keep up.”
> Sloth

Bibliography

Abouserie, R. (1994). ‘Sources and levels of stress in relation to locus of control and self esteem in university students’. *Educational psychology*. Taylor & Francis, 14 (3), pp. 323–330.

About Google Scholar. (no date). Available at: https://scholar.google.com/intl/en/scholar/about.html (Accessed: 13 November 2019).

Accardo, A. L. (2017). ‘College-bound young adults with ASD: Self-reported factors promoting and inhibiting success’. *DADD Online Journal*.

Accardo, A. L., Bean, K., Cook, B., Gillies, A., Edgington, R., Kuder, S. J. and Bomgardner, E. M. (2019). ‘College Access, Success and Equity for Students on the Autism Spectrum’. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-019-04205-8.

Accardo, A. L., Kuder, S. J. and Woodruff, J. (2019). ‘Accommodations and support services preferred by college students with autism spectrum disorder’. *Autism*, 23 (3), pp. 574–583. doi: 10.1177/1362361318760490.

Adams, J. (2021). ‘The contribution of specialist mentoring for autistic student studying higher education courses in the UK’. *Journal of Inclusive Practice in Further and Higher Education*, (13.1), pp. 106–126. Available at: https://nadp-uk.org/issue-13-1-summer-2021/ (Accessed: 5 September 2021).

Aldridge, J. (2016). *Participatory research: working with vulnerable groups in research and practice*. Bristol ; Chicago, IL: Policy Press.

Allen, M. and Coney, K. (2021). *What Happens Next?* AGCAS Disability Task Group. Available at: https://www.agcas.org.uk/News/what-happens-next-2021/268397 (Accessed: 3 January 2022).

Allen, R. E. S. and Wiles, J. L. (2016). ‘A rose by any other name: participants choosing research pseudonyms’. *Qualitative Research in Psychology*. Routledge, 13 (2), pp. 149–165. doi: 10.1080/14780887.2015.1133746.

Alverson, C. Y., Lindstrom, L. E. and Hirano, K. A. (2019). ‘High School to College: Transition Experiences of Young Adults With Autism’. *Focus on Autism and Other Developmental Disabilities*, 34 (1), pp. 52–64. doi: 10.1177/1088357615611880.

Ames, M. E., McMorris, C. A., Alli, L. N. and Bebko, J. M. (2016). ‘Overview and Evaluation of a Mentorship Program for University Students With ASD’. *Focus on Autism and Other Developmental Disabilities*, 31 (1), pp. 27–36. doi: 10.1177/1088357615583465.

Anderson, A. (2018). ‘Autism and the Academic Library: A Study of Online Communication’. *College & Research Libraries*, 79 (5), pp. 645–658. doi: 10.5860/crl.79.5.645.

Anderson, A. H., Carter, M. and Stephenson, J. (2018). ‘Perspectives of university students with autism spectrum disorder’. *Journal of Autism and Developmental Disorders*, 48 (3). doi: 10.1007/s10803-017-3257-3.

Anderson, A. H., Stephenson, J. and Carter, M. (2017). ‘A systematic literature review of the experiences and supports of students with autism spectrum disorder in post-secondary education’. *Research in Autism Spectrum Disorders*, 39, pp. 33–53. doi: 10.1016/j.rasd.2017.04.002.

Anderson, A. H., Stephenson, J., Carter, M. and Carlon, S. (2019). ‘A Systematic Literature Review of Empirical Research on Postsecondary Students with Autism Spectrum Disorder’. *Journal of Autism and Developmental Disorders*, 49 (4), pp. 1531–1558. doi: 10.1007/s10803-018-3840-2.

Anderson, E. M. and Shannon, A. L. (1988). ‘Toward a Conceptualization of Mentoring’. *Journal of Teacher Education*. SAGE Publications Inc, 39 (1), pp. 38–42. doi: 10.1177/002248718803900109.

Anderson, K. A., McDonald, T. A., Edsall, D., Smith, L. E. and Taylor, J. L. (2016). ‘Postsecondary expectations of high-school students with autism spectrum disorders’. *Focus on autism and other developmental disabilities*, 31 (1), pp. 16–26.

Anderson, K. A., Sosnowy, C., Kuo, A. A. and Shattuck, P. T. (2018). ‘Transition of Individuals With Autism to Adulthood: A Review of Qualitative Studies’. *Pediatrics*, 141 (Supplement 4), pp. S318–S327. doi: 10.1542/peds.2016-4300I.

Arnstein, S. R. (1969). ‘A Ladder Of Citizen Participation’. *Journal of the American Institute of Planners*. Routledge, 35 (4), pp. 216–224. doi: 10.1080/01944366908977225.

Ashbaugh, K., Koegel, R. L. and Koegel, L. K. (2017). ‘Increasing social integration for college students with autism spectrum disorder.’ *Behavioral development bulletin*, 22 (1), p. 183.

Ashburner, J. K., Bobir, N. I. and Dooren, K. van. (2018). ‘Evaluation of an Innovative Interest-Based Post-School Transition Programme for Young People with Autism Spectrum Disorder’. *International Journal of Disability, Development and Education*, 65 (3), pp. 262–285. doi: 10.1080/1034912X.2017.1403012.

Australian Government. (1992). *Disability Discrimination Act 1992*. Attorney-General’s Department. Available at: http://www.legislation.gov.au/Details/C2018C00125 (Accessed: 10 March 2020).

Bailey, K. M., Frost, K. M., Casagrande, K. and Ingersoll, B. (2019). ‘The relationship between social experience and subjective well-being in autistic college students: A mixed methods study’. *Autism*. SAGE Publications Ltd. doi: 10.1177/1362361319892457.

Bakker, T., Krabbendam, L., Bhulai, S. and Begeer, S. (2019). 'Background and enrollment characteristics of students with autism in higher education'. *Research in Autism Spectrum Disorders*, 67, p. 101424. doi: 10.1016/j.rasd.2019.101424.

Bandara, W., Miskon, S. and Fielt, E. (2011). 'A systematic, tool-supported method for conducting literature reviews in information systems'. in Tuunainen, V., Nandhakumar, J., Rossi, M., and Soliman, W. (eds) *Proceedings of the 19th European Conference on Information Systems (ECIS 2011)*. *19th European Conference on Information Systems : ICT and Sustainable Service Development (ECIS 2011)*, Helsinki, Finland. Available at: http://www.ecis2011.fi/ (Accessed: 19 October 2019).

Banerjee-Batist, R., Reio, T. G. and Rocco, T. S. (2019). 'Mentoring Functions and Outcomes: An Integrative Literature Review of Sociocultural Factors and Individual Differences'. *Human Resource Development Review*. SAGE Publications, 18 (1), pp. 114–162. doi: 10.1177/1534484318810267.

Barnhill, G. P. (2016). 'Supporting Students With Asperger Syndrome on College Campuses: Current Practices'. *Focus on Autism and Other Developmental Disabilities*, 31 (1), pp. 3–15. doi: 10.1177/1088357614523121.

Baron-Cohen, S. (2008). *Autism and Asperger syndrome*. 1st edn. Oxford: Oxford University Press (Facts (Oxford, England)).

Baron-Cohen, S. and Wheelwright, S. (2003). 'The Friendship Questionnaire: An investigation of adults with Asperger syndrome or high-functioning autism, and normal sex differences'. *Journal of autism and developmental disorders*. Springer, 33 (5), pp. 509–517.

Baruch, Y. and Holtom, B. C. (2008). 'Survey response rate levels and trends in organizational research'. *Human Relations*. SAGE Publications Ltd, 61 (8), pp. 1139–1160. doi: 10.1177/0018726708094863.

Baum, F., MacDougall, C. and Smith, D. (2006). 'Participatory action research'. *Journal of Epidemiology and Community Health*, 60 (10), pp. 854–857. doi: 10.1136/jech.2004.028662.

Bauman, H.-D. L. and Murray, J. J. (eds). (2014). *Deaf Gain: Raising the Stakes for Human Diversity*. Minneapolis, MN: University of Minnesota Press. Available at: http://ebookcentral.proquest.com/lib/bham/detail.action?docID=1833637 (Accessed: 31 October 2019).

Bazeley, P. and Jackson, K. (2013). *Qualitative Data Analysis with NVivo*. Thousand Oaks, CA: SAGE.

Beardon, L. (2020). 'Autopia (Autistic Utopia)'. *2020 CRAE Annual Lecture*, 8 December. Available at: https://crae.ioe.ac.uk/portfolio/2020-crae-annual-lecture/ (Accessed: 5 November 2021).

Beardon, L. (2021). *Autism in Adults*. 2nd edn. London: Hachette UK.

Beardon, L. and Edmonds, G. (2007). 'ASPECT consultancy report. A National Report on the Needs of Adults with Asperger Syndrome'.

Beardon, L., Martin, N. and Woolsey, I. (2009). 'What do students with Asperger syndrome or high-functioning autism want at college and university? (in their own words)'. *Good Autism Practice*, 10 (2), pp. 35–43.

Beardon, L. and Worton, D. (eds). (2017). *Bittersweet on the autism spectrum*. London ; Philadelphia: Jessica Kingsley Publishers.

Bebko, J., Schroeder, J. and Ames, M. (2011). *A Mentoring Program for Students with Asperger's and ASDs*. Ontario: York University Bookstore.

Beekhuyzen, J. (2007). 'Putting the pieces of the puzzle together: Using Nvivo for a literature review'. *Proceedings of QualIT2007: Qualitative Research, From the Margins to the Mainstream, Wellington, New Zealand, Victoria University of Wellington*, pp. 18–20.

Bell, S., Devecchi, C., Shevlin, M. and Mc Guckin, C. (2017). 'Making the transition to post-secondary education: opportunities and challenges experienced by students with ASD in the Republic of Ireland'. *European Journal of Special Needs Education*, 32 (1), pp. 54–70. doi: 10.1080/08856257.2016.1254972.

Benford, R. D. and Snow, D. A. (2000). 'Framing Processes and Social Movements: An Overview and Assessment'. *Annual Review of Sociology*. Annual Reviews, 26, pp. 611–639. Available at: https://www.jstor.org/stable/223459 (Accessed: 10 February 2021).

Berg, M. and Seeber, B. K. (2016). *The Slow Professor: Challenging the Culture of Speed in the Academy*. Toronto: University of Toronto Press.

Berry, K. M. (2018). *Experiences of Students with Autism Spectrum Disorder in Mississippi Community Colleges*. Ed.D. The University of Mississippi. Available at: http://search.proquest.com/docview/2063147608/abstract/7E2D770249244FDPQ/1 (Accessed: 7 November 2019).

Blades, C. A., Stritzke, W. G. K., Page, A. C. and Brown, J. D. (2018). 'The benefits and risks of asking research participants about suicide: A meta-analysis of the impact of exposure to suicide-related content'. *Clinical Psychology Review*, 64, pp. 1–12. doi: 10.1016/j.cpr.2018.07.001.

Blamires, M. and Gee, S. (2002). *Raising aspirations: increasing the participation of students with Autistic Spectrum Disorders (Social Communication Difficulties) in Higher Education: report of the HEFCE strand two disability ASPIHE project*. Report. Canterbury: Canterbury Christ Church University. Available at: http://create.canterbury.ac.uk/10226/ (Accessed: 25 October 2019).

Bogdashina, O. (2005). *Communication issues in autism and Asperger syndrome: do we speak the same language?* London ; Philadelphia: Jessica Kingsley Publishers.

Bogdashina, O. (2016). *Sensory Perceptual Issues in Autism and Asperger Syndrome, Second Edition: Different Sensory Experiences - Different Perceptual Worlds*. London ; Philadelphia: Jessica Kingsley Publishers.

Bolourian, Y., Zeedyk, S. M. and Blacher, J. (2018). 'Autism and the University Experience: Narratives from Students with Neurodevelopmental Disorders'. *Journal of Autism and Developmental Disorders*, 48 (10), pp. 3330–3343. doi: 10.1007/s10803-018-3599-5.

Botha, M. and Cage, E. (no date). *Stigma and Autism Research Network*. Available at: https://stirlingpsych.eu.qualtrics.com/jfe/form/SV_73bnJSEBtCJKoSO (Accessed: 12 October 2021).

Botha, M. and Frost, D. M. (2020). 'Extending the Minority Stress Model to Understand Mental Health Problems Experienced by the Autistic Population'. *Society and Mental Health*. SAGE Publications Inc, 10 (1), pp. 20–34. doi: 10.1177/2156869318804297.

Botha, M. and Gillespie-Lynch, K. (2022). 'Come as You Are: Examining Autistic Identity Development and the Neurodiversity Movement through an Intersectional Lens'. *Human Development*. Karger Publishers, 66 (2), pp. 93–112. doi: 10.1159/000524123.

Botha, M., Hanlon, J. and Williams, G. L. (2021). 'Does Language Matter? Identity-First Versus Person-First Language Use in Autism Research: A Response to Vivanti'. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-020-04858-w.

Bottema-Beutel, K., Kim, S. Y. and Miele, D. B. (2019). 'College Students' Evaluations and Reasoning About Exclusion of Students with Autism and Learning Disability: Context and Goals may Matter More than Contact'. *Journal of Autism and Developmental Disorders*, 49 (1), pp. 307–323. doi: 10.1007/s10803-018-3769-5.

de Botton, A. (2009). *A kinder, gentler philosophy of success*. Available at: https://www.ted.com/talks/alain_de_botton_a_kinder_gentler_philosophy_of_success/transcript (Accessed: 9 September 2020).

Bourdieu, P. (1993). *Sociology in question*. London ; Thousand Oaks, CA: Sage (Theory, culture & society).

Boven, F. (2018). 'Special interests and inclusive academic learning: an autistic perspective'. *Advances in Autism*. doi: 10.1108/AIA-05-2018-0020.

Bowman, J. and Scaife, W. (2012). 'Blogging: A System to Encourage Asperger and Neuro-Typical Students to Successfully Complete Their Undergraduate Dissertation?' *International Journal for Cross-Disciplinary Subjects in Education*, 3 (1).

Braun, V. and Clarke, V. (2006). 'Using thematic analysis in psychology'. *Qualitative Research in Psychology*, 3 (2), pp. 77–101. doi: 10.1191/1478088706qp063oa.

Braun, V. and Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. 1st edn. Thousand Oaks, CA: SAGE.

Breakey, C. (2006). *The Autism Spectrum and Further Education: A Guide to Good Practice*. London ; Philadelphia: Jessica Kingsley Publishers.

Brinkert, J. and Remington, A. (2020). 'Making sense of the perceptual capacities in autistic and non-autistic adults'. *Autism*, 24 (7), pp. 1795–1804. doi: 10.1177/1362361320922640.

Brinkmann, S. and Kvale, S. (2015). *InterViews: learning the craft of qualitative research interviewing*. 3rd edn. Los Angeles: Sage Publications.

Brosnan, M. and Mills, E. (2016). 'The effect of diagnostic labels on the affective responses of college students towards peers with "Asperger's Syndrome" and "Autism Spectrum Disorder"'. *Autism*, 20 (4), pp. 388–394. doi: 10.1177/1362361315586721.

Brown, K. R. and Coomes, M. D. (2016). 'A spectrum of support: current and best practices for students with Autism Spectrum Disorder (ASD) at community colleges'. *Community College Journal of Research and Practice*, 40 (6), pp. 465–479. doi: 10.1080/10668926.2015.1067171.

Brown, K. R., Peña, E. V. and Rankin, S. (2017). 'Unwanted Sexual Contact: Students With Autism and Other Disabilities at Greater Risk'. *Journal of College Student Development*, 58 (5), pp. 771–776. doi: 10.1353/csd.2017.0059.

Bublitz, D., Wong, V., Donachie, A., Brooks, P. J. and Gillespie-Lynch, K. (2015). 'Applying universal design to build supports for college students with autism spectrum disorder'. *Roberta v. Nata (Eds.) Progress in Education*, 36, pp. 1–24.

Buell, C. (2004). 'Models of mentoring in communication'. *Communication Education*. Routledge, 53 (1), p. null. doi: 10.1080/0363452032000135779.

Burgstahler, S. and Russo-Gleicher, R. J. (2015). 'Applying Universal Design to Address the Needs of Postsecondary Students on the Autism Spectrum'. *Journal of Postsecondary Education and Disability*, 28 (2), pp. 199–212. Available at: https://eric.ed.gov/?id=EJ1074670 (Accessed: 20 November 2019).

Butler, R. C. and Gillis, J. M. (2011). 'The Impact of Labels and Behaviors on the Stigmatization of Adults with Asperger's Disorder'. *Journal of Autism and Developmental Disorders*, 41 (6), pp. 741–749. doi: 10.1007/s10803-010-1093-9.

Byrne, M. W. and Keefe, M. R. (2002). 'Building Research Competence in Nursing Through Mentoring'. *Journal of Nursing Scholarship*, 34 (4), pp. 391–396. doi: 10.1111/j.1547-5069.2002.00391.x.

Cage, E., De Andres, M. and Mahoney, P. (2020). 'Understanding the factors that affect university completion for autistic people'. *Research in Autism Spectrum Disorders*, 72, p. 101519. doi: 10.1016/j.rasd.2020.101519.

Cage, E., Di Monaco, J. and Newell, V. (2018). 'Experiences of Autism Acceptance and Mental Health in Autistic Adults'. *Journal of Autism and Developmental Disorders*, 48 (2), pp. 473–484. doi: 10.1007/s10803-017-3342-7.

Cage, E. and Howes, J. (2020). 'Dropping out and moving on: A qualitative study of autistic people's experiences of university:' *Autism*. SAGE PublicationsSage UK: London, England. doi: 10.1177/1362361320918750.

Cai, R. Y. and Richdale, A. L. (2016). 'Educational Experiences and Needs of Higher Education Students with Autism Spectrum Disorder'. *Journal of Autism and Developmental Disorders*, 46 (1), pp. 31–41. doi: 10.1007/s10803-015-2535-1.

Camarena, P. M. and Sarigiani, P. A. (2009). 'Postsecondary educational aspirations of high-functioning adolescents with autism spectrum disorders and their parents'. *Focus on Autism and Other Developmental Disabilities*, 24 (2), pp. 115–128.

Camm-Crosbie, L., Bradley, L., Shaw, R., Baron-Cohen, S. and Cassidy, S. (2019). '"People like me don't get support": Autistic adults' experiences of support and treatment for mental health difficulties, self-injury and suicidality'. *Autism: The International Journal of Research & Practice*, 23 (6), pp. 1431–1441. doi: 10.1177/1362361318816053.

Campbell, D. E. and Campbell, T. A. (2000). 'The mentoring relationship: Differing perceptions of benefits'. *College Student Journal*. Project Innovation (Alabama), 34 (4), pp. 516–516.

Canadian Human Rights Commission. (2019). *Accessible Canada Act 2019*. Available at: https://laws-lois.justice.gc.ca/eng/acts/a-0.6/page-1.html (Accessed: 15 March 2022).

Cascio, M. A., Weiss, J. A. and Racine, E. (2020). 'Person-oriented ethics for autism research: Creating best practices through engagement with autism and autistic communities'. *Autism*. SAGE Publications Ltd, 24 (7), pp. 1676–1690. doi: 10.1177/1362361320918763.

Casement, S., Carpio de los Pinos, C. and Forrester-Jones, R. (2017). 'Experiences of University Life for Students with Asperger's Syndrome: A Comparative Study between Spain and England'. *International Journal of Inclusive Education*, 21 (1), pp. 73–89.

Chadha, D., Maraj, M. and Kogelbauer, A. (2020). 'Opening up Assessment in the Age of COVID-19: Exploring the Utility of Online Open-Book Exams'. *Advances in Engineering Education*. American Society for Engineering Education, 8 (4). Available at: https://eric.ed.gov/?id=EJ1287402 (Accessed: 15 September 2021).

Charmaz, K. (1996). 'Grounded theory'. in Smith, J. A., Harré, R., and Van Langenhove, L. (eds) *Rethinking methods in Psychology*, pp. 27–49.

Chiang, H.-M., Cheung, Y. K., Hickson, L., Xiang, R. and Tsai, L. Y. (2012). 'Predictive Factors of Participation in Postsecondary Education for High School Leavers with Autism'. *Journal of Autism and Developmental Disorders*, 42 (5), pp. 685–696. doi: 10.1007/s10803-011-1297-7.

Chown, N. (2014). 'More on the ontological status of autism and double empathy'. *Disability & Society*. Routledge, 29 (10), pp. 1672–1676. doi: 10.1080/09687599.2014.949625.

Chown, N., Baker-Rogers, J., Hughes, L., Cossburn, K. N. and Byrne, P. (2018). 'The "High Achievers" project: an assessment of the support for students with autism attending UK universities'. *Journal of Further and Higher Education*, 42 (6), pp. 837–854. doi: 10.1080/0309877X.2017.1323191.

Chown, N. and 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), pp. 477–493. doi: 10.1080/0309877X.2011.643771.

Christ, T. W. (2007). 'A Recursive Approach to Mixed Methods Research in a Longitudinal Study of Postsecondary Education Disability Support Services'. *Journal of Mixed Methods Research*. SAGE Publications, 1 (3), pp. 226–241. doi: 10.1177/1558689807301101.

Clouder, L., Karakus, M., Cinotti, A., Ferreyra, M. V., Fierros, G. A. and Rojo, P. (2020). 'Neurodiversity in higher education: a narrative synthesis'. *Higher Education*, 80 (4), pp. 757–778. doi: 10.1007/s10734-020-00513-6.

Cochrane, A. and Holmes, C. (2022). *Report into Disabled Students' Allowance (DSA)*. Available at: https://lordchrisholmes.com/report-disabled-students-allowance-dsa/ (Accessed: 13 April 2022).

Cohen, L., Manion, L., Morrison, K., Manion, L. and Morrison, K. (2000). *Research Methods in Education*. 5th edn. London ; New York: Routledge. doi: 10.4324/9780203224342.

Cole, K. L. (2021). 'Neuroqueering interpersonal communication theory: listening to autistic object-orientations'. *Review of Communication*. Routledge, 21 (3), pp. 187–205. doi: 10.1080/15358593.2021.1961849.

Colley, H. (2003). 'Engagement mentoring for socially excluded youth: Problematising an "holistic" approach to creating employability through the transformation of habitus'. *British Journal of Guidance & Counselling*. Routledge, 31 (1), pp. 77–99. doi: 10.1080/0306988031000086189.

Collini, S. (2012). *What are universities for?* London ; New York: Penguin.

Como, D. H., Floríndez, L. I., Tran, C. F., Cermak, S. A. and Stein Duker, L. I. (2020). 'Examining unconscious bias embedded in provider language regarding children with autism'. *Nursing & Health Sciences*, 22 (2), pp. 197–204. doi: 10.1111/nhs.12617.

Coney, K. (2021). 'What should be done to ensure autistic graduates succeed in the workplace?' *Journal of Inclusive Practice in Further and Higher Education*, (13.1), pp. 106–126. Available at: https://nadp-uk.org/issue-13-1-summer-2021/ (Accessed: 5 September 2021).

Constantino, J. N. and Gruber, C. P. (2012). *Social responsiveness scale: SRS-2*. Torrance, CA: Western Psychological Services.

Cooper, A. (2013). 'Assessing the needs of students on the autism spectrum at college and university'. *Good Autism Practice*, 14 (1), pp. 47–54. Available at: https://www.ingentaconnect.com/content/bild/gap/2013/00000014/A00102s1/art00008 (Accessed: 25 October 2019).

Cooper, K., Smith, L. G. E. and Russell, A. (2017). 'Social identity, self-esteem, and mental health in autism'. *European Journal of Social Psychology*, 47 (7), pp. 844–854. doi: 10.1002/ejsp.2297.

Cousin, G. (2010). 'Positioning positionality'. in Savin-Baden, M. and Major, C. H., *New Approaches to Qualitative Research: Wisdom and Uncertainty*. Routledge.

Cox, B. E., Thompson, K., Anderson, A., Mintz, A., Locks, T., Morgan, L., Edelstein, J. and Wolz, A. (2017). 'College Experiences for Students With Autism Spectrum Disorder: Personal Identity, Public Disclosure, and Institutional Support'. *Journal of College Student Development*, 58 (1), pp. 71–87. doi: 10.1353/csd.2017.0004.

Crane, L., Adams, F., Harper, G., Welch, J. and Pellicano, L. (2017). 'Know your normal: Mental health in young autistic adults'. UCL Institute of Education. Available at: https://www.ambitiousaboutautism.org.uk/sites/default/files/youth-participation/toolkit/Ambitious-about_autism-know-your-normal-full-report.pdf (Accessed: 8 May 2021).

Crane, L., Ashworth, M. and Davies, J. (2020). *Research Toolkit*. *Autistica Research Toolkit*. Available at: https://www.autistica.org.uk/our-research/research-toolkit (Accessed: 8 September 2020).

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. and Lam, S. (2020). 'COVID-19: 20 countries' higher education intra-period digital pedagogy responses'. *Journal of Applied Learning & Teaching*. Singapore: Kaplan Singapore, 3 (1), pp. 1–20. doi: 10.37074/jalt.2020.3.1.7.

Cresswell, L. and Cage, E. (2019). '"Who Am I?": An Exploratory Study of the Relationships Between Identity, Acculturation and Mental Health in Autistic Adolescents'. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-019-04016-x.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE Publications Ltd.

Creswell, J. W. and Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: SAGE Publications.

Creswell, J. W. and Tashakkori, A. (2007). 'Editorial: Differing Perspectives on Mixed Methods Research'. *Journal of Mixed Methods Research*. SAGE Publications, 1 (4), pp. 303–308. doi: 10.1177/1558689807306132.

Cribb, S., Kenny, L. and Pellicano, E. (2019). '"I definitely feel more in control of my life": The perspectives of young autistic people and their parents on emerging adulthood'. *Autism: The International Journal of Research & Practice*, 23 (7), pp. 1765–1781. doi: 10.1177/1362361319830029.

Crisp, G. and Cruz, I. (2009). 'Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007'. *Research in Higher Education*, 50 (6), pp. 525–545. doi: 10.1007/s11162-009-9130-2.

Cullen, J. A. (2015). 'The Needs of College Students with Autism Spectrum Disorders and Asperger's Syndrome'. *Journal of Postsecondary Education and Disability*, 28 (1), pp. 89–101. Available at: https://eric.ed.gov/?id=EJ1066322 (Accessed: 20 November 2019).

Cunnien, T. (2016). *A retention intervention for first-year students with disabilties in an art and design institution: A program evaluation*. Ed.D. University of West Georgia. Available at: http://search.proquest.com/docview/1882683904/abstract/895D4784ABA9410BPQ/1 (Accessed: 27 November 2019).

Cutrona, C. E. and Russell, D. W. (1987). 'The provisions of social relationships and adaptation to stress'. *Advances in personal relationships*, 1 (1), pp. 37–67.

Dallas, B. K., Ramisch, J. L. and McGowan, B. (2015). 'Students with Autism Spectrum Disorder and the Role of Family in Postsecondary Settings: A Systematic Review of the Literature'. *Journal of Postsecondary Education and Disability*, 28 (2), pp. 135–147. Available at: https://eric.ed.gov/?id=EJ1074657 (Accessed: 20 November 2019).

Davidovitch, N., Ponomaryova, A., Guterman, H. G. and Shapira, Y. (2019). 'The Test of Accessibility of Higher Education in Israel: Instructors' Attitudes toward High-Functioning

Autistic Spectrum Students'. *International Journal of Higher Education*, 8 (2), pp. 49–67. Available at: https://eric.ed.gov/?id=EJ1212859 (Accessed: 8 November 2019).

Davidson, J. and Henderson, V. L. (2010). '"Coming out" on the spectrum: autism, identity and disclosure'. *Social & Cultural Geography*. Routledge, 11 (2), pp. 155–170. doi: 10.1080/14649360903525240.

Dazzi, T., Gribble, R., Wessely, S. and Fear, N. T. (2014). 'Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence?' *Psychological Medicine*. Cambridge University Press, 44 (16), pp. 3361–3363. doi: 10.1017/S0033291714001299.

De Groot, K. and Van Strien, J. W. (2017). 'Evidence for a Broad Autism Phenotype'. *Advances in Neurodevelopmental Disorders*, 1 (3), pp. 129–140. doi: 10.1007/s41252-017-0021-9.

Defeyter, M. A., Stretesky, P. B., Long, M. A., Furey, S., Reynolds, C., Porteous, D., Dodd, A., Mann, E., Kemp, A., Fox, J., McAnallen, A. and Gonçalves, L. (2021). 'Mental Well-Being in UK Higher Education During Covid-19: Do Students Trust Universities and the Government?' *Frontiers in Public Health*, 9, p. 436. doi: 10.3389/fpubh.2021.646916.

Deleuze, G. and Guattari, F. (2013). *A thousand plateaus: capitalism and schizophrenia*. paperback. London: Bloomsbury (Bloomsbury revelations series).

DeNigris, D., Brooks, P. J., Obeid, R., Alarcon, M., Shane-Simpson, C. and Gillespie-Lynch, K. (2018). 'Bullying and Identity Development: Insights from Autistic and Nonautistic College Students'. *Journal of Autism & Developmental Disorders*, 48 (3), pp. 666–678. doi: 10.1007/s10803-017-3383-y.

Dente, C. L. and Coles, K. P. (2012). 'Ecological Approaches to Transition Planning for Students with Autism and Asperger's Syndrome'. *Children & Schools*, 34 (1), pp. 27–36. doi: 10.1093/cs/cdr002.

Devos, A. (2008). 'Where enterprise and equity meet: the rise of mentoring for women in Australian universities'. *Discourse: Studies in the cultural politics of education*. Taylor & Francis, 29 (2), pp. 195–205.

Di Gregorio, S. (2000). 'Using Nvivo for your literature review'. in *Meeting of the strategies in qualitative research: Issues and results from the analysis using QSR NVivo and NUD* IST*.

Dijkhuis, R. R., Ziermans, T. B., Van Rijn, S., Staal, W. G. and Swaab, H. (2017). 'Self-regulation and quality of life in high-functioning young adults with autism'. *Autism: The International Journal of Research & Practice*, 21 (7), pp. 896–906. doi: 10.1177/1362361316655525.

Dijkhuis, R., de Sonneville, L., Ziermans, T., Staal, W. and Swaab, H. (2020). 'Autism Symptoms, Executive Functioning and Academic Progress in Higher Education Students'. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-019-04267-8.

Dipeolu, A. O., Storlie, C. and Johnson, C. (2014). 'Transition to college and students with high functioning Autism Spectrum Disorder: Strategy considerations for school counselors.' *Journal of School Counseling*, 12 (11), p. n11.

Disabled Students' Allowances Team. (2019a). 'SSIN 05/19 - Review of non-medical help (NMH) role descriptions, qualifications and professional body membership'. Available at: https://www.practitioners.slc.co.uk/media/1729/ssin-nmh-review-goverment-response.pdf (Accessed: 3 March 2021).

Disabled Students' Allowances Team. (2019b). 'SSIN 08/19 - Arrangements for students funded under the Education (Student Support) Regulations'. Available at: https://www.practitioners.slc.co.uk/media/1760/dsa-qag-closure-information-ssin-08-19.pdf (Accessed: 26 August 2020).

Disabled Students' Allowances Team. (2019c). 'SSIN 09/19 Non-Medical Help (NMH) – DfE qualification and professional body membership requirements to deliver DSA's fundable NMH roles. Version 2.' Available at: https://www.practitioners.slc.co.uk/media/1762/ssin-0919-dsa-mandatory_qualifications_and_professional_body_membership_requirements.pdf (Accessed: 3 September 2020).

Disabled Students Commission. (2022). *Disabled Students' Commission Annual Report 2021-2022*. Disabled Students Commission. Available at: https://www.advance-he.ac.uk/knowledge-hub/disabled-students-commission-annual-report-2021-2022 (Accessed: 6 April 2022).

Disabled Students Sector Leadership Group. (2017). *Inclusive teaching and learning in higher education*. Available at: https://www.gov.uk/government/publications/inclusive-teaching-and-learning-in-higher-education (Accessed: 9 February 2023).

Drake, S. (2014). 'College experience of academically successful students with autism'. *Journal of Autism*, 1 (1), p. 5. doi: 2054-992X-1-5.

DSA-QAG. (2016). 'DSA guidance document for new DSA students 2016-17'. Available at: https://www.practitioners.slc.co.uk/media/1139/201617-dsa-guidance-document-for-new-dsa-students-in-ay2016-17.pdf (Accessed: 25 May 2018).

DSA-QAG. (2020). *NMH Providers v1.4*. *Disabled Students Allowance Quality Assurance Group*. Available at: https://dsa-qag.org.uk/practitioner/nmh-providers (Accessed: 25 May 2020).

Dwyer, A. L. and Cummings, A. L. (2001). 'Stress, self-efficacy, social support, and coping strategies in university students'. *Canadian Journal of Counselling and Psychotherapy*, 35 (3).

EBSCO. (no date). *Education Abstracts*. Available at: http://web.b.ebscohost.com (Accessed: 19 October 2019).

Eisenberg, D., Gollust, S. E., Golberstein, E. and Hefner, J. L. (2007). 'Prevalence and correlates of depression, anxiety, and suicidality among university students'. *American journal of orthopsychiatry*. Wiley Online Library, 77 (4), pp. 534–542.

Elias, R., Muskett, A. E. and White, S. W. (2019). 'Educator perspectives on the postsecondary transition difficulties of students with autism'. *Autism: The International Journal of Research & Practice*, 23 (1), pp. 260–264. doi: 10.1177/1362361317726246.

Elias, R. and White, S. W. (2018). 'Autism Goes to College: Understanding the Needs of a Student Population on the Rise'. *Journal of Autism and Developmental Disorders*, 48 (3), pp. 732–746. doi: 10.1007/s10803-017-3075-7.

Engleman, L. and Bybee, R. W. (2001). 'The BSCS story: A history of the biological sciences curriculum study'. *Colorado Spring (CO): SCCS*.

English, L. (2018). 'Supporting the transition of autistic students into university life: reflections on a specialist peer mentoring scheme', p. 6.

Essex, J. and Melham, P. (2019). 'Experiences of educational transition: young women with ASD, and the staff supporting them, speak'. *Support for Learning*, 34 (1), pp. 86–111. doi: 10.1111/1467-9604.12235.

Eyal, G. (ed.). (2010). *The Autism Matrix: the social origins of the autism epidemic*. Cambridge: Polity.

Fabri, M. and Andrews, P. (2015). *Autism&Uni D2.1 Literature Review Report*. Leeds Beckett University, p. 61. Available at: http://www.autism-uni.org/wp-content/uploads/2016/02/D2.1-AutismUni-Literature-Review-Report.pdf (Accessed: 30 November 2018).

Fabri, M. and Andrews, P. C. (2016). 'Hurdles and drivers affecting autistic students' higher education experience: Lessons learnt from the multinational Autism&Uni research study'. in *10th Annual International Teaching, Education and Development Conference (INTED)*, pp. 7–9.

Fabri, M., Fenton, G., Andrews, P. and Beaton, M. (2020). 'Experiences of higher education students on the autism spectrum: Stories of low mood and high resilience'. *International Journal of Disability, Development and Education*. Taylor & Francis, pp. 1–19.

Fagan, M. M. and Walter, G. (1982). 'Mentoring among Teachers'. *The Journal of Educational Research*, 76 (2), pp. 113–118. doi: 10.1080/00220671.1982.10885433.

Fagenson, E. A. (1989). 'The mentor advantage: Perceived career/job experiences of proteges versus non-proteges'. *Journal of Organizational Behavior*, 10 (4), pp. 309–320. doi: 10.1002/job.4030100403.

Fairchild, L. A., Powell, M. B., Gadke, D. L., Spencer, J. C. and Stratton, K. K. (2020). 'Increasing social engagement among college students with autism'. *Advances in Autism*, ahead-of-print (ahead-of-print). doi: 10.1108/AIA-09-2019-0030.

Fayette, R. and Bond, C. (2018). 'A systematic literature review of qualitative research methods for eliciting the views of young people with ASD about their educational experiences'. *European Journal of Special Needs Education*, 33 (3), pp. 349–365. doi: 10.1080/08856257.2017.1314111.

Fénelon, P. (2010). *The Adventures of Telemachus: Son of Ulysses*. Edited by P. Riley. Cambridge ; New York: Cambridge University Press.

Fink, L. D. (2013). *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. New York: John Wiley & Sons.

Finlay, L. (2013). 'Unfolding the Phenomenological Research Process: Iterative Stages of "Seeing Afresh"'. *Journal of Humanistic Psychology*. SAGE Publications Inc, 53 (2), pp. 172–201. doi: 10.1177/0022167812453877.

Foote, K. E. and Solem, M. N. (2009). 'Toward better mentoring for early career faculty: results of a study of US geographers'. *International Journal for Academic Development*. Routledge, 14 (1), pp. 47–58. doi: 10.1080/13601440802659403.

Ford, C. D. (2009). *An investigation of support programs for college students with high functioning autism or Asperger syndrome*. PhD. University of Missouri–Columbia.

Foucault, M. (1984). *The Foucault reader*. 1st edn. Edited by P. Rabinow. New York: Pantheon Books.

Frey, L. M. and Fulginiti, A. (2017). 'Talking about suicide may not be enough: family reaction as a mediator between disclosure and interpersonal needs'. *Journal of Mental Health*. Routledge, 26 (4), pp. 366–372. doi: 10.1080/09638237.2017.1340592.

Friese, S. (2016). 'Qualitative data analysis software: The state of the art'. in.

Frith, U. (1996). 'Cognitive explanations of autism'. *Acta Pædiatrica*, 85, pp. 63–68. doi: 10.1111/j.1651-2227.1996.tb14280.x.

Fry, D. (2016). 'Phone app boosts independence'. *Learning Disability Practice (2014+)*. London, United Kingdom: RCNi, 19 (1), p. 15. doi: http://dx.doi.org/10.7748/ldp.19.1.15.s14.

Furlong, J. and Maynard, T. (1995). *Mentoring Student Teachers: The Growth of Professional Knowledge*. London: Psychology Press.

Galbraith, M. W. and Cohen, N. H. (1996). 'The Complete Mentor Role: Understanding the Six Behavioral Functions'. *Journal of Adult Education; Brigham City*. Brigham City, United States, Brigham City: Mountain Plains Adult Education Association, 24 (2), pp. 2–11. Available at: http://search.proquest.com/docview/204580336/abstract/89F111A755364A4EPQ/1 (Accessed: 11 March 2020).

Gates, G. S. (2019). *Trauma, stigma and autism: developing resilience and loosening the grip of shame*. London ; Philadelphia: Jessica Kingsley Publishers.

Geertz, C. (1973). 'Thick description: Toward an Interpretive Theory of Culture'. in *The interpretation of cultures: selected essays*. Basic Books, pp. 3–32. Available at: https://www-fulcrum-org.ezproxye.bham.ac.uk/concern/monographs/9g54xh780 (Accessed: 17 November 2019).

Gelbar, N. W., Shefcyk, A. and Reichow, B. (2015). 'A comprehensive survey of current and former college students with autism spectrum disorders'. *The Yale Journal of Biology and Medicine*, 88 (1), p. 45.

Gelbar, N. W., Smith, I. and Reichow, B. (2014). 'Systematic Review of Articles Describing Experience and Supports of Individuals with Autism Enrolled in College and University

Programs'. *Journal of Autism and Developmental Disorders*, 44 (10), pp. 2593–2601. doi: 10.1007/s10803-014-2135-5.

Getzel, E. E., Prohn, S. M. and Carr, S. (2019). 'Supporting Students in Postsecondary Education'. in Jordan, R., Roberts, J., and Hume, K. (eds) *The SAGE Handbook of Autism and Education*. 1 Oliver's Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd, pp. 419–433. doi: 10.4135/9781526470409.n34.

Gillespie-Lynch, K., Brooks, P. J., Someki, F., Obeid, R., Shane-Simpson, C., Kapp, S. K., Daou, N. and Smith, D. S. (2015). 'Changing College Students' Conceptions of Autism: An Online Training to Increase Knowledge and Decrease Stigma'. *Journal of Autism and Developmental Disorders*, 45 (8), pp. 2553–2566. doi: 10.1007/s10803-015-2422-9.

Gillespie-Lynch, K., Bublitz, D., Donachie, A., Wong, V., Brooks, P. J. and D'Onofrio, J. (2017). '"For a long time our voices have been hushed": Using student perspectives to develop supports for neurodiverse college students'. *Frontiers in psychology*, 8, p. 544. doi: 10.3389/fpsyg.2017.00544.

Gillespie-Lynch, K., Daou, N., Sanchez-Ruiz, M.-J., Kapp, S. K., Obeid, R., Brooks, P. J., Someki, F., Silton, N. and Abi-Habib, R. (2019). 'Factors underlying cross-cultural differences in stigma toward autism among college students in Lebanon and the United States'. *Autism: The International Journal of Research & Practice*, 23 (8), pp. 1993–2006. doi: 10.1177/1362361318823550.

Gillespie-Lynch, K., DeNigris, D., Cheriyan, B., Massa, A., Wong, V., Kostikas, C., Bragerton-Nasert, S., Riccio, A., Arab, R. and Alicea, M. (2017). 'Fostering effective teaching using strategies developed by peer mentors for autistic and non-autistic undergraduates'. in Obeid, R., Schwartz, A., Shane-Simpson, C., and Brooks, P. J. (eds) *How we Teach Now: The GSTA Guide to Student-Centered Teaching*, pp. 393–406. Available at: http://teachpsych.org/ebooks/ (Accessed: 22 November 2019).

Gillespie-Lynch, K., Hotez, E., Zajic, M., Riccio, A., DeNigris, D., Kofner, B., Bublitz, D., Gaggi, N. and Luca, K. (2020). 'Comparing the writing skills of autistic and nonautistic university students: A collaboration with autistic university students'. *Autism*. SAGE Publications Sage UK: London, England, 24 (7), pp. 1898–1912.

Gillespie-Lynch, K., Kapp, S. K., Brooks, P. J., Pickens, J. and Schwartzman, B. (2017). 'Whose expertise is it? Evidence for autistic adults as critical autism experts'. *Frontiers in psychology*, 8, p. 438.

Gillespie-Lynch, K. and Riccio, A. (no date). 'Alleviating the Double Empathy Problem through Participatory Research: A Comparison of the Writing Skills of Autistic and Non-Autistic College Students'. *ResearchGate*, (Preprint). Available at: https://www.researchgate.net/publication/337943459 (Accessed: 6 January 2020).

Gioia, D. A., Corley, K. G. and Hamilton, A. L. (2013). 'Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology'. *Organizational Research Methods*, 16 (1), pp. 15–31. doi: 10.1177/1094428112452151.

Girves, J. E., Zepeda, Y. and Gwathmey, J. K. (2005). 'Mentoring in a Post-Affirmative Action World'. *Journal of Social Issues*, 61 (3), pp. 449–479. doi: 10.1111/j.1540-4560.2005.00416.x.

Glaser, B. G. (1998). *Doing grounded theory: issues and discussions*. California: Sociology Press.

Glennon, T. J. (2001). 'The stress of the university experience for students with Asperger syndrome'. *Work (Reading, Mass.)*, 17 (3), pp. 183–190.

Gobbo, K. and Shmulsky, S. (2012). 'Classroom Needs of Community College Students with Asperger's Disorder and Autism Spectrum Disorders'. *Community College Journal of Research and Practice*, 36 (1), pp. 40–46. doi: 10.1080/10668920903381813.

Gobbo, K. and Shmulsky, S. (2014). 'Faculty Experience with College Students with Autism Spectrum Disorders: A Qualitative Study of Challenges and Solutions'. *Focus on Autism and Other Developmental Disabilities*, 29 (1), pp. 13–22. doi: 10.1177/1088357613504989.

Goffman, E. (1968). *Stigma: notes on the management of spoiled identity*. London: Penguin (Penguin psychology).

Goffman, E. (1969). *The presentation of self in everyday life*. Reprint. London: Penguin.

Goffman, E. (1974a). *Frame analysis: an essay on the organization of experience*. Boston: Northeastern University Press.

Goffman, E. (1974b). 'The Frame Analysis of Talk'. in *Frame analysis: an essay on the organization of experience*. Northeastern University Press ed. Boston: Northeastern University Press, pp. 496–559.

Goodley, D. (2014). *Dis/ability studies: Theorising disablism and ableism*. London ; New York: Routledge.

GOV.uk. (no date). *Check if a university or college is officially recognised*. *GOV.UK*. Available at: https://www.gov.uk/check-a-university-is-officially-recognised/recognised-bodies (Accessed: 28 February 2020).

Grandin, T. (1990). 'Needs of High Functioning Teenagers and Adults with Autism (Tips From a Recovered Autistic)'. *Focus on Autistic Behavior*, 5 (1), pp. 1–16. doi: 10.1177/108835769000500101.

Granville, S. (2020). 'Systematic Review: Emotion regulation interventions in autism. Empirical Paper: Evaluating a goal-setting intervention for children and young people with executive dysfunction: a single-case experimental design.' University of Exeter. Available at: https://ore.exeter.ac.uk/repository/handle/10871/122092 (Accessed: 15 February 2022).

Griffin, K. A. and Reddick, R. J. (2011). 'Surveillance and sacrifice: Gender differences in the mentoring patterns of Black professors at predominantly White research universities'. *American Educational Research Journal*, 48 (5), pp. 1032–1057.

Griffin, M. M., Wendel, K. F., Day, T. L. and McMillan, E. D. (2016). 'Developing Peer Supports for College Students with Intellectual and Developmental Disabilities.' *Journal of Postsecondary Education and Disability*, 29 (3), pp. 263–269.

Griffith, G. M., Totsika, V., Nash, S. and 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*. SAGE Publications Ltd, 16 (5), pp. 532–546. doi: 10.1177/1362361311405223.

Grogan, G. (2015). 'Supporting Students with Autism in Higher Education through Teacher Educator Programs'. *SRATE Journal*, 24 (2), pp. 8–13. Available at: https://eric.ed.gov/?id=EJ1083126 (Accessed: 20 November 2019).

Gunnell, D., Caul, S., Appleby, L., John, A. and Hawton, K. (2020). 'The incidence of suicide in University students in England and Wales 2000/2001–2016/2017: Record linkage study'. *Journal of Affective Disorders*, 261, pp. 113–120. doi: 10.1016/j.jad.2019.09.079.

Gurbuz, E., Hanley, M. and Riby, D. M. (2019). 'University Students with Autism: The Social and Academic Experiences of University in the UK'. *Journal of Autism and Developmental Disorders*, 49 (2), pp. 617–631. doi: 10.1007/s10803-018-3741-4.

Hacking, I. (1999). *The social construction of what?* Cambridge, MA: Harvard University Press.

Hacking, I. (2009). 'Autistic autobiography'. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364 (1522), pp. 1467–1473. doi: 10.1098/rstb.2008.0329.

Hacking, Ian. (2009). 'How We Have Been Learning to Talk About Autism: A Role for Stories'. *Metaphilosophy*, 40 (3–4), pp. 499–516. doi: 10.1111/j.1467-9973.2009.01607.x.

Hamilton, J., Stevens, G. and Girdler, S. (2016). 'Becoming a Mentor: The Impact of Training and the Experience of Mentoring University Students on the Autism Spectrum'. *PLOS ONE*, 11 (4), p. e0153204. doi: 10.1371/journal.pone.0153204.

Hansard. (1989). *Student Top-up Loans*. Houses of Parliament. Available at: https://api.parliament.uk/historic-hansard/commons/1989/jun/19/student-top-up-loans#S6CV0155P0_19890619_HOC_191 (Accessed: 29 March 2022).

Happé, F. and Frith, U. (2010). *Autism and talent*. Oxford: Oxford University Press (1522).

Hargreaves, A. and Fullan, M. (2000). 'Mentoring in the New Millennium'. *Theory Into Practice*, 39 (1), pp. 50–56. doi: 10.1207/s15430421tip3901_8.

Harrington, S. (2011). 'Mentoring new nurse practitioners to accelerate their development as primary care providers: A literature review'. *Journal of the American Academy of Nurse Practitioners*, 23 (4), pp. 168–174. doi: 10.1111/j.1745-7599.2011.00601.x.

Hart, C. (2001). *Doing a literature search: a comprehensive guide for the social sciences / Chris Hart.* London: SAGE.

Hart, D., Grigal, M. and Weir, C. (2010). 'Expanding the Paradigm: Postsecondary Education Options for Individuals with Autism Spectrum Disorder and Intellectual Disabilities'. *Focus*

on Autism and Other Developmental Disabilities, 25 (3), pp. 134–150. doi: 10.1177/1088357610373759.

Hastwell, J., Martin, N., Baron-Cohen, S. and Harding, J. (2012). 'Giving Cambridge University students with Asperger syndrome a voice: a qualitative, interview-based study towards developing a model of best practice'. *Good Autism Practice*, 13 (1), pp. 56–63.

Hastwell, J., Martin, N., Baron-Cohen, S. and Harding, J. (2017). 'Reflections on a university based social group for students with Asperger syndrome'. *Good Autism Practice*, 18 (1), pp. 97–105.

Hayes, E. F. (1998). 'Mentoring and nurse practitioner student self-efficacy'. *Western Journal of Nursing Research*. SAGE PUBLICATIONS, INC. 2455 Teller Road, Thousand Oaks, CA 91320, 20 (5), pp. 521–535.

Healy, C. C. and Welchert, A. J. (1990). 'Mentoring Relations: A Definition to Advance Research and Practice'. *Educational Researcher*. American Educational Research Association, 19 (9), pp. 17–21. doi: 10.3102/0013189X019009017.

Heath, H. and Cowley, S. (2004). 'Developing a grounded theory approach: a comparison of Glaser and Strauss'. *International Journal of Nursing Studies*, 41 (2), pp. 141–150. doi: 10.1016/S0020-7489(03)00113-5.

Hector, M. (2020). *Arriving at Thriving - Learning from disabled students to ensure access for all*. Higher Education Commission. Available at: https://www.policyconnect.org.uk/research/arriving-thriving-learning-disabled-students-ensure-access-all (Accessed: 8 October 2020).

Hendrickson, J. M., Carson, R., Woods-Groves, S., Mendenhall, J. and Scheidecker, B. (2013). 'UI REACH: A Postsecondary Program Serving Students with Autism and Intellectual Disabilities'. *Education & Treatment of Children*, 36 (4), pp. 169–194. doi: 10.1353/etc.2013.0039.

Hendrickson, J. M., Woods-Groves, S., Rodgers, D. B. and Datchuk, S. (2017). 'Perceptions of Students with Autism and Their Parents: The College Experience'. *Education & Treatment of Children*, 40 (4), pp. 571–596. doi: 10.1353/etc.2017.0025.

Henry, J. D. and Crawford, J. R. (2005). 'The short-form version of the Depression Anxiety Stress Scales (DASS-21): construct validity and normative data in a large non-clinical sample'. *The British Journal of Clinical Psychology*, 44 (Pt 2), pp. 227–239. doi: 10.1348/014466505X29657.

HESA. (2002). *Students in Higher Education 2000/01*. Available at: https://www.hesa.ac.uk/data-and-analysis/publications/students-2000-01 (Accessed: 19 April 2018).

HESA. (2012). *Students in Higher Education 2010/11*. Available at: https://www.hesa.ac.uk/data-and-analysis/publications/students-2010-11 (Accessed: 19 April 2018).

HESA. (2018). *Table 15 - UK domiciled student enrolments by disability and sex 2016/17*. Available at: https://www.hesa.ac.uk/data-and-analysis/students/table-15 (Accessed: 17 April 2018).

HESA. (2019). *Table 15 - UK domiciled student enrolments by disability and sex 2014/15 to 2018/19*. Available at: https://www.hesa.ac.uk/data-and-analysis/students/table-15 (Accessed: 20 May 2020).

HESA. (2020). *Higher Education Student Statistics: UK, 2018/19 - Where students come from and go to study*. Available at: https://www.hesa.ac.uk/news/16-01-2020/sb255-higher-education-student-statistics/location (Accessed: 2 November 2020).

HESA. (2021a). *Figure 3 - HE student enrolments by level of study 2015/16 to 2019/20*. Available at: https://www.hesa.ac.uk/data-and-analysis/sb258/figure-3 (Accessed: 30 September 2021).

HESA. (2021b). *Table 15 - UK domiciled student enrolments by disability and sex 2014/15 to 2019/20*. Available at: https://www.hesa.ac.uk/data-and-analysis/students/table-15 (Accessed: 11 May 2021).

HESA. (2022a). *Table 15 - UK domiciled student enrolments by disability and sex 2014/15 to 2020/21 | HESA*. Available at: https://www.hesa.ac.uk/data-and-analysis/students/table-15 (Accessed: 31 March 2022).

HESA. (2022b). *What do HE students study?* Available at: https://www.hesa.ac.uk/data-and-analysis/students/what-study (Accessed: 10 August 2022).

Highlen, D. (2017). 'Helping Students with Autism Spectrum Disorder at the Community College: What Does the Research Say? What Can You Do?' *Community College Journal of Research and Practice*, 41 (7), pp. 447–454. doi: 10.1080/10668926.2016.1199334.

Hillier, A., Goldstein, J., Murphy, D., Trietsch, R., Keeves, J., Mendes, E. and Queenan, A. (2018). 'Supporting university students with autism spectrum disorder'. *Autism*, 22 (1), pp. 20–28. doi: 10.1177/1362361317699584.

HM Government. (1995). *Disability Discrimination Act 1995*. Available at: http://www.legislation.gov.uk/ukpga/1995/50/contents (Accessed: 23 August 2016).

HM Government. (2000). *Freedom of Information Act 2000*. Statute Law Database. Available at: https://www.legislation.gov.uk/ukpga/2000/36/contents (Accessed: 6 January 2021).

HM Government. (2001). *Special Educational Needs and Disability Act 2001*. Available at: http://www.legislation.gov.uk/ukpga/2001/10/contents (Accessed: 23 August 2016).

HM Government. (2009). *Autism Act 2009*. Available at: http://www.legislation.gov.uk/ukpga/2009/15/contents (Accessed: 23 August 2016).

HM Government. (2010). *Equality Act 2010*. Available at: http://www.legislation.gov.uk/ukpga/2010/15/contents (Accessed: 23 August 2016).

Hobson, A. J., Ashby, P., Malderez, A. and Tomlinson, P. D. (2009). 'Mentoring beginning teachers: What we know and what we don't'. *Teaching and Teacher Education*, 25 (1), pp. 207–216. doi: 10.1016/j.tate.2008.09.001.

Holgate, S. (2012). *Perceptions of students with an autism spectrum condition of the value of a CBT intervention to enhance student experience*. EdD.

Holmes, C. (2021). 'The Disabled Students' Allowance Scheme is not working'. *Lord Holmes of Richmond MBE*, 10 December. Available at: https://lordchrisholmes.com/disabled-students-allowance-scheme-not-working/ (Accessed: 8 February 2022).

Homer. (2003). *The Odyssey*. Rev. Translated by E. V. Rieu and D. Rieu. London ; New York: Penguin (Penguin Classics).

Hookway, N. (2008). '"Entering the blogosphere": some strategies for using blogs in social research'. *Qualitative Research*. SAGE Publications, 8 (1), pp. 91–113. doi: 10.1177/1468794107085298.

Hoover-Dempsey, K. V. and Sandler, H. M. (2005). 'Final performance report for OERI Grant# R305T010673: The social context of parental involvement: A path to enhanced achievement'.

Hotez, E., Shane-Simpson, C., Obeid, R., DeNigris, D., Siller, M., Costikas, C., Pickens, J., Massa, A., Giannola, M. and D'Onofrio, J. (2018). 'Designing a summer transition program for incoming and current college students on the autism spectrum: A participatory approach'. *Frontiers in psychology*, 9, p. 46.

Hull, L., Lai, M.-C., Baron-Cohen, S., Allison, C., Smith, P., Petrides, K. and Mandy, W. (2020). 'Gender differences in self-reported camouflaging in autistic and non-autistic adults'. *Autism*. SAGE Publications Ltd, 24 (2), pp. 352–363. doi: 10.1177/1362361319864804.

Hull, L., Petrides, K. V., Allison, C., Smith, P., Baron-Cohen, S., Lai, M.-C. and Mandy, W. (2017). '"Putting on My Best Normal": Social Camouflaging in Adults with Autism Spectrum Conditions'. *Journal of Autism and Developmental Disorders*, 47 (8), pp. 2519–2534. doi: 10.1007/s10803-017-3166-5.

Hurley, E. (ed.). (2014). *Ultraviolet voices: stories of women on the autism spectrum*. Birmingham: Autism West Midlands.

Ingersoll, R. M. and Smith, T. M. (2004). 'Do Teacher Induction and Mentoring Matter?' *NASSP Bulletin*. SAGE Publications Inc, 88 (638), pp. 28–40. doi: 10.1177/019263650408863803.

International Wellbeing Group. (2006). 'Personal Wellbeing Index'. *Melbourne. Australian Centre on Quality of Life, Deakin University*.

Irani, E. (2019). 'The Use of Videoconferencing for Qualitative Interviewing: Opportunities, Challenges, and Considerations'. *Clinical Nursing Research*. SAGE Publications Inc, 28 (1), pp. 3–8. doi: 10.1177/1054773818803170.

Irvine, B. and MacLeod, A. (2022). 'What are the challenges and successes reported by autistic students at university?: a literature review'. *Good Autism Practice (GAP)*, 23 (1), pp. 49–59.

Jackson, S. L. J., Hart, L., Brown, J. T. and Volkmar, F. R. (2018). 'Brief Report: Self-Reported Academic, Social, and Mental Health Experiences of Post-Secondary Students with Autism Spectrum Disorder'. *Journal of Autism and Developmental Disorders*, 48 (3), pp. 643–650. doi: 10.1007/s10803-017-3315-x.

James, A. I. (2014). 'Cross-Age Mentoring to Support A-Level Pupils' Transition into Higher Education and Undergraduate Students' Employability'. *Psychology Teaching Review*. British Psychological Society, Division for Teachers & Researchers in Psychology, 20 (2), pp. 79–94. Available at: https://eric.ed.gov/?id=EJ1146621 (Accessed: 21 April 2021).

Jansen, D., Emmers, E., Petry, K., Mattys, L., Noens, I. and Baeyens, D. (2018). 'Functioning and participation of young adults with ASD in higher education according to the ICF framework'. *Journal of Further and Higher Education*, 42 (2), pp. 259–275. doi: 10.1080/0309877X.2016.1261091.

Jansen, D., Petry, K., Ceulemans, E., Noens, I. and Baeyens, D. (2017). 'Functioning and participation problems of students with ASD in higher education: which reasonable accommodations are effective?' *European Journal of Special Needs Education*, 32 (1), pp. 71–88. doi: 10.1080/08856257.2016.1254962.

Janzen, J. E. (1996). *Understanding the nature of autism: a practical guide*. San Antonio, TX: Therapy Skills Builders.

Jobe, L. E. and Williams White, S. (2007). 'Loneliness, social relationships, and a broader autism phenotype in college students'. *Personality and Individual Differences*, 42 (8), pp. 1479–1489. doi: 10.1016/j.paid.2006.10.021.

Johnston, L. (2006). 'Software and Method: Reflections on Teaching and Using QSR NVivo in Doctoral Research'. *International Journal of Social Research Methodology*, 9 (5), pp. 379–391. doi: 10.1080/13645570600659433.

Jones, M. and Alony, I. (2008). 'Blogs–the new source of data analysis'.

Kaun, A. (2010). 'Open-Ended Online Diaries: Capturing Life as it is Narrated'. *International Journal of Qualitative Methods*. SAGE Publications Inc, 9 (2), pp. 133–148. doi: 10.1177/160940691000900202.

Kelly, R., O'Malley, M.-P. and Antonijevic, S. (2018). '"Just trying to talk to people … It's the hardest": Perspectives of adolescents with high-functioning autism spectrum disorder on their social communication skills'. *Child Language Teaching and Therapy*, 34 (3), pp. 319–334. doi: 10.1177/0265659018806754.

Kenny, L., Hattersley, C., Molins, B., Buckley, C., Povey, C. and Pellicano, E. (2015). 'Which terms should be used to describe autism? Perspectives from the UK autism community'. *Autism*, 20 (4), pp. 442–462. doi: 10.1177/1362361315588200.

Kim, M., Kim, I. and Lee, U. (2021). 'Beneficial Neglect: Instant Message Notification Handling Behaviors and Academic Performance'. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 5 (1), p. 18:1-18:26. doi: 10.1145/3448089.

Knott, F. and Taylor, A. (2014). 'Life at university with Asperger syndrome: a comparison of student and staff perspectives'. *International Journal of Inclusive Education*, 18 (4), pp. 411–426. doi: 10.1080/13603116.2013.781236.

Knowles, M. S., Holton III, E. F. and Swanson, R. A. (2012). *The Adult Learner*. London ; New York: Routledge.

Koegel, L. K., Ashbaugh, K., Koegel, R. L., Detar, W. J. and Regester, A. (2013). 'Increasing socialization in adults with Asperger's syndrome'. *Psychology in the Schools*, 50 (9), pp. 899–909.

Koegel, L. K., Ashbaugh, K., Navab, A. and Koegel, R. L. (2016). 'Improving Empathic Communication Skills in Adults with Autism Spectrum Disorder'. *Journal of Autism and Developmental Disorders*, 46 (3), pp. 921–933. doi: 10.1007/s10803-015-2633-0.

Kram, K. E. (1983). 'Phases of the Mentor Relationship'. *Academy of Management Journal*. Academy of Management, 26 (4), pp. 608–625. doi: 10.5465/255910.

Kram, K. E. and Ragins, B. R. (2008). 'The Landscape of Mentoring in the 21st Century'. in *The Handbook of Mentoring at Work: Theory, Research, and Practice*. California: SAGE Publications.

Kuder, S. J. and Accardo, A. (2018). 'What Works for College Students with Autism Spectrum Disorder'. *Journal of Autism and Developmental Disorders*, 48 (3), pp. 722–731. doi: 10.1007/s10803-017-3434-4.

Kuo, C.-C., Lin, C. I.-T., Kuo, B.-J., Kuang, C.-C. and Dai, L.-T. (2016). 'Learning Experiences of Young Artists with ASD in a University Enrichment Program'. *Universal Journal of Educational Research*, 4 (9), pp. 2144–2162. Available at: https://eric.ed.gov/?id=EJ1113891 (Accessed: 20 November 2019).

Lambe, S., Russell, A., Butler, C., Fletcher, S., Ashwin, C. and Brosnan, M. (2019). 'Autism and the transition to university from the student perspective'. *Autism*, 23 (6), pp. 1531–1541. doi: 10.1177/1362361318803935.

Lane, J. and Kelly, R. (2012). 'Autism and Asperger's Syndrome in the Law Student – Making Accommodations in Academic Assessments.' in. *47th Annual Conference (Re)assessing Legal Education*, Lady Margaret Hall, Oxford, UK. Available at: http://eprints.hud.ac.uk/id/eprint/13546/ (Accessed: 8 April 2018).

Lawson, J. (2010). 'An investigation into behaviours which challenge at university: The impact of neurotypical expectations on autistic students'. *Good Autism Practice*. Available at: https://www.ingentaconnect.com/content/bild/gap/2010/00000011/00000001/art00007 (Accessed: 25 October 2019).

Leach Scully, J. (2008). 'Disability and the thinking body'. in Kristiansen, K., Vehmas, S., and Shakespeare, T., *Arguing about disability: Philosophical perspectives*. Routledge, pp. 57–73.

LeGary, R. A. (2017). ‘College Students with Autism Spectrum Disorder: Perceptions of Social Supports That Buffer College-Related Stress and Facilitate Academic Success’. *Journal of Postsecondary Education and Disability*, 30 (3), pp. 251–268. Available at: https://eric.ed.gov/?id=EJ1163965 (Accessed: 20 November 2019).

Lei, J., Ashwin, C., Brosnan, M. and Russell, A. (2019). ‘Developing an Online Tool to Measure Social Network Structure and Perceived Social Support Amongst Autistic Students in Higher Education: A Feasibility Study’. *Journal of Autism and Developmental Disorders*, 49 (9), pp. 3526–3542. doi: 10.1007/s10803-019-04070-5.

Lei, J., Calley, S., Brosnan, M., Ashwin, C. and Russell, A. (2018). ‘Evaluation of a Transition to University Programme for Students with Autism Spectrum Disorder’. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-018-3776-6.

Lei, J. and Russell, A. (2021). ‘Understanding the role of self-determination in shaping university experiences for autistic and typically developing students in the United Kingdom’. *Autism*. SAGE Publications Ltd, p. 1362361320984897. doi: 10.1177/1362361320984897.

Lessor, R. G. (2013). ‘Self-Help Movements’. in *The Wiley-Blackwell Encyclopedia of Social and Political Movements*. John Wiley & Sons, Ltd. doi: 10.1002/9780470674871.wbespm386.

Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H. and McKee, B. (1978). *The Seasons of a Man’s Life*. Knopf.

Lewis, C. and Corlett, S. (2001). *Skill DSA Review*. National Bureau for Students with Disabilities. Available at: http://www.asasa.co.uk/documents/information/DSA_skillreportsummary.htm (Accessed: 29 March 2022).

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J. and Moher, D. (2009). ‘The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration’. *PLOS Medicine*, 6 (7), p. e1000100. doi: 10.1371/journal.pmed.1000100.

Likert, R. (1932). ‘A technique for the measurement of attitudes.’ *Archives of psychology*.

Liu, G. (2021). *Approaching Autistic Adulthood: the road less travelled.* St Albans: Panoma Press.

Lizotte, M. (2018). ‘I Am a College Graduate: Postsecondary Experiences as Described by Adults with Autism Spectrum Disorders’. *International Journal of Education and Practice*, 6 (4), pp. 179–191. Available at: https://eric.ed.gov/?id=EJ1210065 (Accessed: 20 November 2019).

Loftis, S. F. (2021). ‘Eternal childhood and the failure of cure’. in Bolt, D. (ed.) *Metanarratives of Disability: Culture, Assumed Authority, and the Normative Social Order*. Taylor & Francis.

Longtin, S. (2014). ‘Practice Brief: Interdisciplinary Support Services for Students with Autism Spectrum Disorders’. *Journal of Postsecondary Education and Disability*, 27 (3), pp. 333–342. Available at: https://eric.ed.gov/?id=EJ1048785 (Accessed: 8 November 2019).

Loomes, R., Hull, L. and Mandy, W. P. L. (2017). ‘What Is the Male-to-Female Ratio in Autism Spectrum Disorder? A Systematic Review and Meta-Analysis’. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56 (6), pp. 466–474. doi: 10.1016/j.jaac.2017.03.013.

Losh, M., Adolphs, R., Poe, M. D., Couture, S., Penn, D., Baranek, G. T. and Piven, J. (2009). ‘Neuropsychological profile of autism and the broad autism phenotype’. *Archives of general psychiatry*. American Medical Association, 66 (5), pp. 518–526.

Lucas, R. and James, A. I. (2018). ‘An Evaluation of Specialist Mentoring for University Students with Autism Spectrum Disorders and Mental Health Conditions’. *Journal of Autism and Developmental Disorders*, 48 (3), pp. 694–707. doi: 10.1007/s10803-017-3303-1.

Luey, J. (2014). ‘Participating, Navigating and Succeeding with Autism Spectrum Disorder in the Ontario Postsecondary Education System’. *College Quarterly*, 17 (4). Available at: https://eric.ed.gov/?id=EJ1058113 (Accessed: 8 November 2019).

MacLeod, A. G. (2010). ‘“Welcome to my first rant!” Report on a participatory pilot project to develop the “AS portal”, an online peer support network for higher education students on the autism spectrum’. *Journal of Assistive Technologies*, 4 (1), pp. 14–24. doi: 10.5042/jat.2010.0041.

MacLeod, A. G. (2016). *“Determined to succeed”: perceptions of success from autistic adults*. PhD. University of Birmingham. Available at: https://etheses.bham.ac.uk//id/eprint/6798/ (Accessed: 31 October 2019).

MacLeod, A. G. (2019). ‘Overcoming Barriers to Educational Opportunities Post-school’. in Jordan, R., Roberts, J., and Hume, K., *The SAGE Handbook of Autism and Education*. London: SAGE Publications Ltd, pp. 481–491. doi: 10.4135/9781526470409.n38.

MacLeod, A. G., Allan, J., Lewis, A. and Robertson, C. (2017). ‘“Here I come again”: the cost of success for higher education students diagnosed with autism’. *International Journal of Inclusive Education*, 22 (6), pp. 683–697. doi: 10.1080/13603116.2017.1396502.

MacLeod, A. G., Ellis, L., Lear, C., Kourti, M., Searle, K., Duckworth, C., Irvine, D., Jones, H., King, M., Ling, J. and Simpson, J. (2020). ‘The AuVision project: a collaboration between autistic students and non-autistic staff to understand the student experience within a higher education institution’. *Good Autism Practice (GAP)*, 21 (1), pp. 5–14.

MacLeod, A. G., Lewis, A. and Robertson, C. (2013). ‘“Why should I be like bloody Rain Man?!” Navigating the autistic identity’. *British Journal of Special Education*, 40 (1), pp. 41–49. doi: 10.1111/1467-8578.12015.

MacLeod, A. G., Lewis, A. and Robertson, C. (2014). ‘“Charlie: Please Respond!” Using a Participatory Methodology with Individuals on the Autism Spectrum’. *International Journal of Research & Method in Education*, 37 (4), pp. 407–420. doi: 10.1080/1743727X.2013.776528.

MacLeod, A. and Green, S. (2009). 'Beyond the books: case study of a collaborative and holistic support model for university students with Asperger syndrome'. *Studies in Higher Education*, 34 (6), pp. 631–646. doi: 10.1080/03075070802590643.

Madriaga, M. (2010). '"I avoid pubs and the student union like the plague": Students with Asperger Syndrome and their negotiation of university spaces'. *Children's Geographies*, 8 (1), pp. 39–50. doi: 10.1080/14733280903500166.

Madriaga, M. and Goodley, D. (2010). 'Moving beyond the minimum: socially just pedagogies and Asperger's syndrome in UK higher education'. *International Journal of Inclusive Education*, 14 (2), pp. 115–131. doi: 10.1080/13603110802504168.

Maïano, C., Normand, C. L., Salvas, M.-C., Moullec, G. and Aimé, A. (2016). 'Prevalence of School Bullying Among Youth with Autism Spectrum Disorders: A Systematic Review and Meta-Analysis'. *Autism Research*, 9 (6), pp. 601–615. doi: 10.1002/aur.1568.

Mamede, S. and Schmidt, H. G. (2014). 'The twin traps of overtreatment and therapeutic nihilism in clinical practice'. *Medical Education*, 48 (1), pp. 34–43. doi: 10.1111/medu.12264.

Manzo, L. C. and Brightbill, N. (2007). 'Toward a participatory ethics'. in Kindon, S. L., Pain, R., and Kesby, M. (eds) *Participatory action research approaches and methods: connecting people, participation and place*. London ; New York: Routledge (Routledge studies in human geography, 22), pp. 33–40.

Martin, N. (2006). 'Strategies which increase the likelihood of success at university of students with Asperger's syndrome'. *Good Autism Practice*, 7 (2), pp. 51–60.

Martin, N. (2008). *REAL services to assist students who have Asperger syndrome*. NADP briefing. Sheffield Hallam University Autism Centre: National Association of Disability Practitioners.

Martin, N. (2010). 'Minimising the stress of the PhD viva for students with Asperger syndrome'. *Good Autism Practice*, 11 (1), pp. 52–57. Available at: https://www.ingentaconnect.com/content/bild/gap/2010/00000011/00000001/art00008 (Accessed: 25 October 2019).

Martin, N. (2011). 'Promoting Inclusive Practice for PhD Students Near Completion'. *The Journal of Inclusive Practice in Further and Higher Education*, 3 (2), pp. 37–51.

Martin, N. (2021). 'Perspectives on UK university employment from autistic researchers and lecturers'. *Disability & Society*. Routledge, 36 (9), pp. 1510–1531. doi: 10.1080/09687599.2020.1802579.

Martin, N., Beardon, L., Hodge, N., Goodley, D. and Madriaga, M. (2008). 'Towards an inclusive environment for university students who have Asperger syndrome (AS)'. *The Journal of Inclusive Practice in further and higher education*, 1 (1), pp. 3–14.

Martin, N., Milton, D. E. M., Sims, T., Dawkins, G., Baron-Cohen, S. and Mills, R. (2017). 'Does "mentoring" offer effective support to autistic adults? A mixed-methods pilot study'. *Advances in Autism*, 3 (4), pp. 229–239. doi: 10.1108/AIA-06-2017-0013.

Martín-Martín, A., Orduna-Malea, E., Thelwall, M. and Delgado López-Cózar, E. (2018). 'Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories'. *Journal of Informetrics*, 12 (4), pp. 1160–1177. doi: 10.1016/j.joi.2018.09.002.

Maslow, A. H. (1943). 'A theory of human motivation.' *Psychological review*. American Psychological Association, 50 (4), p. 370.

Mason, R. A., Rispoli, M., Ganz, J. B., Boles, M. B. and Orr, K. (2012). 'Effects of video modeling on communicative social skills of college students with asperger syndrome'. *Developmental Neurorehabilitation*. Taylor & Francis, 15 (6), pp. 425–434. doi: 10.3109/17518423.2012.704530.

Masterson, T. L. and Meeks, L. M. (2014). 'What support might help students with autism at university?' *Good Autism Practice*, 15 (1), pp. 47–53. Available at: https://www.ingentaconnect.com/content/bild/gap/2014/00000015/00000001/art00006 (Accessed: 25 October 2019).

Matthews, A. (2020). *The Role & Impact of Specialist Mental Health Mentoring on Students in UK HEIs*. UMO White Paper. UMHAN. Available at: https://www.umhan.com/resources/100-the-role-impact-of-specialist-mental-health-mentoring-on-students-in-uk-heis (Accessed: 25 February 2021).

McLeod, J. D., Meanwell, E. and Hawbaker, A. (2019). 'The Experiences of College Students on the Autism Spectrum: A Comparison to Their Neurotypical Peers'. *Journal of Autism & Developmental Disorders*, 49 (6), pp. 2320–2336. doi: 10.1007/s10803-019-03910-8.

Mearns, D., Thorne, B., Lambers, E. and Warner, M. (2000). *Person-Centred Therapy Today: New Frontiers in Theory and Practice*. New York: SAGE.

Mero-Jaffe, I. (2011). '"Is that what I Said?" Interview Transcript Approval by Participants: An Aspect of Ethics in Qualitative Research'. *International Journal of Qualitative Methods*. SAGE Publications Inc, 10 (3), pp. 231–247. doi: 10.1177/160940691101000304.

Merydith, S. P., Kulhanek, S. E., Murray, C. E. and Bradley, B. M. (2019). 'Peer Coaches, Autism Spectrum Disorder, College Transitions: A Spectrum of Supports'. *National Association of School Psychologists. Communique; Bethesda*. Bethesda, United States, Bethesda: National Association of School Psychologists, 48 (3), pp. 20–21. Available at: http://search.proquest.com/docview/2343570522/abstract/4EC1116A00D74EE3PQ/1 (Accessed: 3 March 2020).

Micali, N., Chakrabarti, S. and Fombonne, E. (2004). 'The broad autism phenotype: findings from an epidemiological survey'. *Autism*. Sage Publications, 8 (1), pp. 21–37.

Milton, D. (2012). 'On the ontological status of autism: the "double empathy problem"'. *Disability & Society*, 27 (6), pp. 883–887. doi: 10.1080/09687599.2012.710008.

Milton, D. (2013). '"Filling in the gaps": A micro-sociological analysis of autism'. *Autonomy, the Critical Journal of Interdisciplinary Autism Studies*. Autreach Press, 1 (2). Available at: http://www.larry-arnold.net/Autonomy/index.php/autonomy/article/view/7 (Accessed: 24 August 2022).

Milton, D. (2014a). ‘Autistic expertise: A critical reflection on the production of knowledge in autism studies’. *Autism*, 18 (7), pp. 794–802. doi: 10.1177/1362361314525281.

Milton, D. (2014b). ‘Embodied sociality and the conditioned relativism of dispositional diversity’. *Autonomy, the Critical Journal of Interdisciplinary Autism Studies*, 1 (3). Available at: http://www.larry-arnold.net/Autonomy/index.php/autonomy/article/view/AR10 (Accessed: 20 February 2017).

Milton, D. (2017a). *A mismatch of salience: explorations of the nature of autism from theory to practice*. Shoreham by Sea: Pavillion.

Milton, D. (2017b). ‘Autistics speak but are they heard?’ in *A Mismatch of Salience: Explorations of the nature of autism from theory to practice*. Shoreham by Sea: Pavilion, pp. 121–131.

Milton, D., Martin, N. and Melham, P. (2016). ‘Beyond reasonable adjustment: autistic-friendly spaces and Universal Design’. in *Autism and Intellectual Disability in Adults*. Shoreham by Sea: Pavilion Publishing, pp. 81–85.

Milton, D., Ridout, S., Kourti, M., Loomes, G. and Martin, N. (2019). ‘A critical reflection on the development of the Participatory Autism Research Collective (PARC)’. *Tizard Learning Disability Review*. doi: 10.1108/TLDR-09-2018-0029.

Milton, D. and Sims, T. (2014). ‘A review of mentoring guidance for students on the autism spectrum’. in. *Education Doctoral Research Conference*, University of Birmingham.

Milton, D., Sims, T., Dawkins, G., Martin, N. and Mills, R. (2017). ‘The development and evaluation of a mentor training programme for those working with autistic adults’. *Good Autism Practice*, 18 (1), pp. 25–33.

Mitchell, W. and Beresford, B. (2014). ‘Young people with high-functioning autism and Asperger’s syndrome planning for and anticipating the move to college: what supports a positive transition?’ *British Journal of Special Education*, 41 (2), pp. 151–171. doi: 10.1111/1467-8578.12064.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G. and Group, T. P. (2009). ‘Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement’. *PLOS Medicine*, 6 (7), p. e1000097. doi: 10.1371/journal.pmed.1000097.

Moore, S., Kinnear, M. and Freeman, L. (2020). ‘Autistic doctors: overlooked assets to medicine’. *The Lancet Psychiatry*. Elsevier, 7 (4), pp. 306–307. doi: 10.1016/S2215-0366(20)30087-0.

Morse, A., Beaumont, M., Burke, M., Colletti, S., Martin, R., Patel, P., Quick, H., Sumbay, S., Stanyon, R., Whittingham, A. and Murphie, A. (2018). *The adult social care workforce in England*. Report by the Comptroller and Auditor General HC 714. London: National Audit Office. Available at: https://www.voced.edu.au/content/ngv:80163 (Accessed: 5 October 2021).

Mottron, L. and Bzdok, D. (2020). ‘Autism spectrum heterogeneity: fact or artifact?’ *Molecular Psychiatry*. Nature Publishing Group, 25 (12), pp. 3178–3185. doi: 10.1038/s41380-020-0748-y.

Mowart, C., Cooper, A. and Golson, L. (2011). *Supporting students on the autistic spectrum. Student mentor guidelines - NAS*. Available at: https://www.autism.org.uk/studentmentors (Accessed: 18 July 2018).

Muggleton, J. T. B., MacMahon, K. and Johnston, K. (2019). 'Exactly the same but completely different: A thematic analysis of Clinical Psychologists' conceptions of Autism across genders'. *Research in Autism Spectrum Disorders*, 62, pp. 75–84. doi: 10.1016/j.rasd.2019.03.004.

Mulrenan, P., Atkins, J. and Cox, S. (2018). '"I get up in the night to cry": The impact of homelessness on higher education students in London, UK'. *Critical Social Policy*. SAGE Publications Ltd, 38 (1), pp. 143–154. doi: 10.1177/0261018317724524.

Murray, D. (2020). 'Dimensions of Difference'. in *The Neurodiversity Reader: Exploring concepts, lived experience and implications for practice*. Shoreham by Sea: Pavilion, pp. 18–34.

Nagase, K. (2017). 'Peer Support of Students with Autism Spectrum Disorders in Higher Education Institutions by Typical Students'. *IAFOR Journal of Psychology & the Behavioral Sciences*, 3 (2), p. 11.

National Autistic Society. (no date). *NAS Autism Data*. Available at: https://www.autism.org.uk/autismdata (Accessed: 19 October 2019).

Ncube, B. L., Shaikh, K. T., Ames, M. E., McMorris, C. A. and Bebko, J. M. (2019). 'Social Support in Postsecondary Students with Autism Spectrum Disorder'. *International Journal of Mental Health and Addiction*, 17 (3), pp. 573–584. doi: 10.1007/s11469-018-9972-y.

Ness, B. M. (2013). 'Supporting Self-Regulated Learning for College Students with Asperger Syndrome: Exploring the "Strategies for College Learning" Model'. *Mentoring & Tutoring: Partnership in Learning*, 21 (4), pp. 356–377. doi: 10.1080/13611267.2013.855865.

Nevill, R. E. A. and White, S. W. (2011). 'College Students' Openness Toward Autism Spectrum Disorders: Improving Peer Acceptance'. *Journal of Autism and Developmental Disorders*, 41 (12), pp. 1619–1628. doi: 10.1007/s10803-011-1189-x.

Newman, J. H. (1842). *The Idea of a University Defined and Illustrated: In Nine Discourses Delivered to the Catholics of Dublin*. gutenberg.org. Available at: http://www.gutenberg.org/files/24526/24526-pdf.pdf (Accessed: 25 August 2020).

Newman, L., Wagner, M., Cameto, R. and Knokey, A.-M. (2009). *The Post-High School Outcomes of Youth With Disabilities up to 4 Years After High School: A Report From the National Longitudinal Transition Study-2 (NLTS2). NCSER 2009-3017. National Center for Special Education Research*. National Center for Special Education Research. Available at: https://eric.ed.gov/?id=ED505448 (Accessed: 31 May 2022).

Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D. and Wei, X. (2011). *The Post-High School Outcomes of Young Adults with Disabilities up to 8 Years after High School: A Report from the National Longitudinal Transition Study-2 (NLTS2). NCSER 2011-3005. National Center for Special Education Research*. National Center for Special Education Research. Available at: https://eric.ed.gov/?id=ED524044 (Accessed: 16 February 2022).

Nicholas, D. B., Mitchell, W., Dudley, C., Clarke, M. and Zulla, R. (2018). 'An ecosystem approach to employment and autism spectrum disorder'. *Journal of autism and developmental disorders*, 48 (1), pp. 264–275.

Nicolaidis, C., Raymaker, D., Kapp, S. K., Baggs, A., Ashkenazy, E., McDonald, K., Weiner, M., Maslak, J., Hunter, M. and Joyce, A. (2019). 'The AASPIRE practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants'. *Autism: The International Journal of Research & Practice*, 23 (8), pp. 2007–2019. doi: 10.1177/1362361319830523.

Nora, A. and Crisp, G. (2007). 'Mentoring Students: Conceptualizing and Validating the Multi-Dimensions of a Support System'. *Journal of College Student Retention: Research, Theory & Practice*, 9 (3), pp. 337–356. doi: 10.2190/CS.9.3.e.

Nuske, A., Rillotta, F., Bellon, M. and Richdale, A. (2019). 'Transition to higher education for students with autism: A systematic literature review'. *Journal of Diversity in Higher Education*, 12 (3), pp. 280–295. doi: 10.1037/dhe0000108.

Obeid, R., Daou, N., DeNigris, D., Shane-Simpson, C., Brooks, P. J. and Gillespie-Lynch, K. (2015). 'A Cross-Cultural Comparison of Knowledge and Stigma Associated with Autism Spectrum Disorder Among College Students in Lebanon and the United States'. *Journal of Autism and Developmental Disorders*, 45 (11), pp. 3520–3536. doi: 10.1007/s10803-015-2499-1.

O'Dell, L., Bertilsdotter Rosqvist, H., Ortega, F., Brownlow, C. and Orsini, M. (2016). 'Critical autism studies: exploring epistemic dialogues and intersections, challenging dominant understandings of autism'. *Disability & Society*. Routledge, 31 (2), pp. 166–179. doi: 10.1080/09687599.2016.1164026.

Office for National Statistics. (2018). *Estimating suicide among higher education students, England and Wales*. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/estimatingsuicideamonghighereducationstudentsenglandandwalesexperimentalstatistics/2018-06-25 (Accessed: 2 January 2019).

Office for Students. (2019). *Continuation rates*. Available at: https://www.officeforstudents.org.uk/data-and-analysis/continuation-and-transfer-rates/continuation-rates/ (Accessed: 10 February 2022).

Office for Students. (2022a). *Exploring student outcomes dashboard*. Office for Students. Available at: https://www.officeforstudents.org.uk/data-and-analysis/student-outcomes-and-experiences-data-dashboards/exploring-student-outcomes-dashboard/ (Accessed: 1 May 2022).

Office for Students. (2022b). *Setting numerical thresholds for condition B3*. Available at: https://www.officeforstudents.org.uk/publications/setting-numerical-thresholds-for-condition-b3/.

O'Neill, M., Booth, S. and Lamb, J. (2018). 'Using NVivo™ for Literature Reviews: The Eight Step Pedagogy (N7 1)'. *The Qualitative Report*, 23 (13), pp. 21–39. Available at: https://nsuworks.nova.edu/tqr/vol23/iss13/3.

Oswalt, S. B. and Riddock, C. C. (2007). 'What to do about being overwhelmed: Graduate students, stress and university services.' *College Student Affairs Journal*. ERIC, 27 (1), pp. 24–44.

Owen, C., McCann, D., Rayner, C. and Deveraux, C. (2016). *Supporting Students with Autism Spectrum Disorder in Higher Education*. Curtain University: National Centre for Student Equity in Higher Education. Available at: https://www.ncsehe.edu.au/publications/supporting-students-with-autism-spectrum-disorder-in-higher-education/ (Accessed: 1 May 2022).

Pearson, A. and Rose, K. (2021). 'A Conceptual Analysis of Autistic Masking: Understanding the Narrative of Stigma and the Illusion of Choice'. *Autism in Adulthood*. Mary Ann Liebert, Inc., publishers. doi: 10.1089/aut.2020.0043.

Perepa, P. (2018). 'Perceptions of students with autism regarding higher education support services'. *The Journal of Inclusive Practice in Further and Higher Education*, 10 (1), p. 20.

Peruzzo, F. (2020). 'I am not disabled: Difference, ethics, critique and refusal of neoliberal academic selves'. in Brown, N. and Leigh, J. (eds) *Ableism in Academia: Theorising Experiences of Disabilities and Chronic Illnesses in Higher Education*. S.l.: UCL Press.

Pillay, Y. and Bhat, C. S. (2012). 'Facilitating Support for Students with Asperger's Syndrome'. *Journal of College Student Psychotherapy*, 26 (2), pp. 140–154. doi: 10.1080/87568225.2012.659161.

Pinder-Amaker, S. (2014). 'Identifying the Unmet Needs of College Students on the Autism Spectrum'. *Harvard Review of Psychiatry*, 22 (2), p. 125. doi: 10.1097/HRP.0000000000000032.

Plummer, K. (2001). *Documents of Life 2: An Invitation to A Critical Humanism*. London ; Thousand Oaks, CA: SAGE.

Powers, L. E., Sowers, J.-A. and Stevens, T. (1995). 'An Exploratory, Randomized Study of the Impact of Mentoring on the Self-Efficacy and Community-Based Knowledge of Adolescents with Severe Physical Challenges'. *Journal of Rehabilitation; Washington, D.C.* Washington, D.C., United States, Washington, D.C.: National Rehabilitation Association, 61 (1), pp. 33–41. Available at: https://search.proquest.com/docview/1310698944/citation/9514923CFA9D431BPQ/1 (Accessed: 20 August 2020).

PRISMA. (2015). Available at: http://www.prisma-statement.org/ (Accessed: 14 November 2019).

ProQuest. (no date). *Education Database*. Available at: https://search-proquest-com (Accessed: 19 October 2019).

Pugliese, C. E. and White, S. W. (2014). 'Brief Report: Problem Solving Therapy in College Students with Autism Spectrum Disorders: Feasibility and Preliminary Efficacy'. *Journal of Autism and Developmental Disorders*, 44 (3), pp. 719–729. doi: 10.1007/s10803-013-1914-8.

Qian, X., Clary, E., Johnson, D. R. and Echternacht, J. K. (2018). 'The Use of a Coaching Model to Support the Academic Success and Social Inclusion of Students with Intellectual

Disabilities in Community and Technical College Settings'. *Journal of Postsecondary Education and Disability*, 31 (3), pp. 193–208. Available at: https://eric.ed.gov/?id=EJ1200602 (Accessed: 8 November 2019).

Rando, H., Huber, M. J. and Oswald, G. R. (2016). 'An Academic Coaching Model Intervention for College Students on the Autism Spectrum'. *Journal of Postsecondary Education and Disability*, 29 (3), pp. 257–262.

Readings, B. (1999). *The university in ruins*. 4th edn. Cambridge, MA: Harvard University Press.

Remington, A., Swettenham, J. and Lavie, N. (2012). 'Lightening the load: Perceptual load impairs visual detection in typical adults but not in autism.' *Journal of Abnormal Psychology*, 121 (2), pp. 544–551. doi: 10.1037/a0027670.

Research Autism. (no date). *Research Autism Database*. Available at: http://www.researchautism.net/autism-publications/publications-database (Accessed: 19 October 2019).

Riccio, A., Kapp, S., Cage, E., Vincent, J., Dwyer, P., DeNigris, D., Santos, J., Jordan, A., Hossain, M., Kofner, B. and Gillespie-Lynch, K. (2021). 'What Helps Autistic University Students Develop Autistic Identity and Thrive?' in. *Society for Research in Child Development (SRCD)*.

Ridout, S. (2018). *Autism and Mental Well-Being in Higher Education: A Practical Resource for Students, Mentors and... Study Skills Support Workers.* Hove: Pavilion Publishing.

Ridout, S. and Edmondson, M. (2017). 'Cygnet mentoring project: combined experiences from a mentor and a mentee'. *Autonomy, the Critical Journal of Interdisciplinary Autism Studies*, 1 (5).

Rieu, E. V. (2003). 'Introduction to the 1946 Edition'. in *The Odyssey*. Rev Ed edition. London ; New York: Penguin Classics.

Robert, A. (1999). 'Homer's Mentor - Duties Fulfilled or Misconstrued'. *History of Education Journal*.

Roberts, G. C., Kavussanu, M. and Sprague, R. L. (2001). 'Mentoring and the impact of the research climate'. *Science and Engineering Ethics*, 7 (4), pp. 525–537. doi: 10.1007/s11948-001-0010-1.

Roberts, K. D. (2010). 'Topic Areas to Consider When Planning Transition From High School to Postsecondary Education for Students With Autism Spectrum Disorders'. *Focus on Autism and Other Developmental Disabilities*, 25 (3), pp. 158–162. doi: 10.1177/1088357610371476.

Roberts, N. and Birmingham, E. (2017). 'Mentoring University Students with ASD: A Mentee-centered Approach'. *Journal of Autism and Developmental Disorders*, 47 (4), pp. 1038–1050. doi: 10.1007/s10803-016-2997-9.

Robertson, S. M. and Ne'eman, A. D. (2008). 'Autistic Acceptance, the College Campus, and Technology: Growth of Neurodiversity in Society and Academia'. *Disability Studies*

Quarterly, 28 (4). Available at: http://dsq-sds.org/article/view/146 (Accessed: 23 November 2018).

Roman-Urrestarazu, A., van Kessel, R., Allison, C., Matthews, F. E., Brayne, C. and Baron-Cohen, S. (2021). 'Association of Race/Ethnicity and Social Disadvantage With Autism Prevalence in 7 Million School Children in England'. *JAMA Pediatrics*, 175 (6), p. e210054. doi: 10.1001/jamapediatrics.2021.0054.

Rose, D. (2000). 'Universal Design for Learning'. *Journal of Special Education Technology*, 15 (4), pp. 47–51. doi: 10.1177/016264340001500407.

Rose, D. H. and Meyer, A. (2002). *Teaching Every Student in the Digital Age: Universal Design for Learning*. Association for Supervision and Curriculum Development, 1703 N.

Rosqvist, H. B. (2019). 'Knowing what to do: exploring meanings of development and peer support aimed at people with autism'. *International Journal of Inclusive Education*, 23 (2), pp. 174–187. doi: 10.1080/13603116.2018.1427807.

Rousseau, J.-J. (1762). *Emile; or On Education*. Penguin Classics, 1991. New York: Penguin.

Russell, G., Stapley, S., Newlove-Delgado, T., Salmon, A., White, R., Warren, F., Pearson, A. and Ford, T. (2021). 'Time trends in autism diagnosis over 20 years: a UK population-based cohort study'. *Journal of Child Psychology and Psychiatry*. doi: 10.1111/jcpp.13505.

Rutherford, E. N. (2013). *An exploration of support factors available to higher education students with high functioning autism or asperger syndrome*. Ed.D. Lamar University. Available at: https://search.proquest.com/docview/1492361678/abstract/2D9EEBB25C1A4547PQ/1 (Accessed: 20 November 2019).

SAAS. (no date). *Disabled Students' Allowance (DSA)*. Available at: https://www.saas.gov.uk/guides/disabled-students-allowance (Accessed: 7 October 2020).

Saldaña, J. (2013). *The Coding Manual for Qualitative Researchers*. 2nd edn. Thousand Oaks, CA: SAGE Publications.

Sandel, M. J. (2020). *The Tyranny of Merit: What's Become of the Common Good?* Kindle. Penguin.

Sarrett, J. C. (2018). 'Autism and Accommodations in Higher Education: Insights from the Autism Community'. *Journal of Autism and Developmental Disorders*, 48 (3), pp. 679–693. doi: 10.1007/s10803-017-3353-4.

Sasson, N. J., Faso, D. J., Nugent, J., Lovell, S., Kennedy, D. P. and Grossman, R. B. (2017). 'Neurotypical Peers are Less Willing to Interact with Those with Autism based on Thin Slice Judgments'. *Scientific Reports*. Nature Publishing Group, 7 (1), p. 40700. doi: 10.1038/srep40700.

Savage, H. E., Karp, R. S. and Logue, R. (2004). 'Faculty Mentorship At Colleges And Universities'. *College Teaching*. Routledge, 52 (1), pp. 21–24. doi: 10.3200/CTCH.52.1.21-24.

Sayman, D. M. (2015). 'I Still Need My Security Teddy Bear: Experiences of an Individual with Autism Spectrum Disorder in Higher Education'. *Learning Assistance Review*, 20 (1), pp. 77–98. Available at: https://eric.ed.gov/?id=EJ1058012 (Accessed: 20 November 2019).

Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M. and Bakker, A. B. (2002). 'Burnout and engagement in university students: A cross-national study'. *Journal of cross-cultural psychology*. Sage Publications Sage CA: Thousand Oaks, CA, 33 (5), pp. 464–481.

Schindler, V., Cajiga, A., Aaronson, R. and Salas, L. (2015). 'The experience of transition to college for students diagnosed with Asperger's disorder'. *The Open Journal of Occupational Therapy*, 3 (1), p. 2.

Schwartz-Shea, P. and Yanow, D. (2012). *Interpretive research design: concepts and processes*. New York: Routledge (Routledge series on interpretive methods).

Scott, S. S., Mcguire, J. M. and Shaw, S. F. (2003). 'Universal Design for Instruction: A New Paradigm for Adult Instruction in Postsecondary Education'. *Remedial and Special Education*. SAGE Publications Inc, 24 (6), pp. 369–379. doi: 10.1177/07419325030240060801.

Searle, K. A., Ellis, L., Kourti, M., MacLeod, A. G., Lear, C., Duckworth, C., Irvine, D., Jones, H., King, M., Ling, J. and Simpson, J. (2019). 'Participatory autism research with students at a UK university: evidence from a small-scale empirical project'. *Advances in Autism*, p. AIA-05-2018-0018. doi: 10.1108/AIA-05-2018-0018.

Sedgewick, F., Hull, L. and Ellis, H. (2021). *Autism and masking: how and why people do it, and the impact it can have*. London: Jessica Kingsley Publishers.

Segar, M. (1997). *Coping: A survival guide for people with Asperger Syndrome*. Available at: https://www-users.cs.york.ac.uk/alistair/survival/survival.pdf (Accessed: 19 December 2016).

SfE. (2020). *NMH Suppliers v1.9*. Available at: https://www.practitioners.slc.co.uk/exchange-blog/2020/september/10092020-guidance-for-nmh-suppliers/ (Accessed: 25 May 2020).

Shakespeare, T. and Watson, N. (2001). 'The social model of disability: an outdated ideology'. in Barnartt, S. N. and Altman, B. M. (eds) *Exploring theories and expanding methodologies (research in social science & disability S.)*. Amsterdam: Emerald Group Publishing, pp. 9–28.

Shattuck, P. T., Narendorf, S. C., Cooper, B., Sterzing, P. R., Wagner, M. and Taylor, J. L. (2012). 'Postsecondary Education and Employment Among Youth With an Autism Spectrum Disorder'. *Pediatrics*, 129 (6), pp. 1042–1049. doi: 10.1542/peds.2011-2864.

Shattuck, P. T., Steinberg, J., Yu, J., Wei, X., Cooper, B. P., Newman, L. and Roux, A. M. (2014). 'Disability identification and self-efficacy among college students on the autism spectrum'. *Autism research and treatment*, 2014.

Shew, A. (2020). 'Let COVID-19 expand awareness of disability tech'. *Nature*, 581 (7806), pp. 9–10. Available at: https://www.nature.com/articles/d41586-020-01312-w (Accessed: 15 August 2021).

Shmulsky, S. and Gobbo, K. (2013). 'Autism Spectrum in the College Classroom: Strategies for Instructors'. *Community College Journal of Research and Practice*, 37 (6), pp. 490–495. doi: 10.1080/10668926.2012.716753.

Shmulsky, S. and Gobbo, K. (2019). 'Autism Support in a Community College Setting: Ideas from Intersectionality'. *Community College Journal of Research and Practice*, 43 (9), pp. 648–652. doi: 10.1080/10668926.2018.1522278.

Siccama, C. J. and Penna, S. (2008). 'Enhancing Validity of a Qualitative Dissertation Research Study by Using NVIVO'. *Qualitative Research Journal*. doi: 10.3316/QRJ0802091.

Siew, C. T., Mazzucchelli, T. G., Rooney, R. and Girdler, S. (2017). 'A specialist peer mentoring program for university students on the autism spectrum: A pilot study'. *PLOS ONE*. Edited by R. E. Tractenberg, 12 (7), p. e0180854. doi: 10.1371/journal.pone.0180854.

Simmeborn Fleischer, A. (2012). 'Alienation and struggle: Everyday student-life of three male students with Asperger syndrome'. *Scandinavian Journal of Disability Research*, 14 (2), pp. 177–194. doi: 10.1080/15017419.2011.558236.

Simonoff, E., Pickles, A., Charman, T., Chandler, S., Loucas, T. and Baird, G. (2008). 'Psychiatric disorders in children with autism spectrum disorders: prevalence, comorbidity, and associated factors in a population-derived sample'. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47 (8), pp. 921–929. doi: 10.1097/CHI.0b013e318179964f.

Sims, T. (2016). 'Transition to university for young adults on the autism spectrum'. *The Journal of Inclusive Practice in Further and Higher Education*, 7, pp. 64–69.

Sims, T., Milton, D., Martin, N. and Dawkins, G. (2016). 'Developing a user-informed training package for a mentoring programme for people on the autism spectrum'. *The Journal of Inclusive Practice in Further and Higher Education*, 7, pp. 49–52.

Singer, J. (2017). *Neurodiversity: the birth of an idea*. Kindle.

SLC. (2022). *Your Disabled Students' Allowance Funded Non-Medical Help (NMH) Support – What can you expect?* Available at: https://www.practitioners.slc.co.uk/exchange-blog/2022/january/disabled-students-allowance-funded-nmh-support/ (Accessed: 28 January 2022).

Smith, A. (1998). *Accelerated Learning in Practice*. London: A&C Black.

Smith, R. and Alred, G. (2017). 'The Impersonation of Wisdom'. in Hagger, H., McIntyre, D., and Wilkin, M. (eds) *Mentoring: Perspectives on School-based Teacher Education*. 1 edition. Routledge, pp. 103–117.

Snow, D. A., Rochford, E. B., Worden, S. K. and Benford, R. D. (1986). 'Frame Alignment Processes, Micromobilization, and Movement Participation'. *American Sociological Review*. [American Sociological Association, Sage Publications, Inc.], 51 (4), pp. 464–481. doi: 10.2307/2095581.

Snow, D. and Benford, R. (1988). 'Ideology, Frame Resonance and Participant Mobilization'. *International Social Movement Research*, 1, pp. 197–217.

Sosik, J. J. and Godshalk, V. M. (2000). 'The Role of Gender in Mentoring: Implications for Diversified and Homogenous Mentoring Relationships'. *Journal of Vocational Behavior*, 57 (1), pp. 102–122. doi: 10.1006/jvbe.1999.1734.

Southby, K. and Robinson, O. (2018). 'Information, Advocacy and Signposting as a Low-Level Support for Adults with High-Functioning Autism Spectrum Disorder: An Example from the UK'. *Journal of Autism and Developmental Disorders*, 48 (2), pp. 511–519. doi: 10.1007/s10803-017-3331-x.

Spielberger, C. D. (2010). 'State-Trait anxiety inventory'. *The Corsini Encyclopaedia of Psychology*. Wiley Online Library, pp. 1–1.

Strauss, A. and Corbin, J. (1994). 'Grounded theory methodology: An Overview'. in Denzin, N. K. and Lincoln, Y. S. (eds) *Handbook of qualitative research*, pp. 273–85.

Strauss, A. L. and Corbin, J. M. (1991). *Basics of qualitative research: grounded theory procedures and techniques*. 3rd edn. Thousand Oaks, CA: SAGE.

Strauss, P., U, A. and Young, S. (2011). '"I know the type of people I work well with": student anxiety in multicultural group projects'. *Studies in Higher Education*, 36 (7), pp. 815–829. doi: 10.1080/03075079.2010.488720.

Stronach, S., Wiegand, S. and Mentz, E. (2019). 'Brief Report: Autism Knowledge and Stigma in University and Community Samples'. *Journal of Autism and Developmental Disorders*, 49 (3), pp. 1298–1302. doi: 10.1007/s10803-018-3825-1.

Student Loans Company. (2017). 'Student Support Information Note (SSIN) Arrangements for students funded under the student support regulations Disabled Students' Allowances (DSAs)'. Available at: http://www.practitioners.slc.co.uk/media/1157/201718-dsa-mentoring-and-study-skills-and-excess-hours.pdf.

Student Loans Company. (2021). 'SfE FoI response'.

Sturm, A. and Kasari, C. (2019). 'Academic and psychosocial characteristics of incoming college freshmen with autism spectrum disorder: The role of comorbidity and gender'. *Autism Research*, 12 (6), pp. 931–940. doi: 10.1002/aur.2099.

Sundli, L. (2007). 'Mentoring—A new mantra for education?' *Teaching and Teacher Education*, 23 (2), pp. 201–214. doi: 10.1016/j.tate.2006.04.016.

Taylor, A. and Knott, F. (2007). 'Developing a diagnostic and support service for students with Asperger syndrome at university'. *Good Autism Practice*, 8 (2), pp. 9–15.

Taylor, C. M. and Colvin, K. L. (2013). 'Universal Design: A Tool to Help College Students with Asperger's Syndrome Engage on Campus'. *About Campus*, 18 (3), pp. 9–15. doi: 10.1002/abc.21118.

Taylor, J. L., Henninger, N. A. and Mailick, M. R. (2015). 'Longitudinal patterns of employment and postsecondary education for adults with autism and average-range IQ'. *Autism*, 19 (7), pp. 785–793.

Tennyson, A. (1842). *Ulysses*. Available at: https://rpo.library.utoronto.ca/poems/ulysses (Accessed: 5 May 2021).

The DSA Timeline and associated developments & initiatives - 1983 to 2014 - NNAC-Wiki. (no date). Available at: http://nnac.org/wiki/index.php/The_DSA_Timeline_and_associated_developments_%26_initiatives_-_1983_to_2014 (Accessed: 29 March 2022).

The Faculty Office. (no date). 'Lambeth Degrees Awarded'. Available at: https://www.facultyoffice.org.uk/lambeth-degrees/degrees-awarded/ (Accessed: 28 October 2020).

Thomas, L. (2002). 'Student retention in higher education: the role of institutional habitus'. *Journal of Education Policy*. Routledge, 17 (4), pp. 423–442. doi: 10.1080/02680930210140257.

Thompson, C., Bölte, S., Falkmer, T. and Girdler, S. (2019). 'Viewpoints on how students with autism can best navigate university'. *Scandinavian journal of occupational therapy*, 26 (4), pp. 294–305.

Thompson, C., Falkmer, T., Evans, K., Bölte, S. and Girdler, S. (2018). 'A realist evaluation of peer mentoring support for university students with autism'. *British Journal of Special Education*, 45 (4), pp. 412–434. doi: 10.1111/1467-8578.12241.

Thompson, H. (2018). 'Recent Work in Critical Disability Studies'. *Paragraph*. Edinburgh University Press, 41 (2), pp. 233–244. doi: 10.3366/para.2018.0265.

Underhill, J. C., Ledford, V. and Adams, H. (2019). 'Autism stigma in communication classrooms: exploring peer attitudes and motivations toward interacting with atypical students'. *Communication Education*, 68 (2), pp. 175–192. doi: 10.1080/03634523.2019.1569247.

University of Cambridge DRC. (no date). *Disability Resource Centre - DSAs*. Available at: https://www.disability.admin.cam.ac.uk/students/financial-support/disabled-students-allowance (Accessed: 27 October 2021).

U.S. Department of Labor. (1990). *Americans with Disabilities Act 1990*. Available at: https://www.dol.gov/general/topic/disability/ada (Accessed: 10 March 2020).

U.S. Equal Employment Opportunity Commission. (2008). *Americans with Disabilities Act Amendments Act 2008*. Available at: https://www.eeoc.gov/statutes/americans-disabilities-act-amendments-act-2008 (Accessed: 3 September 2020).

Van Hees, V., Moyson, T. and Roeyers, H. (2015). 'Higher Education Experiences of Students with Autism Spectrum Disorder: Challenges, Benefits and Support Needs'. *Journal of Autism and Developmental Disorders*, 45 (6), pp. 1673–1688. doi: 10.1007/s10803-014-2324-2.

Van Hees, V., Roeyers, H. and De Mol, J. (2018). 'Students with Autism Spectrum Disorder and Their Parents in the Transition into Higher Education: Impact on Dynamics in the Parent–Child Relationship'. *Journal of Autism and Developmental Disorders*, 48 (10), pp. 3296–3310. doi: 10.1007/s10803-018-3593-y.

VanBergeijk, E., Klin, A. and Volkmar, F. (2008). 'Supporting More Able Students on the Autism Spectrum: College and Beyond'. *Journal of Autism and Developmental Disorders*, 38 (7), p. 1359. doi: 10.1007/s10803-007-0524-8.

Vincent, J. (2019). 'It's the fear of the unknown: Transition from higher education for young autistic adults'. *Autism*, 23 (6), pp. 1575–1585. doi: 10.1177/1362361318822498.

Vincent, J., Potts, M., Fletcher, D., Hodges, S., Howells, J., Mitchell, A., Mallon, B. and Ledger, T. (2017). '"I think autism is like running on Windows while everyone else is a Mac": using a participatory action research approach with students on the autistic spectrum to rearticulate autism and the lived experience of university'. *Educational Action Research*. Routledge, 25 (2), pp. 300–315. doi: 10.1080/09650792.2016.1153978.

Vita, G. D. (2002). 'Does Assessed Multicultural Group Work really pull UK Students' Average down?' *Assessment & Evaluation in Higher Education*, 27 (2), pp. 153–161. doi: 10.1080/02602930220128724.

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), pp. 691–693. doi: 10.1007/s10803-019-04280-x.

Vries, J. de, Webb, C. and Eveline, J. (2006). 'Mentoring for gender equality and organisational change'. *Employee Relations*, 28 (6), pp. 573–587. doi: 10.1108/01425450610704506.

Ward, D. and Webster, A. (2018). 'Understanding the Lived Experiences of University Students with Autism Spectrum Disorder (ASD): A Phenomenological Study'. *International Journal of Disability, Development and Education*, 65 (4), pp. 373–392. doi: 10.1080/1034912X.2017.1403573.

Ward, E. G., Thomas, E. E. and Disch, W. B. (2014). 'Mentor Service Themes Emergent in a Holistic, Undergraduate Peer-Mentoring Experience'. *Journal of College Student Development*. Johns Hopkins University Press, 55 (6), pp. 563–579. doi: 10.1353/csd.2014.0058.

Warrier, V., Greenberg, D. M., Weir, E., Buckingham, C., Smith, P., Lai, M.-C., Allison, C. and Baron-Cohen, S. (2020). 'Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals'. *Nature Communications*, 11 (1), p. 3959. doi: 10.1038/s41467-020-17794-1.

Watson, N. (2002). 'Well, I Know this is Going to Sound Very Strange to You, but I Don't See Myself as a Disabled Person: Identity and disability'. *Disability & Society*. Routledge, 17 (5), pp. 509–527. doi: 10.1080/09687590220148496.

Webb, C. and Shakespeare, P. (2008). 'Judgements about mentoring relationships in nurse education'. *Nurse Education Today*, 28 (5), pp. 563–571. doi: 10.1016/j.nedt.2007.09.006.

Weger, H., Castle Bell, G., Minei, E. M. and Robinson, M. C. (2014). 'The Relative Effectiveness of Active Listening in Initial Interactions'. *International Journal of Listening*. Routledge, 28 (1), pp. 13–31. doi: 10.1080/10904018.2013.813234.

Wehman, P., Smith, M. D. and Schall, C. (2009). *Autism and the Transition to Adulthood: Success beyond the Classroom.* 4th edn. Baltimore, MD: Paul H Brookes Publishing.

Wei, X., Christiano, E., Yu, J., Blackorby, J., Shattuck, P. and Newman, L. (2014). 'Postsecondary Pathways and Persistence for STEM Versus Non-STEM Majors: Among College Students with an Autism Spectrum Disorder'. *Journal of Autism & Developmental Disorders*, 44 (5), pp. 1159–1167. doi: 10.1007/s10803-013-1978-5.

Wei, X., Wagner, M., Hudson, L., Yu, J. W. and Javitz, H. (2016). 'The Effect of Transition Planning Participation and Goal-Setting on College Enrollment Among Youth With Autism Spectrum Disorders'. *Remedial & Special Education*, 37 (1), pp. 3–14. doi: 10.1177/0741932515581495.

Wei, X., Yu, J., Shattuck, P., McCracken, M. and Blackorby, J. (2013). 'Science, Technology, Engineering, and Mathematics (STEM) Participation Among College Students with an Autism Spectrum Disorder'. *Journal of Autism & Developmental Disorders*, 43 (7), pp. 1539–1546. doi: 10.1007/s10803-012-1700-z.

Weir, E., Allison, C. and Baron-Cohen, S. (2021). 'The sexual health, orientation, and activity of autistic adolescents and adults'. *Autism Research*. doi: 10.1002/aur.2604.

Welkowitz, L. A. and Baker, L. J. (2005). 'Supporting college students with Asperger's syndrome'. in *Asperger's syndrome: Intervening in schools, clinics, and communities*, pp. 173–187.

West, A. (2016). 'A framework for conceptualizing models of mentoring in educational settings'. *International Journal of Leadership and Change*, 4 (1), p. 11.

White, D., Hillier, A., Frye, A. and Makrez, E. (2019). 'College Students' Knowledge and Attitudes Towards Students on the Autism Spectrum'. *Journal of Autism and Developmental Disorders*, 49 (7), pp. 2699–2705. doi: 10.1007/s10803-016-2818-1.

White, S. W., Elias, R., Salinas, C. E., Capriola, N., Conner, C. M., Asselin, S. B., Miyazaki, Y., Mazefsky, C. A., Howlin, P. and Getzel, E. E. (2016). 'Students with autism spectrum disorder in college: Results from a preliminary mixed methods needs analysis'. *Research in Developmental Disabilities*, 56, pp. 29–40. doi: 10.1016/j.ridd.2016.05.010.

White, S. W., Ollendick, T. H. and Bray, B. C. (2011). 'College students on the autism spectrum: Prevalence and associated problems'. *Autism*, 15 (6), pp. 683–701. doi: 10.1177/1362361310393363.

White, S. W., Richey, J. A., Gracanin, D., Coffman, M., Elias, R., LaConte, S. and Ollendick, T. H. (2016). 'Psychosocial and Computer-Assisted Intervention for College Students with Autism Spectrum Disorder: Preliminary Support for Feasibility'. *Education and training in autism and developmental disabilities*, 51 (3), pp. 307–317. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5241080/ (Accessed: 26 March 2020).

Whitehouse, A. J. O., Durkin, K., Jaquet, E. and Ziatas, K. (2009). 'Friendship, loneliness and depression in adolescents with Asperger's Syndrome'. *Journal of Adolescence*, 32 (2), pp. 309–322. doi: 10.1016/j.adolescence.2008.03.004.

Whiteside, U., Pantelone, D. W., Hunter-Reel, D., Eland, J., Kleiber, B. and Larimer, M. (2007). 'Initial Suggestions for Supervising and Mentoring Undergraduate Research Assistants at Large Research Universities.' *International Journal of Teaching & Learning in Higher Education*, 19 (3).

WHO. (2022). *ICD-11 6A02*. Available at: https://icd.who.int/dev11/f/en#/http%3A%2F%2Fid.who.int%2Ficd%2Fentity%2F437815624 (Accessed: 1 February 2022).

Wiggins, G. P., Wiggins, G. and McTighe, J. (2005). *Understanding by Design*. Alexandria, VA: ASCD.

Williams, D. L. (2010). *Rousseau's Platonic Enlightenment*. Pennsylvania: Penn State Press.

Williams, L. B. (2016). 'Student Life on the Autism Spectrum: Helping to Build a More Inclusive Campus'. *Change*, 48 (4), pp. 48–54. doi: 10.1080/00091383.2016.1198187.

Wilson, J. A. and Elman, N. S. (1990). 'Organizational Benefits of Mentoring'. *The Executive; Ada*. Ada, United States, Ada: Academy of Management, 4 (4), p. 88. doi: http://dx.doi.org/10.5465/ame.1990.4277215.

Zellers, D. F., Howard, V. M. and Barcic, M. A. (2008). 'Faculty Mentoring programs: Reenvisioning rather than Reinventing the wheel'. *Review of Educational Research*, 78 (3), pp. 552–588. doi: 10.3102/0034654308320966.

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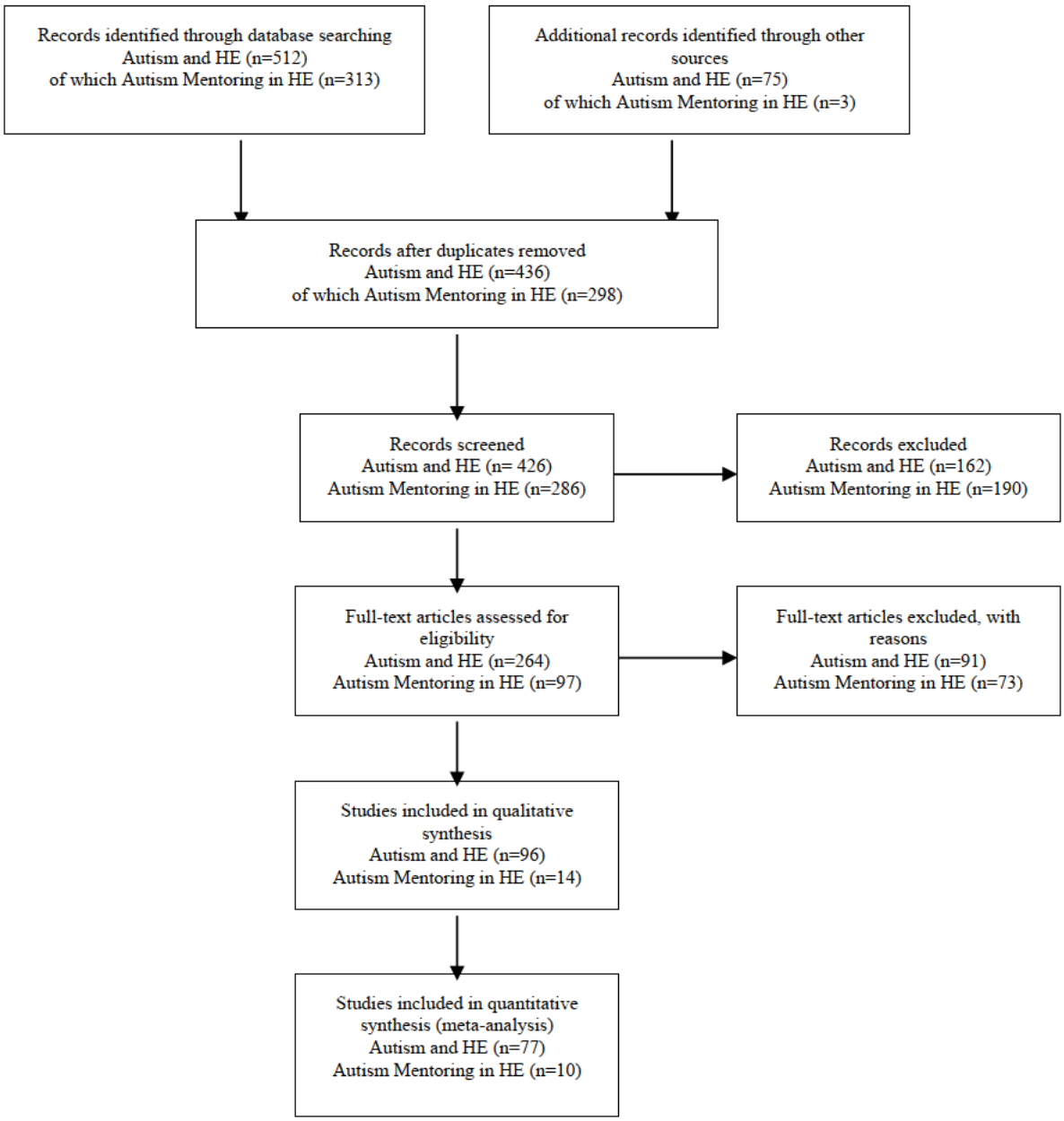
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Figure 40
PRISMA flow diagram



From (Moher et al.*, 2009)*

Table 23
NIHR PROSPERO search results 31 Oct 2019

Search	String for autism specific literature reviews	Total count	Relevance to autism and HE
Complete literature reviews	autis* AND (Review Completed not published OR Review Completed published OR Review Completed published_being_updated):RS AND (education):HA	14	0
Ongoing literature reviews	autis* AND (Review_Ongoing):RS AND (education):HA	56	1

Table 24
Databases and search query hits as of 31 Oct 2019

Database	Mentoring particular search	Eclectic search	notes
	mentor* AND (“autism” OR “autistic” OR “asd” OR “asperger’s” OR “aspergers” OR “HFA”) AND (“higher education” OR college OR university OR “post secondary” OR “postsecondary”)	(“autism” OR “autistic” OR “asd” OR “asperger’s” OR “aspergers” OR “HFA”) AND (“higher education” OR college OR university OR “post secondary” OR “postsecondary”)	
NAS Autism Data (National Autistic Society, no date)	Hits: 28 False positive: 18 Unfound: 0 Total: 8	Hits: 114 False positive: 3 Unfound: 0 Total: 113	Potential for complex Boolean operator chain to have been reduced to ANDs and ORs without bracketing.
Research Autism Database (Research Autism, no date)	Hits: 15 False positive: 2 Unfound: 0 Total: 13	Hits: 24 False positive: 6 Unfound: 1 Total:17	No Boolean search Individual searches for terms were run and results aggregated
Education Abstracts (EBSCO, no date) - also searches ERIC Collection (Education Resources Information Center, n.d.) and ProQuest Database (ProQuest, no date)	Hits: 157 False positive: 117 Unfound: 8 Total: 32	Hits: 184 False positive: 62 Unfound: 1 Total: 121	
Google Scholar x+2x	Hits: 125 False positive: 54 Unfound: 2 Total: 69	Hits: 196 False positive: 93 Unfound: 4 Total: 99	

Table 25
Number of autistic participants in surveyed literature by broad methodology to January 2021

autistic participants in study	no. of mixed method studies	no. of mixed method participants	no. of qualitative studies	no. of qualitative participants	no. of quantitative studies	no. of quantitative participants	
3	0	0	6	18	0	0	
4	0	0	2	8	1	4	
5	1	5	5	25	1	5	
6	0	0	3	18	0	0	
7	2	14	1	7	0	0	
8	1	8	1	8	0	0	
9	0	0	2	18	1	9	
10	1	10	3	30	0	0	
11	0	0	2	22	0	0	
12	2	24	3	36	0	0	
13	1	13	1	13	0	0	
14	1	14	3	42	0	0	
15	1	15	1	15	0	0	
16	0	0	2	32	0	0	
18	0	0	1	18	0	0	
20	1	20	0	0	0	0	
21	2	42	1	21	1	21	
23	4	92	2	46	1	23	
24	1	24	1	24	0	0	
25	2	50	1	25	0	0	
26	0	0	1	26	2	52	
28	0	0	3	84	0	0	
30	1	30	1	30	0	0	
31	1	31	1	31	0	0	
35	1	35	0	0	0	0	
37	0	0	0	0	1	37	
40	1	40	0	0	1	40	
43	0	0	0	0	1	43	
44	1	44	0	0	1	44	
48	0	0	0	0	1	48	
52	0	0	0	0	1	52	
54	1	54	0	0	1	54	
55	0	0	0	0	1	55	
56	0	0	0	0	2	112	
57	0	0	0	0	1	57	
67	1	67	0	0	0	0	
73	0	0	0	0	1	73	
75	0	0	0	0	1	75	
90	0	0	0	0	1	90	
97	0	0	0	0	1	97	
113	0	0	0	0	1	113	
120	0	0	0	0	1	120	
122	1	122	0	0	0	0	
135	0	0	1	135	0	0	
142	0	0	1	142	0	0	
158	0	0	0	0	1	158	
230	1	230	0	0	1	230	
660	0	0	0	0	1	660	
2211	0	0	0	0	1	2211	
		984		**874**		**4483**	**6341**

Document 1
Confirmation of ethics approval

Application for Ethical Review ERN_19-1916

Samantha Waldron (Research Support Services) <[redacted]>
Tue 20/10/2020 10:15

To: Andrea Macleod (School of Education) <A.G.Macleod@bham.ac.uk>
Cc: Brian Irvine (PhD Education - FT) <B.R.H.Irvine@pgr.bham.ac.uk>; Karen Guldberg (Disability, Inclusion and Special Needs) <K.K.Guldberg@bham.ac.uk>

Dear Dr MacLeod,

Re: "Developing frameworks for specialist autism mentoring in higher education"
Application for Ethical Review ERN_19-1916

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https //intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https //intranet birmingham ac uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts bham ac uk.

Kind regards,

Ms Sam Waldron
Research Ethics Officer
Research Support Group
C Block Dome (room 137)
Aston Webb Building
University of Birmingham
Edgbaston B15 2TT
Tel [redacted] (if you leave a voicemail message and number I will get back to you)
Email [redacted] (also available on Skype for Business)

Please remember to submit a new Self-Assessment Form for each new project Click Ethical Review Process for further details regarding the University's Ethical Review process

Click Research Governance for further details regarding the University's Research Governance and Clinical Trials Insurance processes, or email researchgovernance@contacts bham ac uk with any queries

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Document 2
Participant information sheet

UNIVERSITY OF BIRMINGHAM | ACER AUTISM CENTRE FOR EDUCATION AND RESEARCH

Developing frameworks for Specialist (Autism) Mentoring in Higher Education.

Short version

There has been a remarkable increase in autistic students in the UK. These students should get support from DSA funded Specialist (autism) Mentors. There has been very little research on this, so this project is going to fill that gap.

It will have 3 phases:

1. Finding out how much mentoring happens.
2. Asking mentees and mentors to fill in ½ termly online diaries to find out what goes on; any really interesting things will be followed up with interviews either in person, or online. Diaries should take no more than 5-10 minutes each.
3. A forum of autistic mentees, autistic mentors and autistic academics will meet to make sure that any frameworks or guidance coming out of the diaries is good.

Hopefully this will create resources to help mentees use their time well, help mentors be better mentors, and help universities to fulfil their function better.

Long version for those who are interested:

Context

There has been a remarkable increase in autistic students attending university; from just 60 UK university students in 2003/04, to 11,015 students in 2017/18 [i]. Currently, these autistic students are less likely than any disability group to obtain a First or Upper Second Class and are less likely to move to full-time paid employment [ii]. Support for autistic students in the UK comes via the Disabled Students Allowance (DSA) to engage a "Specialist (Autism) Mentor" to provide 'highly specialist, specifically tailored, one to one support which helps students address the barriers to learning created by a particular impairment' [iii]. It is vital that universities are furnished with informed guidance on the substance of Specialist (Autism) Mentoring to ensure the best outcomes for this growing demographic of autistic students.

In the six years since a systematic literature review found only 20 articles directly documenting the experiences of only 69 autistic university students [iv], there has been steady growth in research [v]. Following national research agendas that seek to put participatory principles into action [vi], there has been development of work that empowers autistic students in advocating for accessible university systems [vii], but analysis still finds little or no literature on optimising Specialist (Autism) Mentoring support [viii].

We know that the pilot studies of Specialist (Autism) Mentoring have shown the worth of such programmes [ix], with good mentors developing tailored partnerships to bridge the individual to university systems [x]. Students have reported high levels of satisfaction with the Specialist (Autism) Mentoring offered [xi], in particular mentees have reported empowerment through the 'person-centred ethos' developed following participatory principles [xii] with mentees 'appreciated for themselves rather than modified to fit in' [xiii]. Research has so far been conducted into individual HE mentoring provisions, this new work will mark a departure into cross-institutional research.

Research focus in 3 phases

To this end this research seeks to ask, what are the themes inherent to good Specialist (Autism) Mentoring?

Phase 1 – What is the current scope of Specialist (Autism) Mentoring?

After a scoping survey seeking a national picture via university disability officers of the UK's 130 universities, a monthly online structured diary will be deployed to recruited representative mentees and mentors to capture the themes that are discussed in Specialist (Autism) Mentoring sessions.

Phase 2 – What occurs during mentoring sessions? Thick descriptions of the mundane and unusual themes of mentoring.

Permission will be sought to interview both mentees and mentors who report surprising themes though their online diaries. Interviews will be coded to reveal associations between semantic fields from which mentoring strategies can be developed. These interviews will be consolidated into a thick description of mentoring which will be considered by the participants in the following phase.

Phase 3 – What is needed to support good mentoring? Consolidating a mentoring framework with a participatory panel.

Using autistic expertise to develop a framework from the themes is a robust method for understanding the social interplay inherent in the mentoring relationship [xiv] and echoes the prevailing autism research agenda [xv]. A participatory panel of autistic students, mentors and academics and allied mentors and disability practitioners, will be recruited. Anonymised data from the preceding phases will be shared with these groups who will be tasked with linking of semantic and latent themes [xvi]. These conversations, and the participants' own experience of university, will form the basis of a framework for mentors to adopt. One would hope that this provokes a moving beyond conceptions of reasonable adjustment towards the universal design of university systems [xvii]. Participatory panel members will have follow-up contact to ensure thoughts that come after a period of reflection are captured.

Feedback

In line with a growing trend of autism research, the final thesis will start with a lay summary; upon acceptance, this will be circulated to all diary & participatory panel members alongside guidance on how to access a full version of the thesis from UBIRA eTheses. A report on potential frameworks for mentoring will be circulated to participating mentors.

Outcomes

The framework developed by this research will have multiple benefits. Universities will have a mechanism for ensuring excellent provision of mentoring. Specialist (Autism) Mentors will be provided clarity in their task and be empowered to share their experience with academics. Furthermore, these themes of mentoring should also provide clear expectations of the role to enable recruitment of autistic mentors into the profession. Potentially, neurodiverse campuses will be enhanced through autistic students' advocacy in the design of their own university encounters [xviii]. It is hoped that the participatory elements of the research design will also challenge the deficit models of autism that mentees face [xix].

Though research is grounded in the experience of autistic students in the UK it will both inform and be informed by the models of peer mentoring projects that are emerging in Canada [xx] and Australia [xxi], and the college counsellor model prevalent in the US [xxii].

Finally, this research also echoes four of the top five James Lind Alliance research priorities for autism that seek to provide an agenda for the allocation of UK research funding; with mentoring as an adapted intervention to improve mental health, though researching effective support for autistic people, finding interventions to reduce anxiety, and providing the most appropriate support to achieve the best education, life and social outcomes for autistic people [xxiii]. This priority setting sought to rank the needs of the autistic community [xxiv]. This research would contribute to ensuring the success of our growing population of autistic students and the academic communities that they are part of.

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[i] HESA, Who s Studying in HE?: Personal Characteristics , 2018 <https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he/characteristics> [accessed 16 January 2020].

[ii] Advance HE, *Equality in Higher Education: Students Statistical Report 2018* (Equality Challenge Unit, 6 August 2018) <https://www.ecu.ac.uk/publications/equality-higher-education-statistical-report-2018/> [accessed 19 December 2018]; National Autistic Society, *The Autism Employment Gap' Too Much Information in the Workplace*, 2016 <https://www.autism.org.uk/get-involved/tmi/employment.aspx> [accessed 11 November 2018].

[iii] DSA-QAG, DSA Guidance Document for New DSA Students 2016-17 , 2016 <https://www.practitioners.slc.co.uk/media/1139/201617-dsa-guidance-document-for-new-dsa-students-in-ay2016-17.pdf> [accessed 25 May 2018].

[iv] Nicholas W. Gelbar, Isaac Smith, and Brian Reichow, Systematic Review of Articles Describing Experience and Supports of Individuals with Autism Enrolled in College and University Programs , *Journal of Autism and Developmental Disorders*, 44.10 (2014), 2593–2601 <https://doi.org/10.1007/s10803-014-2135-5>.

[v] Wendy Mitchell and Bryony Beresford, Young People with High-Functioning Autism and Asperger s Syndrome Planning for and Anticipating the Move to College: What Supports a Positive Transition? , *British Journal of Special Education*, 41.2 (2014), 151–71 <https://doi.org/10.1111/1467-8578.12064>; Ann M. Mulder and Andrew Cashin, The Need to Support Students with Autism at University , *Issues in Mental Health Nursing*, 35.9 (2014), 664–71 <https://doi.org/10.3109/01612840.2014.894158>; Kristen Gillespie-Lynch and others, Changing College Students Conceptions of Autism: An Online Training to Increase Knowledge and Decrease Stigma , *Journal of Autism and Developmental Disorders*, 45.8 (2015), 2553–66 <https://doi.org/10.1007/s10803-015-2422-9>; Marc Fabri and Penny Andrews, *Autism&Uni D2.1 Literature Review Report*, Autism&uni (Leeds Beckett University, January 2015), p. 61 <http://www.autism-uni.org/wp-content/uploads/2016/02/D2.1-AutismUni-Literature-Review-Report.pdf> [accessed 30 November 2018]; Gena P. Barnhill, Supporting Students With Asperger Syndrome on College Campuses: Current Practices , *Focus on Autism and Other Developmental Disabilities*, 31.1 (2016), 3–15 <https://doi.org/10.1177/1088357614523121>; Sasha M. Zeedyk, Leigh Ann Tipton, and Jan Blacher, Educational Supports for High Functioning Youth With ASD: The Postsecondary Pathway to College , *Focus on Autism and Other Developmental Disabilities*, 31.1 (2016), 37–48 <https://doi.org/10.1177/1088357614525435>; Ashleigh Hillier and others, Supporting University Students with Autism Spectrum Disorder , *Autism*, 22.1 (2018), 20–28 <https://doi.org/10.1177/1362361317699584>.

[vi] Cara R. Damiano and others, Future Directions for Research in Autism Spectrum Disorders , *Journal of Clinical Child and Adolescent Psychology: The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53*, 43.5 (2014), 828–43 <https://doi.org/10.1080/15374416.2014.945214>; Elizabeth Pellicano, Adam Dinsmore, and Tony Charman, What Should Autism Research Focus upon? Community Views and Priorities from the United Kingdom , *Autism*, 18.7 (2014), 756–70 <https://doi.org/10.1177/1362361314529627>.

[vii] Andrea Georgia MacLeod, Ann Lewis, and Christopher Robertson, "Charlie: Please Respond!" Using a Participatory Methodology with Individuals on the Autism Spectrum , *International Journal of Research & Method in Education*, 37.4 (2014), 407–20 <https://doi.org/10.1080/1743727X.2013.776528>; Damian Milton, Nicola Martin, and Pauline Melham, Beyond Reasonable Adjustment: Autistic-Friendly Spaces and Universal Design , in *Autism and Intellectual Disability in Adults* (Pavilion Publishing, 2016), I, 81–85; Eilidh Cage, Jessica Di Monaco, and Victoria Newell, Experiences of Autism Acceptance and Mental Health in Autistic Adults , *Journal of Autism and Developmental Disorders*, 48.2 (2018), 473–84 <https://doi.org/10.1007/s10803-017-3342-7>.

[viii] Rebecca Lucas and Alana I. James, An Evaluation of Specialist Mentoring for University Students with Autism Spectrum Disorders and Mental Health Conditions , *Journal of Autism and Developmental Disorders*, 48.3 (2018), 694–707 <https://doi.org/10.1007/s10803-017-3303-1>.

[ix] James Bebko, Jessica Schroeder, and Megan Ames, *A Mentoring Program for Students with Asperger's and ASDs* (Ontario: York University Bookstore, 2011); Tara Sims and others, Developing a User-Informed Training Package for a Mentoring Programme for People on the Autism Spectrum , *The Journal of Inclusive Practice in Further and Higher Education*, 7 (2016), 49–52; Josette Hamilton, Gillian Stevens, and Sonya Girdler, Becoming a Mentor: The Impact of Training and the Experience of Mentoring University Students on the Autism Spectrum , *PLOS ONE*, 11.4 (2016), e0153204 <https://doi.org/10.1371/journal.pone.0153204>.

[x] Andrea MacLeod and Sue Green, Beyond the Books: Case Study of a Collaborative and Holistic Support Model for University Students with Asperger Syndrome , *Studies in Higher Education*, 34.6 (2009), 631–46 <https://doi.org/10.1080/03075070802590643>; Lucas and James.

[xi] Lucas and James; Nicola Martin and others, Does "Mentoring" Offer Effective Support to Autistic Adults? A Mixed-Methods Pilot Study , *Advances in Autism*, 3.4 (2017), 229–39 <https://doi.org/10.1108/AIA-06-2017-0013>; Megan E. Ames and others, Overview and Evaluation of a Mentorship Program for University Students With ASD , *Focus on Autism and Other Developmental Disabilities*, 31.1 (2016), 27–36 <https://doi.org/10.1177/1088357615583465>.

[xii] Martin and others.

[xiii] Luke Beardon, Nicola Martin, and Ian Woolsey, What Do Students with Asperger Syndrome or High-Functioning Autism Want at College and University? (In Their Own Words) , *Good Autism Practice*, 10.2 (2009), 35–43 (p. 42).

[xiv] Damian EM Milton, Autistic Expertise: A Critical Reflection on the Production of Knowledge in Autism Studies , *Autism*, 18.7 (2014), 794–802 <https://doi.org/10.1177/1362361314525281>.

[xv] Colin Barnes and Alison Sheldon, "Emancipatory" Disability Research and Special Educational Needs , in *The Sage Handbook of Special Education* (London: Sage, 2007), pp. 233–46 <http://disability-

studies.leeds.ac.uk/files/library/Barnes-Research-and-SEN.pdf> [accessed 10 October 2017]; Liz Pellicano, Adam Dinsmore, and Tony Charman, A Future Made Together: Shaping Autism Research in the UK. , 2013 <http://discovery.ucl.ac.uk/1495583/1/A_Future_Made_Together_1.2_LR.pdf>; Elizabeth Pellicano, Dinsmore, and Charman.

[xvi] Virginia Braun and Victoria Clarke, Using Thematic Analysis in Psychology , *Qualitative Research in Psychology*, 3.2 (2006), 77–101 <https://doi.org/10.1191/1478088706qp063oa>.

[xvii] Nick Chown and Nick Beavan, 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 (2011), 477–93 <http://www.academia.edu/12586679> [accessed 11 January 2019]; Milton, Martin, and Melham, I.

[xviii] Scott M. Robertson and Ari D. Ne eman, Autistic Acceptance, the College Campus, and Technology: Growth of Neurodiversity in Society and Academia , *Disability Studies Quarterly*, 28.4 (2008) <http://dsq-sds.org/article/view/146> [accessed 23 November 2018]; Scott Michael Robertson, Neurodiversity, Quality of Life, and Autistic Adults: Shifting Research and Professional Focuses onto Real-Life Challenges , *Disability Studies Quarterly*, 30.1 (2009) <https://doi.org/10.18061/dsq.v30i1.1069>.

[xix] Manuel Madriaga, "I Avoid Pubs and the Student Union like the Plague": Students with Asperger Syndrome and Their Negotiation of University Spaces , *Children's Geographies*, 8.1 (2010), 39–50 <https://doi.org/10.1080/14733280903500166>; MacLeod, Lewis, and Robertson; Sims and others.

[xx] Bebko, Schroeder, and Ames; Ames and others.

[xxi] Hamilton, Stevens, and Girdler; Choo Ting Siew and others, A Specialist Peer Mentoring Program for University Students on the Autism Spectrum: A Pilot Study , ed. by Rochelle E. Tractenberg, *PLOS ONE*, 12.7 (2017), e0180854 <https://doi.org/10.1371/journal.pone.0180854>.

[xxii] Yegan Pillay and Christine Suniti Bhat, Facilitating Support for Students with Asperger s Syndrome , *Journal of College Student Psychotherapy*, 26.2 (2012), 140–54 <https://doi.org/10.1080/87568225.2012.659161>.

[xxiii] James Lind Alliance, Autism Top 10 Priorities , 2016 <http://www.jla.nihr.ac.uk/priority-setting-partnerships/autism/top-10-priorities/> [accessed 31 October 2019].

[xxiv] Autistica, Your Research Priorities , *Autistica*, 2017 <https://www.autistica.org.uk/our-research/our-research/your-research-priorities> [accessed 16 October 2019].

Data

Participants may choose to terminate participation in the study at any time during the year and for any reason, and may ask for any responses given to be removed from the study up until:

Phase 1 – scoping provision	1-2-21	(first day of Semester 2, 20/21)
Phase 2 – mentoring diaries	20-9-21	(first day of Semester 1, 21/22)
Phase 3 – participatory panel	31-1-22	(first day of Semester 2, 21/22)

Data will be collected via Qualtrics; a secure, GDPR compliant, survey platform. Raw data will be restricted to the lead researcher. Participants will be assigned an ID number and have the option to identify this to a pseudonym to allow ownership of outcomes as well as to protect privacy, personal details will be stored separately to allow contact of universitas should safeguarding be a concern. Upon completion of this project data will be anonymised, locked and transferred to the University of Birmingham Research Data Archive for a period of 10 years.

Data will be used for a doctoral thesis which will develop a framework for mentoring, if further papers are to be published, further consent will be sought.

Research tool 1
Qualtrics scoping survey sent to all UK HEIs


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We at ACER (the Autism Centre for Educational Research) are interested in understanding Specialist (Autism) Mentoring at University.

In this **2 minute** survey we would like to find out how much Specialist (Autism) Mentoring happens at your university. This will guide us towards recruiting participants for a more detailed study, which should provide ways of improving mentoring in your institution and across the UK.

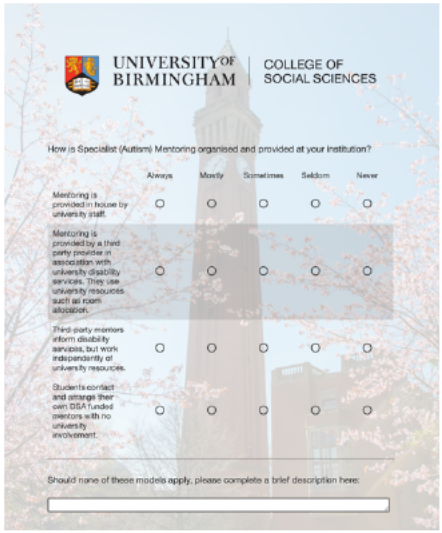
If you would like to contact the principal investigator in the study to discuss this research, do e-mail Brian at B.R.H.Irvine@pgr.bham.ac.uk or contact his supervisor Dr. Andrea MacLeod at A.G.Macleod@bham.ac.uk

Full information sheet detailing research

By clicking the button below, you acknowledge that your participation in the study is voluntary and that you may choose to recall your answers for any reason until 25/1/21. Data on your institution will be securely stored on University of Birmingham servers. Data will be used for the resulting doctoral thesis and published papers.

I consent, begin the study

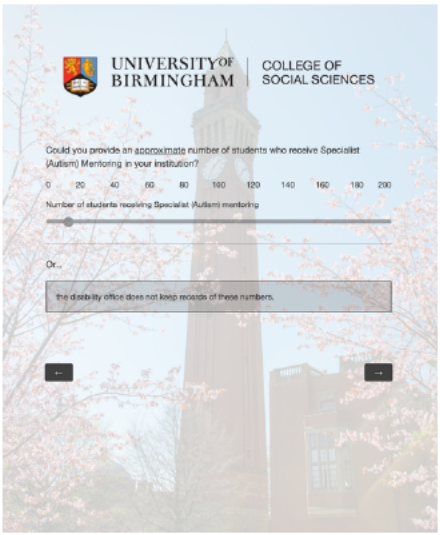
→


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How is Specialist (Autism) Mentoring organised and provided at your institution?

	Always	Mostly	Sometimes	Seldom	Never
Mentoring is provided in house by university staff.	○	○	○	○	○
Mentoring is provided by a third party provider in association with university disability services. They use university resources such as room allocation.	○	○	○	○	○
Third-party mentors inform disability services, but work independently of university resources.	○	○	○	○	○
Students contact and arrange their own DSA funded mentors with no university involvement.	○	○	○	○	○

Should none of these models apply, please complete a brief description here:


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Could you provide an approximate number of students who receive Specialist (Autism) Mentoring in your institution?

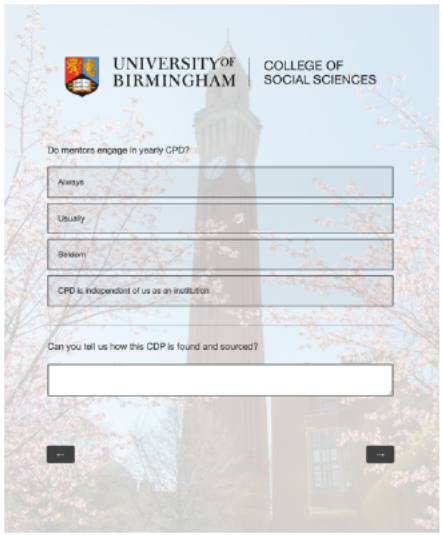
0 20 40 60 80 100 120 140 160 180 200

Number of students receiving Specialist (Autism) mentoring

Or...

the disability office does not keep records of these numbers.

← →


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Do mentors engage in yearly CPD?

Always

Usually

Seldom

CPD is independent of us as an institution

Can you tell us how this CDP is found and sourced?

← →


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Last question:
Who would be the best person in your organisation to email about potential CPD or further interesting mentoring research?

Their email is:

Or

We don't have a suitable contact... yet.

← →

Table 26
Responses on models of Specialist (Autism) Mentoring provision from responding UK universities as of January 2021

Institution	Approx. number of mentees	Mentoring is provided in house by university staff	Third party mentors in association with university disability services	Third-party mentors inform disability services - no resources shared	Students contact and arrange their own DSA funded mentors - no university involvement
University of York	145*	Never	Always	Mostly	Mostly
Birmingham City University	140	Never	Never	Never	Seldom
Staffordshire University	131		Always		
University of Surrey	120	Mostly	Sometimes	Always	Sometimes
University of South Wales	117	Mostly	Never	Sometimes	Seldom
University of Bristol	100	Never	Always	Never	Seldom
Ravensbourne University London	95	Never	Sometimes	Mostly	Never
University of Kent	87	Mostly	Seldom	Seldom	Seldom
Queen Mary University London	85	Never	Mostly	Mostly	Seldom
Bangor University	85	Sometimes	Mostly	Seldom	Never
University of Edinburgh	72	Always	Never	Never	Never
University of Cumbria	60	Mostly	Sometimes	Never	Never
Swansea University	58	Mostly	Never	Never	Seldom
King's College London	45	Never	Mostly	Always	Sometimes
Royal Holloway	40	Mostly	Seldom	Seldom	Seldom
Liverpool Hope University	38	Never	Seldom	Always	Never
Edinburgh Napier University	31	Seldom	Mostly	Sometimes	Never
Brunel University	30	Always	Seldom	Sometimes	Seldom
Bucks New University	29		Mostly		
University of St Andrews	22	Never	Sometimes	Mostly	Mostly
Harper Adams University	20	Never	Always	Always	Seldom
Abertay University	20	Never	Always	Never	Seldom
University of Gloucestershire	20	Mostly		Sometimes	Sometimes
Hartpury University	19	Mostly	Never	Sometimes	Sometimes
University of Roehampton	15	Mostly	Sometimes	Sometimes	
University of Suffolk	10	Seldom	Never	Mostly	Sometimes
St George's University of London	6	Never	Seldom	Mostly	Seldom
The University of Law	6*	Never	Seldom	Always	Sometimes
Writtle University College	4	Mostly	Mostly	Sometimes	Seldom

* disability office does not keep records of these numbers

Table 27
NMH Specialist (Autism) Mentoring fees of major providers

Provider	Hourly charge	(+ VAT)
Clear Links	£50.99	£61.19
Scholars Mentoring	£54.75	£65.70
Oxford Brookes	£48.33	£58.00
Barry Bennett	£47.20	£56.64
D&A	£50.00	£60.00
St Mary's University	£62.50	£70.00
Unitemps	£48.40	£58.08
UMO	£61.99	£74.39
University of Westminster	£57.50	£69.00
Spectrum First	£45.42	£54.50
Ravensbourne	£48.33	£58.00
L.Robinson	£43.33	£52.00
Amano	£51.00	£61.20
Chace	£55.00	£66.00

Average cost	£61.76

Data from Google search 21/25/21. First 20 entries, keywords: “nmh specialist mentor fees”:

Amano (2021) NMH stakeholder Available at: https://www amanosupport com/stakeholder/ (Accessed: 25 November 2021)

Barry Bennett (2021) NMH charge rates | Barry Bennett - DSA and NMH Specialists Available at: https://www barrybennett co uk/nmh/nmh-charge-rates php (Accessed: 25 November 2021)

Chace (2021) NMH - Independent DSA Assessment Centres & Assistive Technology Training - NMH Available at: http://www chace ac uk/nmh asp (Accessed: 25 November 2021)

Clear Links (2021) NMH Charge Rates - Clear Links Available at: https://www clear-links co uk/nmh-charges (Accessed: 25 November 2021)

D&A (2021) D&A | Diversity and Ability | Non-Medical Helper (NMH) Rates Available at: https://diversityandability com/rates/ (Accessed: 25 November 2021)

L Robinson (2021) NMH Costs Available at: http://www lrobinsontrainingconsultancy co uk/nmh-provision/nmh-costs (Accessed: 25 November 2021)

Oxford Brookes NMH Team (2021) Non-medical helper (NMH) rates Available at: https://www brookes ac uk/students/inclusive-support-service/disabled-students-allowance/non-medical-helper-rates/ (Accessed: 25 November 2021)

Ravensbourne (2021) NMH rates Available at: https://www ravensbourne ac uk/asset-bucket/prod/2020-06/nmh-rates-template-v30-1 pdf (Accessed: 25 November 2021)

Scholars Mentoring (2021) Non-Medical Helper Rates - Scholars Available at: http://scholarsmentoringcompany co uk/nmh-rates/ (Accessed: 25 November 2021)

Spectrum First (2021) NMH Support - Supporting Adults with Autism Available at: https://spectrumfirst org/nmh-support/ (Accessed: 25 November 2021)

UMO (2021) UMO Rates Available at: https://umo services/UMO%20Rates%202019_20%20NMH%20support%20f9VPB8rcZqQHVbc3 pdf (Accessed: 25 November 2021)

Unitemps (2021) Rates - NMH support Available at: https://www unitemps com/services/non-medical-help-support/rates/ (Accessed: 25 November 2021)

University of Westminster DLS (2021) Information for DSA Needs Assessors Available at: https://www westminster ac uk/current-students/support-and-services/disability-learning-support/information-for-dsa-needs-assessors (Accessed: 25 November 2021)

Research tool 2
Exemplar diary (end of year)


UNIVERSITY OF BIRMINGHAM | COLLEGE OF SOCIAL SCIENCES

UNIVERSITY OF BIRMINGHAM | ACER

Welcome back *

Thank you for continuing to be part of this project, and welcome to the last guided diary.

ACER (the Autism Centre for Educational Research) are interested in understanding Specialist (Autism) Mentoring at University. You will be asked to answer some questions about your last term of mentoring. Please be assured that your responses will be kept confidential. The study should take you around 10 minutes to complete.

If you would like to contact the principal investigator in the study to discuss this research, do e-mail Jillian at [redacted]

By clicking the button below, you acknowledge that your participation in the study is voluntary and that you may choose to end your participation in the study at any time and for any reason.

I consent, begin the diary entry

I do not consent, I do not wish to participate in the research

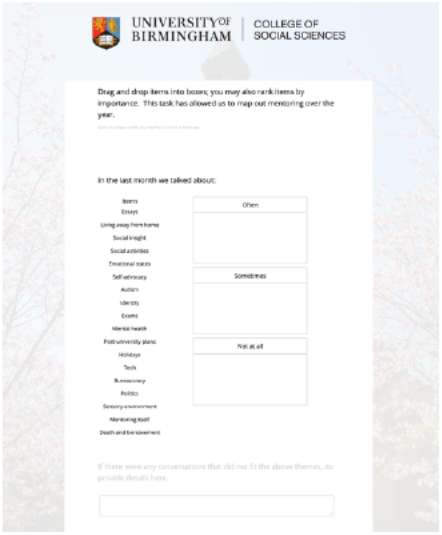
I do not consent, I wish to withdraw from the project


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This guided diary consists of three parts:

- Ranking topics.
  A quick sorting of a list of topics you may have talked about during mentoring.
- Mentoring stories.
  Writing stories about experiences of mentoring, either free-form or using prompts from earlier diaries in this project.
- As it is also the last round of diaries, there will be an opportunity to give feedback to how you found the experience of participating in this research.

<< >>


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Drag and drop items into boxes; you may also rank items by importance. This task has allowed us to map out mentoring over the year.

In the last month we talked about:

Items
Essays
Living away from home
Social insight
Social activities
Emotional states
Self-advocacy
Autism
Identity
Exams
Mental health
Post-university plans
Holidays
Tech
Bureaucracy
Politics
Sensory environment
Mentoring itself
Death and bereavement

Often

Sometimes

Not at all

If there were any conversations that did not fit the above themes, do provide details here.

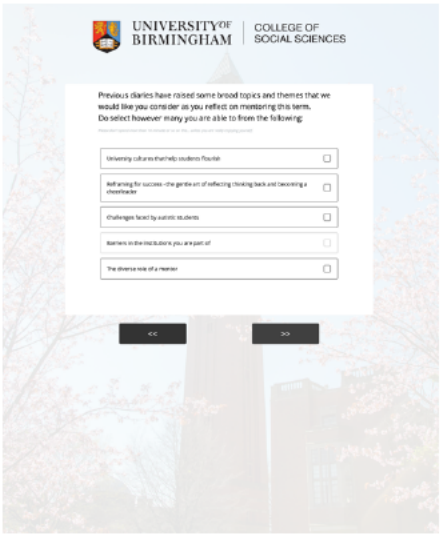

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Stories of mentoring
At this point you have a choice:

Save your thoughts as a single freeform entry

Choose a few topics on which to give short reflections?

<< >>


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Previous diaries have raised some broad topics and themes that we would like you consider as you reflect on mentoring this term.
Do select however many you are able to from the following:

University cultures that help students flourish

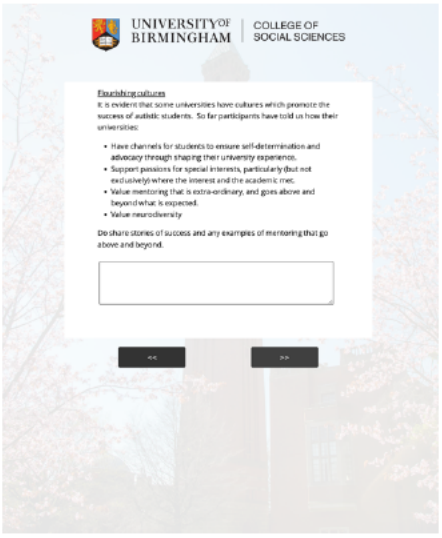
Reframing for success--the gentle art of reflecting choking back and becoming a cheerleader

Challenges faced by autistic students

Barriers in the institutions you are part of

The diverse role of a mentor

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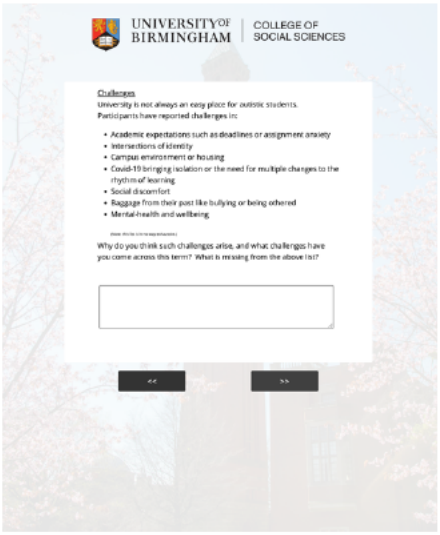
Flourishing cultures
It is evident that some universities have cultures which promote the success of autistic students. So far participants have told us how their universities:

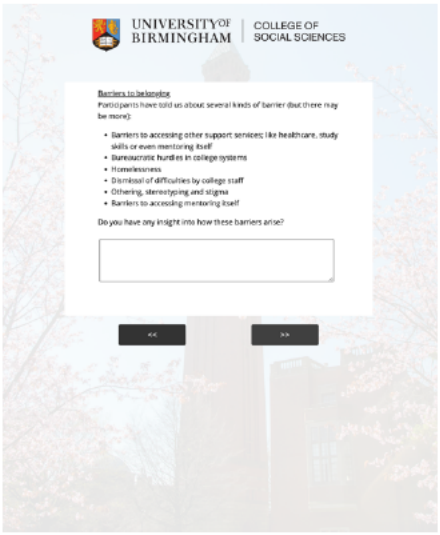
- Have channels for students to ensure self-determination and advocacy through shaping their university experience.
- Support passions for special interests, particularly (but not exclusively) where the interest and the academic mec.
- Value mentoring that is extra-ordinary, and goes above and beyond what is expected.
- Value neurodiversity

Do share stories of success and any examples of mentoring that go above and beyond.

<< >>


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Framing and reframing
Many participants talked about how mentoring works through creating a space in which mentees can rethink and reframe life events.
This may be:
• identifying issues either in a way of thinking or in a university system
• strategic planning that makes the mentees and universities better
• motivation with optimism, empowerment and the sharing of joy
Can you share stories of how this has happened in your mentoring?
<<
>>


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Challenges
University is not always an easy place for autistic students.
Participants have reported challenges in:
• Academic expectations such as deadlines or assignment anxiety
• Intersections of identity
• Campus environment or housing
• Covid-19 bringing isolation or the need for multiple changes to the rhythms of learning
• Social discomfort
• Baggage from their past like bullying or being othered
• Mental-health and wellbeing
Why do you think such challenges arise, and what challenges have you come across this term? What is missing from the above list?
<<
>>


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Barriers to belonging
Participants have told us about several kinds of barrier (but there may be more):
• Barriers to accessing other support services like healthcare, study skills or even mentoring itself
• Bureaucratic hurdles in college systems
• Homelessness
• Dismissal of difficulties by college staff
• Othering, stereotyping and stigma
• Barriers to accessing mentoring itself
Do you have any insight into how these barriers arise?
<<
>>


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The diverse role of a mentor
If you could write the job description of you mentor, what would it be?
<<
>>

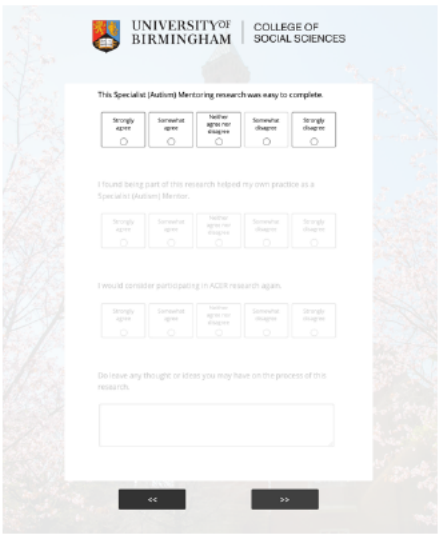
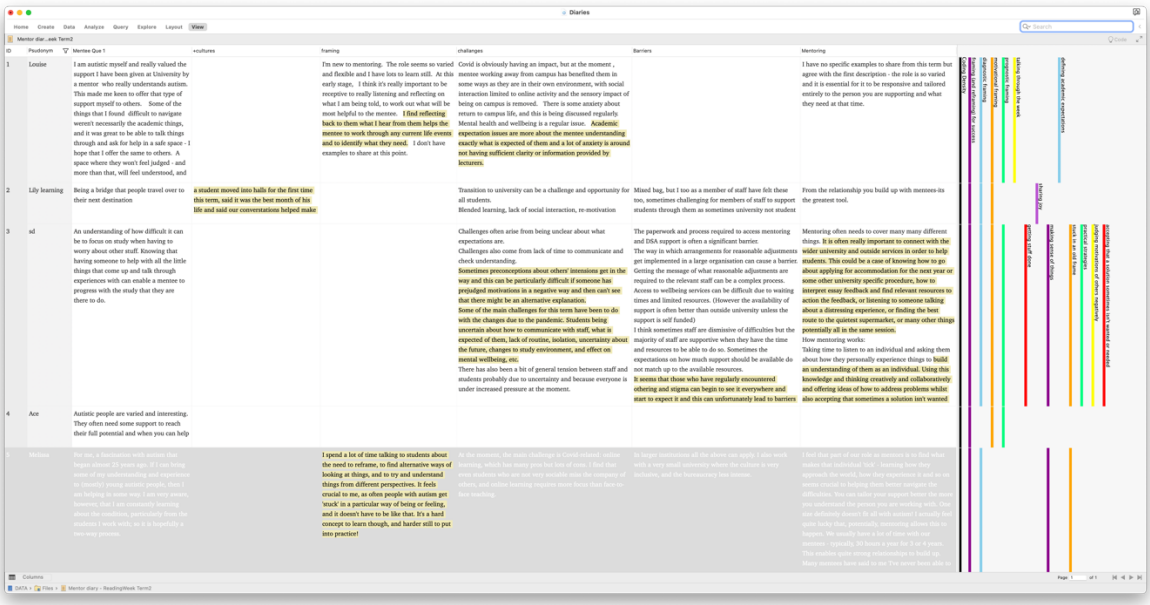

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This Specialist (Autism) Mentoring research was easy to complete.
Strongly agree
Somewhat agree
Neither agree nor disagree
Somewhat disagree
Strongly disagree
I found being part of this research helped my own practice as a Specialist (Autism) Mentor.
I would consider participating in ACER research again.
Do leave any thoughts or ideas you may have on the process of this research.
<<
>>

Figure 41
Specimen of dairy coding for themes of framing and reframing. First four mentors, Reading week



The above specimen of thematic coding is taken from 4 out of the 27 responses from mentors during the Term 2 Reading week tranche. For illustrative purposes the focus is solely on the category of **framing and reframing**, and omits 23 other categories, sub-categories, and codes (see Table 28). Highlights indicate coding stripes to right; these stripes are ranked from newest to oldest. In this the methodology of Braun and Clarke can be seen (Braun and Clarke, 2006). The older codes to the right accrue with subsequent passes to become axial codes. In one instance the codes of DEFINING ACADEMIC EXPECTATIONS, DOUBLE EMPATHY MISUNDERSTANDINGS, MAKING SENSE OF THINGS, STUCK IN AN OLD FRAME, JUDGING MOTIVATIONS OF OTHERS NEGATIVELY TALKING THROUGH THE WEEK, all were deemed as exercises of mentees exercising their judgment by framing events. Later, following the insight that **framing and reframing** emulated Snow and Benford's three dimensions of frame alignment, this judgment about judgment became a constituent part of ***diagnostic framing*** (Snow *et al.*, 1986).

Table 28
Specimen coding table. First four mentors, Term 2 Reading week diaries

Category	Subcategory	CODE	Ace	Lily learning	Louise	Melissa	SD
barriers			0	2	0	1	4
	barriers to support services		0	0	0	0	2
		LIMITS ON WELLBEING SUPPORT	0	0	0	0	2
	departmental independence		0	0	0	1	1
	lack of understanding from staff		0	0	0	0	2
challenge			2	3	2	1	4
	academic challenge		0	1	0	0	2
		ONLINE LEARNING	0	1	0	1	0
		UNCLEAR EXPECTATIONS	0	0	0	0	2
	covid challenges		2	1	1	1	2
		ISOLATION (LOCKDOWN)	0	1	0	1	0
cultures of success			2	1	1	0	0
	thriving remotely		1	0	1	0	0
framing (and reframing) for success			3	6	5	5	5
	diagnostic framing		0	1	4	1	3
		DEFINING ACADEMIC EXPECTATIONS	0	0	2	0	0
		DOUBLE EMPATHY MISUNDERSTANDINGS	0	0	0	0	2
		MAKING SENSE OF THINGS	0	0	0	1	2
		STUCK IN AN OLD FRAME	0	0	0	1	2
		JUDGING MOTIVATIONS OF OTHERS NEGATIVELY	0	0	0	0	2
		TALKING THROUGH THE WEEK	0	0	2	0	0
	motivational framing		1	1	1	0	1
		VALUING PASSION FOR SPECIAL INTERESTS	0	0	1	0	1
	prognostic framing		1	0	1	0	4
		DEVELOPING SOCIAL UNDERSTANDING	0	0	1	0	2
		LIAISING WITH UNIVERSITY	0	0	0	0	2
		EMPOWERED WITH TOOLS TO DEAL WITH SENSORY WORLD	1	0	0	0	1
		GETTING STUFF DONE	0	0	0	0	2
mentoring role			2	2	4	4	4
	appreciating the heterogeneity of mentees		0	0	0	1	1
		PERSON-CENTRED WORK	0	0	0	1	1
	bridge to the next destination		1	1	0	0	2
		AIM OF COMPLETING STUDIES	1	0	0	0	1
	creating spaces of safety		1	1	1	1	0
		SPACES OF RECOGNITION AND ACCEPTANCE	0	0	1	1	0
		THE MENTORING RELATIONSHIP	0	1	0	1	0
		THE USEFULNESS OF THE MENTOR'S CHARACTER	1	0	0	1	0
		UNDERSTANDING AS MORE THAN LISTENING	0	0	1	1	1
		ACTIVE LISTENING	0	0	1	0	1
	whatever is needed at that time		0	0	2	0	2
		BESPOKE ROLE	0	0	2	0	1

Figure 42
Specimen coding of interview transcript, 23/5/21

Interview Pseudonym:	Rosie
Interviewee Subgroup #:	Mentees
Site:	Zoom
Date of Interview:	23/5/21
Interviewer:	Brian Irvine
Transcriber:	Brian Irvine

Key:
(non-verbal)
verbal emphasis
[/comprehension note/]
[inaudible]
[laughter]
[cross talk]
\- short pause
… pause of 2-5 seconds
(Long pause)
? (questionable text)?
=identifying information changed=

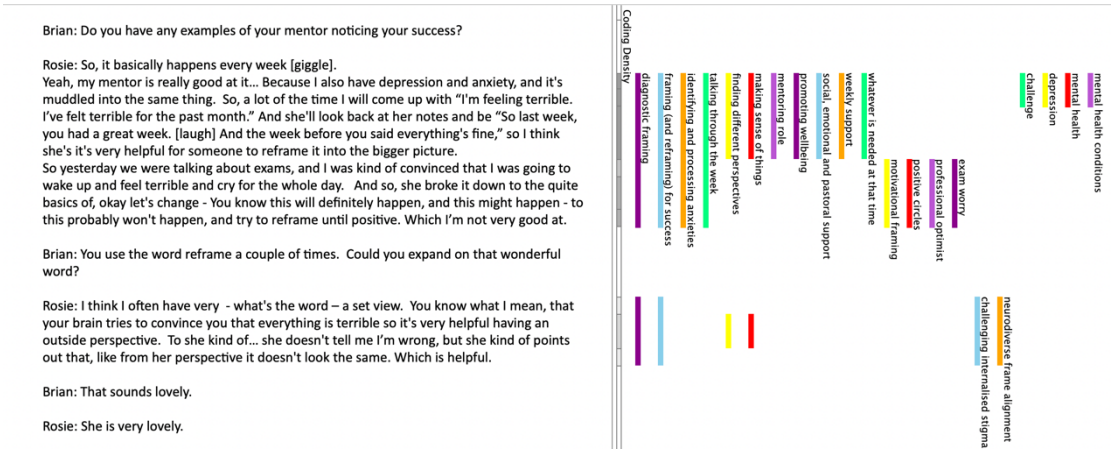


Figure 43
Specimen coding of assented highlights from forum, 9/10/21



Figure 44
Specimen coding of full assented transcription from forum meeting, 21/9/21

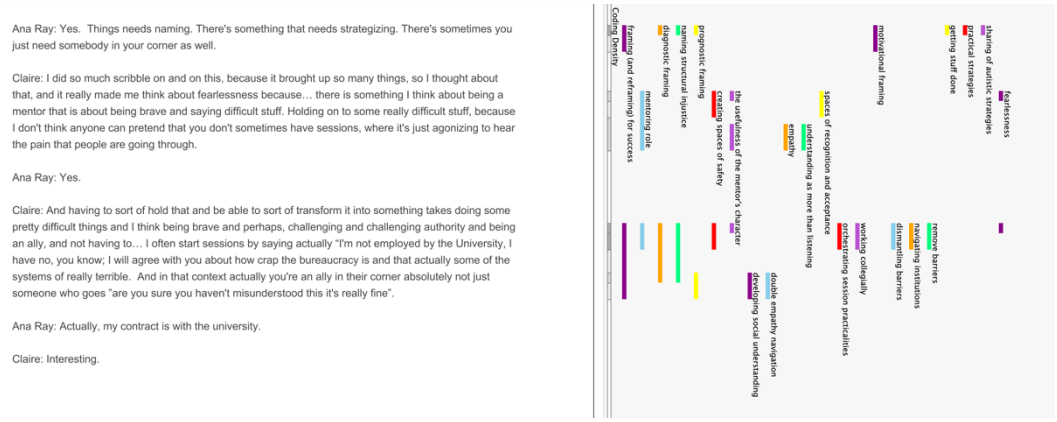


Table 29
Abridged codebook

Code	Files	References
barriers	8	86
accessing health care	3	4
barriers to support services	5	17
additional support not met	1	1
dismissal of difficulties by support offices	2	2
funding irregular courses	1	1
group wellbeing support sessions	1	1
limits on wellbeing support	2	3
lip service	1	1
need for definite diagnosis for funding	1	1
no funding for international students' support	1	1
time and bureaucratic barrier to accessing support	2	4
email to and fro	2	2
initial approach to mentors	1	1
too many options for supports	1	1
departmental independence	4	10
big institutions	1	1
departmental support staff with no autism qualifications	1	1
fitness to practice	1	1
reasonable adjustments across institution	1	1
remote staffing structure	1	1
taking hard line	1	1
homelessness	2	2
impossibility of phone nervousness	2	2
inflexible university structures	3	7
extensions may not be enough	2	2
resourcing the majority	1	2
lack of understanding from staff	6	30
backing down to abrasive staff	1	1
fear of barriers	1	1
ignoring requests	1	2
ignoring requests for clarity	1	1
singling out for asking questions	1	1
lack of acceptance of difference	3	3
lack of time to be supportive	1	1
lack of understanding about role of mentor	1	1
little differentiation for need	1	1
mismatch of salience	3	10
assumptions from staff	2	4
assumption that the student is being awkward	1	1
wrong assumptions from staff	2	3
dismissal of difficulties	2	2
do not realise that students are seeking support	1	1
mistaking masking for coping	1	1
misunderstanding from professionals	2	2
staff create more anxiety	1	1
staff out of loop	1	1
the terror caused by last minute change	1	1
othering of diagnosis	4	10
stereotyping autism	2	2

stigma and fitness for practice	2	4
stigma and reluctance to take up support	1	1
registration on courses	1	1
student support is not as joined up as some think	1	1
students not central to university	1	1
top-down reluctance	1	1
challenge	7	193
academic challenge	5	15
academic pressure	1	1
assignment deadlines	2	2
blended learning	1	1
online learning	1	3
dissertations	1	1
information overload	1	1
placement anxiety	1	2
unclear expectations	2	5
changing expectations	1	1
getting sufficient information	0	0
lack of clarity	1	2
lack of time to check understanding	1	1
becoming nocturnal	1	1
bureaucracy and inflexibility	3	5
burden of emails	3	3
delay in responses	1	1
campus environment	6	13
campus comfort	1	1
hectic campus life	2	3
campus is too busy	1	1
downtime	1	1
no logic to campus navigations	1	1
safe places hidden in the hustle and bustle	2	2
sensory overload	2	3
sensory overload of lectures	1	1
students living at home speaks volumes	1	1
challenge of intersections	4	16
considering gender	2	2
cultural baggage that censures diversity	1	1
disability	1	2
family issues	2	3
balancing priorities of family and university	1	1
sexuality	2	4
trans challenges	2	4
challenge of the social	4	18
camera on policies	2	2
group work	3	4
rehearsals	1	1
interaction difficulties with staff	1	1
non autistics not understanding autistics	3	3
online socialising	1	1
social rules	1	1
social understanding	2	3
socs	1	1
founding societies	1	1
strategies for dealing with other students	1	1
covid challenges	5	73
covid and accessing healthcare	1	1
covid and the availability of staff	1	1
covid anxiety	4	15
anxiety and return to campus	3	5
fear of having remote support removed	1	1
what will campus look like on reopening	1	1
contagion anxiety	2	5
keeping mentors covid safe	1	1
social distancing	1	2
need to minimise panic and over stimulation	1	1
post-lockdown anxieties	1	4
dissatisfaction with online learning	1	1
isolation (lockdown)	3	12
lack of peer-to-peer support	2	2
delay in getting to know people	1	1
lack of exercise opportunities	1	1
living through lockdown at home	1	5
missing others	1	1
reliance on parental support	1	1
lockdown and lack of structure	2	4
lockdown motivation	1	1
momentum	1	1
lockdown and mental health challenges	1	5
good wellbeing at first and then a decline	1	1
lockdown as a busy time for mentors	1	1
makes more contacts into first contacts	1	1
pandemic processing	1	1
staff tensions with covid	1	1
stretched resources	1	1
supporting confused and emotional staff too	1	1
uncertainty of covid plans	4	12
constant changing of restrictions	1	1
covid restrictions easing	2	4
little notice of organisation	1	1
rapid changes owing to covid	3	3
the logistical nightmare of covid	1	1
uncertainty of no-detriment	1	1
unknown expectations of remote assessments	1	1
working online	2	2
criminal justice	1	1
finances	1	1
housing	2	7
home studying	1	2
housing issues	1	4
starting house shares	1	1

individual challenges - heterogeneity of autism	1	1
isolation	3	4
challenges to belonging	1	1
feeling alone	1	1
looking for others with a diagnosis	1	1
IT issues	1	1
mental health	5	15
burnout	1	1
managing mental health difficulties	1	1
mental health and motivation	1	1
mental health conditions	3	4
depression	2	2
promoting self-organisation as wellbeing	1	2
trauma	1	3
abuse	1	1
bereavement	1	1
bullying	1	1
worries	1	1
overwhelmed by travel	3	3
travel	2	2
participation in conferences	1	1
personal life challenges	1	1
physical health	1	1
post-university opportunities	2	2
career uncertainty	1	1
self-regard	4	6
feelings of inferiority	1	1
imposter syndrome	1	1
lacking confidence	1	1
perfectionism	1	1
support stigma	3	5
autism as a label to get wants	1	1
the burden of explaining	1	1
the stigma of special treatment	1	1
timing of support	1	1
transition into university	1	2
withdrawal from courses	1	1
cultures of success	6	39
cohesion between staff and students	3	3
supportive lecturers	1	1
the privilege of working with students	1	1
faith discussions	1	1
neurodiversity positive culture	4	12
autistic led change	1	2
independent self-advocacy	1	1
neurodiverse soc	1	1
understanding of the effect of change	1	1
valuing the person	2	2
zero tolerance of any type of discrimination	1	1
resilience	1	1
specialist support for autistic students	2	2
autism and employment	0	0
easily accessible support paths	1	1
peer support groups	1	1
supporting the best of times	2	2
moving away from home - best part of life ever	1	1
thriving remotely	4	17
choice of mentoring medium	1	1
lecture recordings as norm	1	1
less exam stress during covid	1	2
looking forward to in person teaching	1	1
positive experience of remote mentoring	1	2
remote screen sharing	1	1
students not experiencing usual issues	1	1
thriving during lockdown	2	2
framing (and reframing) for success	10	545
diagnostic framing	10	143
death and dying	1	1
defining academic expectations	5	11
competitive environment of the university	2	2
expectations of lecturer support	1	1
finding the point of irrelevant modules	1	1
promoting academic achievement	1	1
snowballing missed work	1	1
solitary demands of pg research	1	1
double empathy misunderstandings	3	10
attitudes of others	3	4
a lack of common courtesy	1	1
identifying controlling behaviours	1	1
limited self-advocacy minimises perceived severity	1	1
masking	1	1
preconceptions of others intentions	1	2
seeing uninformed support not attack	1	1
uncertainty about how to communicate with staff	1	1
identity intersections	4	11
autistic identity	1	1
integrating late diagnosis	1	1
building on past experience	1	1
growing into yourself	3	7
doing the right thing	1	2
failures as learning experiences	1	1
framing of pressure as transient	1	1
normalising feelings	1	1
reactions to met and unmet needs	1	1
see and value self	1	1

making sense of things	6	17
finding different perspectives	2	3
making links between situations	1	1
owning time	5	5
down time with no purpose raises anxiety	2	2
priorities	0	0
procrastination and perfectionism	1	1
recovering before future studies	1	1
the need for a break	1	1
stuck in an old frame	3	8
fear of barriers	3	3
an expectation of barriers	1	1
an expectation of barriers of othering	1	1
judging motivations of others negatively	1	2
expectation of stigma	1	1
pre and post covid	1	1
threat as opportunity	1	1
naming structural injustice	8	22
challenge of routine changes	1	1
confidence needed to find out information	1	1
hyperscrutiny of disability	1	1
identifying gaps in support	2	3
issues arising from lack of transition preparation	1	1
reasonable adjustment plans	1	1
medical model for those studying medicine	1	2
normative standards	1	3
internalised a need to be fixed	1	1
regs, extensions and executive function	1	1
staff unawareness and the discomfort in relating	1	1
the stigma of 'deserving' support	1	1
navigating university environment	5	10
exhaustion from daily challenge	3	5
fatigue from mundane routines	2	2
phone anxiety	2	2
identifying sensory challenges	2	2
neurodiverse frame alignment	4	17
autistic identity	1	4
challenging internalised stigma	4	6
unpicking deficit-based self-judgement	1	1
difference not disability	2	2
meet students where they are	1	1
medical model and belonging	1	1
mental health as neurodivergence	2	2
the positives of mental health	1	1
past trauma	2	4
exposing the unhappiness of housing	1	1
surviving suicide	1	1
suicidal ideation	1	1
unpleasant school experience	1	2
relational processing	4	9
chance to process events	2	3
talking through challenges	2	2
safe space	2	3
talking through the week	7	29
identifying and processing anxieties	6	18
double clarity problem	3	5
anxiety of having to ask for clarity	1	1
anxiety over being clear	1	1
anxiety over having sufficient clarity	2	3
exam worry	1	1
fear and procrastination	1	2
anxiety delayed communication	1	1
recognising anxiety	3	6
finding the trigger point	3	4
identifying anxiety that limits access	1	1
the terror of the last-minute change	2	2
organisation as anxiety control	1	1
saying the unspoken	1	1
sharing problems and concerns	1	2
mentor as sounding board	2	2
talk out the week to cope	1	2
processing the past week	1	1
venting	1	1
motivational framing	8	78
autistic culture	2	2
becoming an autistic autism mentor	1	1
empowering mentees	4	9

acknowledge and sympathise with discomfort	1	1
avoiding dependence	3	3
manageable framing of scenarios	1	1
motivation of advocacy and change	1	1
permitting risk taking	1	1
someone has the mentees back	1	1
support during meetings with tutor	1	1
having someone with a big picture	1	1
professional optimist	6	7
find the silver linings	1	1
positive circles	3	3
solidarity	1	1
promoting a balanced life	4	11
encouraging careful time managers	2	3
balancing special interests	1	1
planning time	1	1
prioritising work demands	2	2
structuring commitments	1	1
organisational skills	2	5
prompting keeping in contact with friends	1	1
seeing and speaking virtues	5	10
recognising achievement	2	2
recognising strengths	4	7
advantages of traits	1	1
supportive family	1	1
sharing joy	4	19
celebrating achievements	2	2
sharing success	1	1
developing confidence	3	3
giving encouragement	1	1
magnifying encouragement from others	1	1
self-love	1	1
self-acceptance	2	3
self-esteem	2	3
sharing positive experiences	2	2
widening aspirations	1	1
systems, not students, are at fault	2	3
space to discuss mentoring without mentors	1	1
valuing passion for special interests	4	15
comfort of passions	1	1
football	1	1
pets	3	5
self-leveraging special interest	1	1
prognostic framing	7	113
accepting that a solution sometimes isn't wanted or needed	1	1
deciding on manageable challenges	3	6
a little push out from comfort zones	1	1
creating stability in times of uncertainty	1	1
goal setting	1	1
planning to minimise risk	1	1
developing alternative learning strategies	4	8
defining what is needed	1	1
filling in for study skills as needed	1	1
presentation skills	2	2
supporting academic potential	3	3
developing social understanding	7	42
building relationships	3	6
finding ways to seek support	1	1
strategies for reaching out if isolated	1	1
virtual community	1	1
when to take responsibility for interactions	1	1
double empathy	7	14
navigation		
communicating difficulties	1	1
creating clear communication	3	4
mediating communication	1	1
promoting autism understanding	2	4
reframing social dynamics	1	1
family management	1	1
liaising with university	4	20
approachable routes of communication	1	1
communicating with supervisor	1	2
designing helpful systems for all	1	3
self-advocacy in SU	1	1
self-advocacy to senior staff	1	1
extensions	2	6
extenuating circumstances	1	2
late submission of assignments	1	1
formulating emails to staff	2	2
liaise with disability office	1	1
empowered with tools to deal with sensory world	2	10
changing a place to work	2	2
setting up a study environment	1	1
creating time for self	1	1
planning rest and recreation	0	0
going nocturnal	1	1

sleep	1	1
quiet life skills	2	3
best routes to quiet supermarkets	1	1
online shopping	1	1
tune out the hype	1	1
spoon theory	1	1
getting stuff done	6	27
acquiring assistive technology	1	1
breaking down tasks	4	6
breaking down workloads	2	3
out-of-control assignments	1	1
providing tools to simplify tasks	1	1
healthy living	1	1
managing adhd	1	1
planning return to campus	2	2
strategies for accessing healthcare	2	3
participating in developing departmental wide strategies	1	1
practical strategies	3	6
sharing of autistic strategies	3	4
seeing change as an organisational skill	1	1
redo plan from scratch	1	1
strategies for managing assignment stress	3	5
providing accountability in the process of work	1	1
scheduling for deadlines	1	1
work alongside life	4	6
balancing passions and side hustles	1	1
maintaining a work-life balance	1	1
planning for a place to live	2	2
starting house shares	1	1
post-university planning	1	1
signposting services	2	7
post uni support	1	1
signposting study skills	1	4
signposting to cbt	1	1
mentoring role	9	434
appreciating the heterogeneity of mentees	4	54
gender difference	1	1
location flexibility	1	1
one size definitely doesn't fit all	4	26
complexity of individuals	1	1
different students, different needs	1	8
individual needs	4	8
individual strengths	3	5
person-centred work	2	5
what makes the mentee tick	1	1
time flexibility	1	1
toolbox	1	9
common strategies	1	6
tweaked strategies	1	2
autism gain	5	11
autistic insight	1	1
breaking down stigma	2	2
bringing about structural change	1	1
supporting self-advocates	3	3
bridge to the next destination	4	22
aim of completing studies	2	6
connecting to university systems	1	1
reaching potential	1	4
anxiety reduction	3	8
communication enablers	3	3
crisis management	1	2
managing expectations	1	1
creating spaces of safety	7	84
building trust	5	20
a relationship over time	1	2
building rapport	1	1
creating shared experiences	1	1
finds common ground	1	1
compassion	1	1
the joy of working with autistic people	1	1
valuing mentees	4	6
the power of being truly understood	2	2
use of language about autism	0	0
control	4	10
ceding control	2	2
keeping boundaries	1	2
mentee led	2	3
taking control when wanted	1	2
giving time to process	3	4
just a chat	1	1
venting and safe space	1	1
orchestrating session practicalities	5	18
comfort of mentoring	1	1
convenient time	1	1
disturbance free space	2	2
flexible meeting times	1	1
mentoring rooms	1	3
physical space	1	1
punctuality	1	1
scheduling mentoring	1	2
the right-for-you mentor	1	2
changing mentors without offence	1	2
working collegially	2	4
sessions that add to the week	1	3
little adjustments, sufficient support	1	1

skip session if it's a hassle for mentees	1	1
spaces of recognition and acceptance	6	18
a space not to feel judged	2	5
a space to talk openly	2	3
confidential meetings space	2	2
discussing confidentiality	1	1
permission to be fragile somedays	1	1
reflective spaces	1	1
space to say what you mean	1	1
the mentoring relationship	4	7
long term relationship	3	3
strong mentoring relationships	2	3
developing mentoring	3	16
becoming experienced in mentoring	1	2
continuous learning of mentors	1	1
detailed knowledge of the university	2	3
aware of university rhythm	1	1
departmental contact	1	1
institutional burden on mentors	1	1
mentees becoming mentors	1	1
need for debate on mentoring	1	1
needing confidence that students' voices are listened to	1	1
paucity of resources	2	2
post-university mentoring	1	1
supervision	1	1
toolbox of mentoring	1	1
unpaid checking in with other mentors	1	1
dismantling barriers	5	38
barriers to providing mentoring	4	13
agency mentors	1	2
daunting paperwork	1	1
lack of proactive autism service	1	1
mentoring across institutions	1	3
non-uni mentors as outsiders	1	3
agency rules limiting mentors contact with university staff	1	1
lack of mentoring rooms	1	1
mentors' exclusion from IT services	1	1
punitive DSA regulations for missed meetings	1	1
SfE frustration	1	1
slow DSA support	1	1
bureaucratic burden on mentee	3	9
accessing DSA for support	2	4
DSA paperwork and process	1	1
medical evidence requests	1	1
room booking	1	1
supporting DSA contact removes mentoring time	1	1
conflict of employment with need	1	1
lack of CPD	1	1
lack of supervision	1	1
limitations on funding	2	3
funding during nominals	1	1
need for meetings during holidays	1	1
tender undercutting	1	1
loss of contact with mentees	1	1
organisational delay	1	1
remove barriers	3	5
navigating institutions	2	2
troubleshooting	1	1
students finding video calls tricky	1	1
unrecognised as university staff	1	1
unsupportive disability office	1	1
extra-ordinary mentoring	4	15
bridging learning experiences	1	1
outside the box mentoring	2	3
unconventional meetings	2	2
shared experience	2	2
small squeakers room	1	1
support through criminal justice system	1	1
talking with housemates	1	1
the travelling zoom	1	1
mentors' disposition	2	18
allied mentors	1	2
allied humility	1	1
autistic autism mentors	2	8
heterogeneity and understanding	1	2
knowing autistic communication styles	1	1
knowing sensory needs	1	1
common humanity	1	5
neurodiverse family	1	3
the usefulness of the mentor's character	6	49
courageous mentoring	1	1
fearlessness	1	2
finds success of others rewarding	1	1
gives back to society	1	1
has a firm knowledge and understanding of autism	1	1
humility	2	10
holds own	1	3
preferences loosely flexible and regular	1	3
humour	1	1

kind	1	1
neurodiverse champion	3	11
addresses injustice	1	1
joy of keeping up with autistic minds	2	4
optimism and positivity	1	1
responsive mentoring	1	1
self-reflective mentor	2	10
mentors learning about difference	1	1
recursive practice	1	4
the ineffective effective mentor	1	2
authentic imperfect mentors	1	1
trustworthy	2	3
understanding as more than listening	7	53
active listening	3	12
listen and reflect	3	3
checking for understanding	1	1
empathy	2	5
gaining knowledge about autism as a way to understand	1	1
insight from autistic expertise	2	6
listening without understanding	1	1
pooling ideas with colleagues	1	1
professional experience	1	4
CPD	1	1
drawing on experience with other mentees	1	1
patterns of difficulties	1	2
theoretical understanding of autism	1	1
unconditional positive regard	4	10
a fascination with autism	1	1
patience	1	1
values the variety of autistic students	1	5
understanding through shared experience	1	3
shared autistic understanding	1	1
understanding with autistic lit	1	1
whatever is needed at that time	7	71
balance direction with self-advocacy	1	1
bespoke role	6	49
broad remit	2	3
building on needs assessment report	1	6
study skill set as mentor	1	5
diverse role	3	6
flexibility led by need	6	17
adaptable role	3	4
adaption to flourishing	1	2
flexible role	2	3
holistic support	2	3
making sense of the world	1	1
multiple roles	2	2
taking the lead from the student	1	1
social, emotional, and pastoral support	6	18
helping with the little things	2	2
mentor as wingman	1	1
promoting wellbeing	3	6
offloading worries	1	1
physical wellbeing	1	1
providing support	1	2
weekly support	2	2
wider life support	1	1
the power of being truly understood	2	2

Document 3
Shared interview protocol

UNIVERSITY OF BIRMINGHAM | ACER AUTISM CENTRE FOR EDUCATION AND RESEARCH

Zoom chats about mentoring

The project

There has been a remarkable increase in autistic students in the UK. These students should get support from DSA funded Specialist (autism) Mentors. There has been very little research on this, so this project is going to fill that gap.

It will have 3 phases:

1. Finding out how much mentoring happens.
2. Asking mentees and mentors to fill in ½ termly online diaries to find out what goes on; any really interesting things will be followed up with interviews online.
3. A forum of autistic mentees, autistic mentors and autistic academics will meet to make sure that any frameworks or guidance coming out of the diaries is good.

Hopefully this will create resources to help mentees use their time well, help mentors be better mentors, and help universities to fulfil their function better.

Why you?

You wrote some very interesting things in your online diary. Thank-you.

With who?

If you want to be interviewed the principal researcher Brian Irvine will meet with you via zoom for about 30 minutes. Brian has been a Specialist (Autism) Mentor for 8 years with over 50 students.



Before the meeting

Brian will contact you to arrange a good time to meet on zoom. Emails will contain the themes that we'd like to ask you about.

How will the meeting work?

- You will be asked if we can use your first name or a pseudonym if we want to quote you in write ups.
- If you need to stop for a break - or just want to stop – you can and should.
- Brian will ask one or two questions from the email.

- You can also ask him questions about mentoring, but only if you want to.
- When the meeting is finished a transcript will be prepared and sent to you. Do correct anything you feel needs correcting. Names of universities and mentors will be deleted, along with anything that might identify you.
- If you have any thoughts to add after the meeting, do email Brian at [redacted]

Our very many thanks for the time you give to our project. It allows us to put the thoughts of autistic students and autistic mentors at the core of a framework for Specialist (Autism) Mentoring.

Document 4
Interviewer script

Developing frameworks for Specialist (Autism) Mentoring in Higher Education.

Interviewer script

Pre-interview checklist

- ☐ Identify specific RQs for participant from diaries & add below. (Suggest 2)
- ☐ Invitation email sent with
  - shared interview protocol sheet
  - participant specific domain of questions from diary analysis
  - link to zoom
- ☐ Check for written consent in participant database
- ☐ Check for specific interview style/protocol requests in database

Interview start checklist

- ☐ Welcomes
  - Brian – UoB ACER (Autism Centre for Education and Research)
  - Research to develop a framework for Specialist (Autism) Mentoring so we can help mentors become better mentors.
- ☐ Consent
  - You have been asked because you wrote some interesting things in your online diary this year. We'd like to find out a bit more about [RQs], would you consent to talk a little about them over the next quarter of an hour or so?
  - Check pseudonym
  - If it's ok with you I'd like to record this so I can share a transcript with afterward so you can check that it is a good representation of your thoughts and that any identifying material about you or your mentees is removed. Changing minds is always welcome.
- ☐ Comfort check
  - If you want a break, we will. If you need to see to a child or answer the door-bell, do. Zoom makes me a guest in your house, and I'm thankful for it.
  - Cameras on/off. Captions. Raise specific interviewee requests if needed

Specific participant notes/requests

Pseudonym:

Research Questions and space for notes

2 probe rule:

"Can you give an example?"

"Have you anything you'd like to add?"

Watch for:

Mentors in active listening mode. Affirm behaviour and redirect:
"I can see you're a great mentor, you've gone into listen mode, can I nudge you out of it?"

Mentors seeking validation of practice or discussion about a particular situation. Suggest continuing meeting after interview portion is complete.

Wrap-up

- ☐ Hope to email you the transcript within two (?) days.
- ☐ Findings will be shared with all participants over the next year or so.
- ☐ My many, many thanks for the time you have given up to be part of this.

UNIVERSITY OF BIRMINGHAM | ACER AUTISM CENTRE FOR EDUCATION AND RESEARCH

Zoom forum of mentors

The project

There has been a remarkable increase in autistic students in the UK. These students should get support from DSA funded Specialist (autism) Mentors. There has been very little research on this, so this project is going to fill that gap.

It will have 3 phases:

1. Finding out how much mentoring happens.
2. Asking mentees and mentors to fill in ½ termly online diaries to find out what goes on; any really interesting things will be followed up with interviews online.
3. A forum of autistic and allied mentors will meet to make sure that any frameworks or guidance coming out of the diaries is good.

Hopefully this will create resources to help mentees use their time well, help mentors be better mentors, and help universities to fulfil their function better.

Why you?

You wrote some very interesting things in your online diary that formed the basis of analysis around spaces of safety, extra-ordinary mentoring, the mentors role, outside-the-box mentoring, or the mentors character. Thank-you.

With who?

If you wish to be part of the forum of mentors, the principal researcher Brian Irvine will meet with you and several other mentors via zoom for about 45 minutes. Brian has been a Specialist (Autism) Mentor for 8 years with over 50 students.



Before the meeting

Brian will contact you to arrange a good time to meet on zoom. You will be emailed a short document that will present the findings of the project so far. Your thoughts on the themes would be appreciated.

How will the meeting work?

- You will be asked if we can use your first name or a pseudonym if we want to quote you in write ups.
- If you need to stop for a break - or just want to stop – you can and should.

- When the meeting is finished a summary transcript will be prepared and sent to you. Do correct anything you feel needs correcting. Names of universities and mentors will be deleted, along with anything that might identify you.
- If you have any thoughts to add after the meeting, do email Brian at [redacted]
- There will be opportunities for follow up forums if warranted

Our very many thanks for the time you give to our project. It allows us to put the thoughts of autistic students and autistic mentors at the core of a framework for Specialist (Autism) Mentoring.

Document 6
Forum of mentors briefing document

Findings summary v1.2 13 September 2021

A framework for Specialist (Autism) Mentoring



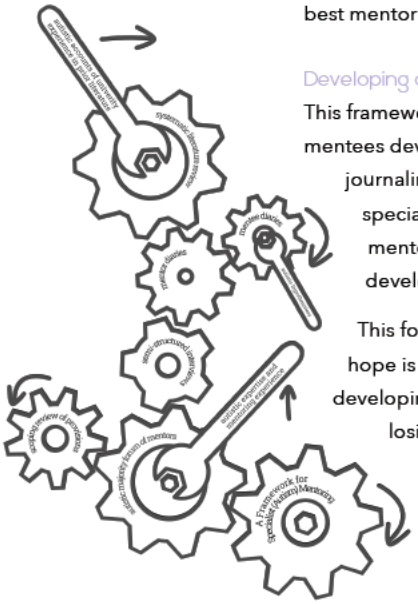
There is no fabled one size fits all when it comes to specialist autism mentoring. Frameworks and strategies that we each put together as practitioners should be, above all, responsive to the needs of the students we encounter. Any framework that limits this is not fit for purpose.

A framework for Specialist (Autism) Mentoring

Frameworks

Frameworks are common tools within education.

This framework marks the start of a conversation within the mentoring profession. It will not be the final say. Rather it is offered as a means of reflecting upon practice and developing mentor's own pathways towards becoming the best mentor that they can be.



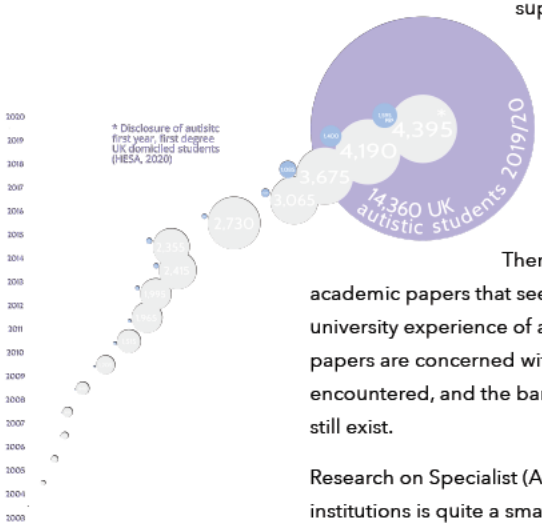
Developing a framework

This framework is rooted in autistic participation. Autistic mentees developed questions that opened fruitful journaling by mentors over the last academic year. A special thanks goes to Louise, an autistic autism mentor who trialled, corrected and guided the development of these online diaries.

This forum sits towards the end of the process, the hope is that - together - we can suggest ways of developing a profession that is deeply valued without losing the freedom to do mentoring right.

Being Autistic at UK Universities

The number of both UG and PG autistic students in our UK HE institutions continues to rise[1]. A Freedom of Information request to the SfE indicates that 19,527 students were in receipt of Specialist Mentoring for autism or mental health support in 2020, but does not hold a breakdown of these two potentially different supports. Surveying institutions indicates that about 8000 of these students receive Specialist (Autism) Mentoring; though this could be as high as 11000, as some institutions clump all mentoring together.



There is now a body of just over 250 academic papers that seeks to map out the variety of university experience of autistic students. Broadly, these papers are concerned with factors for success, challenges encountered, and the barriers to full inclusion that sadly still exist.

Research on Specialist (Autism) Mentoring in UK HE institutions is quite a small proportion of this work. What we do know is that Specialist (Autism) Mentoring provision is highly valued by autistic students in the UK[2]. To add to this it is the formation of quality mentee-mentor partnerships that are credited with supporting studies[3] and progression towards the mentees own goals[4].

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[1] HESA (2020) *Table 15 - UK domiciled student enrolments by disability and sex 2014/15 to 2019/20.* Available at: https://www.hesa.ac.uk/data-and-analysis/students/table-15 (Accessed: 11 May 2021).

[2] Ames, M.E., McMorris, C.A., Alli, L.N., et al. (2016) *Overview and Evaluation of a Mentorship Program for University Students With ASD.* Focus on Autism and Other Developmental Disabilities, 31 (1): 27–36..

[3] Lucas, R. and James, A.I. (2018) *An Evaluation of Specialist Mentoring for University Students with Autism Spectrum Disorders and Mental Health Conditions.* Journal of Autism and Developmental Disorders, 48 (3): 694–707.
Ridout, S. and Edmondson, M. (2017) *Cygnet mentoring project: combined experiences from a mentor and a mentee.* Autonomy, the Critical Journal of Interdisciplinary Autism Studies, 1 (5).

[4] Martin, N., Milton, D.E.M., Sims, T., et al. (2017) *Does "mentoring" offer effective support to autistic adults? A mixed-methods pilot study.* Advances in Autism, 3 (4): 229–239.

Findings from this project

Analysis of diaries over the year 2020/21 from 15 mentees and 29 mentors echoed the **student experiences** of success, challenge and barrier in previous literature. On top of this a new category for mentoring of **framing and reframing** also emerged (p. 6). From these two pillars some principles of a **mentoring role** may be developed (p.9).

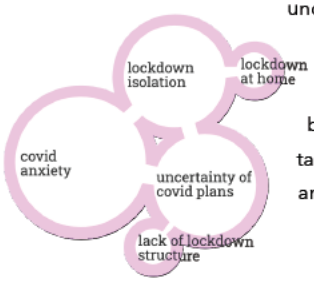
It is an interesting time to have sampled, responses to the pandemic may well have focused mentees and mentors alike on what is important about mentoring.

Student experiences



These responses are those that reported on the success, challenges, and barriers encountered by mentees without mentors suggesting exposition[5].

Cultures of success clustered around universities where neurodiversity was expressed through autistic-led institutional change, neurodiverse societies and a zero tolerance of discrimination. Unsurprisingly, university functions better when staff and students strive to understand each other.



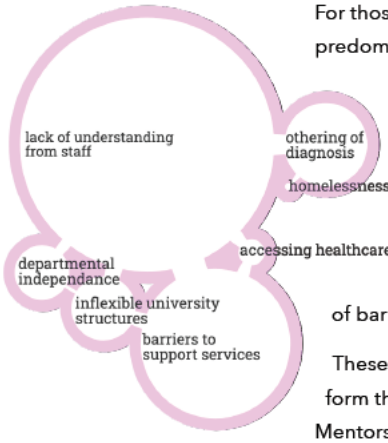
Whilst remote learning in **response to the Covid-19** pandemic was reported to have had a beneficial effect on quite a few mentees; about as many talked to their mentors about the anxiety, uncertainty and isolation they were experiencing.

[5] bubble size of diagrams is proportional to number of times theme was referenced by mentors



Challenges, perhaps as the core work of the mentee-mentor meeting, were widely shared. Perhaps it can be argued that these are challenges shared by all students, but magnified by sensory need and the histories of trauma, support stigma and isolation that being an autistic minority can engender.

Five core challenges emerged: The academic challenges of being a student in itself, the challenges and anxieties of the social domain in being misunderstood and misunderstanding. The challenges brought by juggling multiple personal identities in a world that is not always ready to hear individuals choices. That of the sensory world of the busy campus environment. Finally, the challenges that arise from associated poor mental health which is undoubtedly entwined with all the other challenges autistic students encounter.



For those who know HE, it is unsurprising that the predominant barriers are the lack of understanding from university staff. This is in daily encounters marred by misunderstandings, it may be limited to departments being unaware of the wider work of inclusion in an institution, or it can be baked into the university itself when individuals cannot change things to be responsive to student need. Perhaps more worrying is the presence of barriers to support services that mentoring is a part.

These cultures of success, challenges and barriers form the knowledge base which Specialist (Autism) Mentors need to develop. They will do so through mentoring experience, but should be forearmed through specific training developed and delivered in a way that leverages autistic expertise.

Framing and reframing

As well as documenting the experience that mentees related to them, mentors told stories of how these experiences were talked-through, processed, transformed, and owned so the mentee could leave the sanctum of the mentoring space and enact change back upon the university that sometimes gave them grief. Specialist (Autism) Mentoring seems to be something more than the classic idea of mentoring in which a protege is taken under a wing and shown how to thrive in a given institution.



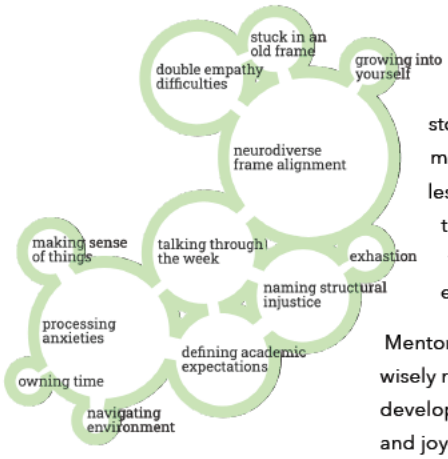
Rather, Specialist (Autism) Mentoring creates a space backstage from the everyday bustle of HE space. There, in the relationship between mentee and mentor, a process of framing and reframing occurs. In this relationship the frames - which are used to find, see and label occurrences within the mentees' life space - find a new alignment[6]. The trials of university life are **diagnosed** by the mentee; the mentee and mentor develop strategies as a **prognosis** that maps out the possible best progression through the issues faced; finally the mentor acts as a personal cheerleader magnifying success and **motivating** mentees towards future encounter with challenges.

These three elements are identified in many social movements, and are writ small in the social action of Specialist (Autism) Mentoring, rather than the grand movements of marches, boycotts and sit-ins[7]. These themes - and this may be the most exciting part of this research - were more likely to occur in the diaries of autistic autism mentors than others.

[6] Goffman, E. (1968) Stigma: notes on the management of spoiled identity. Penguin psychology. London: Penguin. p.157-158

[7] Snow, D. and Benford, R. (1988) Ideology, Frame Resonance and Participant Mobilization. International Social Movement Research, 1: 197-217.

Diagnostic reframing
Prognostic frame alignment
Motivational mentoring

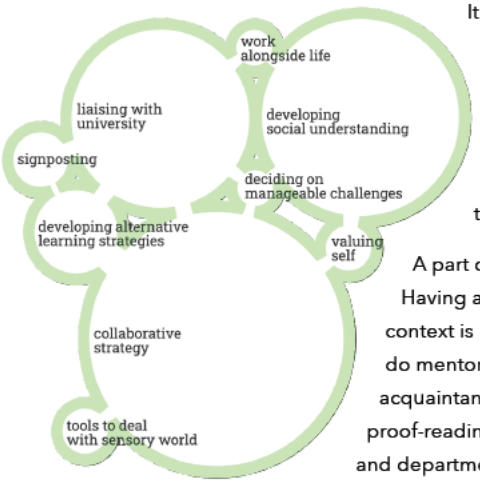


Diagnostic reframing may stem from the action of talking through the week, but much of it seems to hinge on mentees identifying themselves within a neurodiverse frame. Such reframing does not occur in a vacuum, perhaps mentors have a responsibility to ensure mentees know that such movements exist.

With the diagnostic element of Specialist (Autism) Mentoring, it is often sufficient to simply name anxieties, difficulties, injustices and expectations. To speak a trouble aloud and to have it taken seriously as a thing is one of the most powerful tools in the mentors kit. It acts as a balm to a group of students who have stories of having important parts of their selves misunderstood by others. Anxieties shared become less all consuming. Difficulties arising over the gulf of the double empathy gap can be framed as misunderstanding rather than malice. Academic expectations are confirmed.

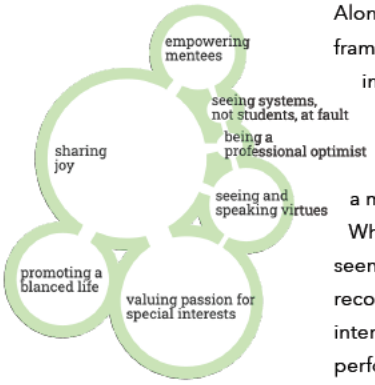
Mentors are required to listen and, where appropriate, to wisely reflect back mentees thinking so the mentee's can develop robust frames that will allow them to name issues and joys.

When the simple revelation of a trouble is not enough to get by, then the mentee and mentor together set to developing strategies as a form of **prognostic framing**. Together they create plans that will hopefully ensure that the issues will eventually be resolved without too much strain.



It is this collaborative nature of the prognostic reframing that brings in the mentor's experience and wisdom. They may have seen similar patterns in dissimilar mentees and are able to co-develop potential solutions to support mentees in reaching their own chosen goals.

A part of this is talking through social understanding. Having a place to discuss observation of the university context is pivotal to rehearsing a place in it. Not only do mentors chat about friendships, family and acquaintances, but they often provide a drafting and proof-reading service for more formal emails to tutors and departments. Not only does this de-escalate worries around the 'proper' way to consult authority, but also positions the mentor as a shield that allows a focus on being a student rather than jumping through hoops.



Alongside the diagnostic and prognostic naming and framing, it became apparent that mentors had a core task in the encouragement and **motivation of mentees**.

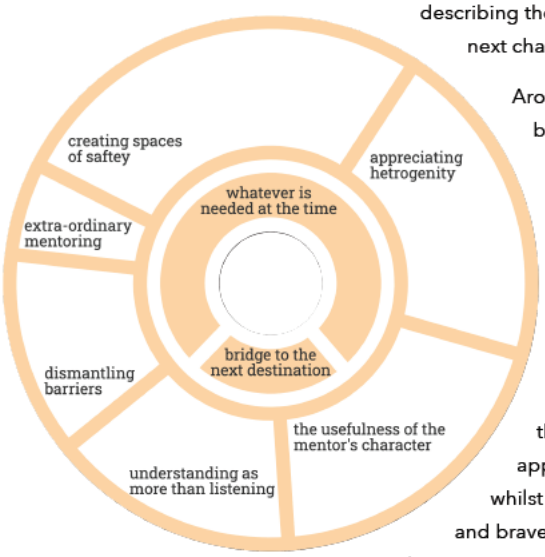
There seems to be something essential about sharing the joy of being at university. Mentees need a mentor who finds weekly joy in their conversations. Who can reflect back success in which ever domain it is seen. Who can speak to that persons virtues. Who can recognise the deep import of passions and special interests. Who is a willing audience to the mentees performance of being themselves. When this is done, the mentee them-self is empowered to go out and take on the tasks and future challenges of student-hood.

Perhaps this model that emerges from mentors who are themselves autistic is a powerful tool with which to shape the direction of the mentoring profession.

The mentoring role

On top of the stories that mentors told about how mentoring brought about change, mentees and mentors also recorded how they envisioned the role and place of mentoring.

Fundamentally, mentoring was described as a flexible and bespoke provision, providing whatever was needed at the time that would allow students to flourish. This immediacy was tempered with an eye to the future, with mentors describing themeless functioning as bridges to next challenges at university and beyond.



Around this - in what has already been dubbed the Poké Ball model - sit narratives of how mentors bring mentoring about. In many cases these were stories about carving out institutional space backstage. In creating trusted places in which students can be accepted for themselves. Some of this is tied up in the mentor themselves as they each sought to appreciate the diversity of mentees, whilst also fostering their own humility and bravery as they tried to do the right thing.

This leads us to the last observation, in doing the right thing there is much "extra-ordinary" mentoring. Zoom games are played, owl pellets for dissection are sourced, permission given to be fragile, barriers are chipped away and students are empowered. Boundaries may be set, but wisdom and compassion allows them to be redrawn by need.

Forum questions

A forum of Specialist (Autism) Mentors will be meeting to discuss how the profession can be taken forward. With this in mind there are a few questions that will need to be tackled.

Does this research broadly echo your own experiences?

What drew your interest, and equally what did not sit so well with you?

How should mentor training be structured?

What knowledge and understanding do you consider to be vital at the outset of new mentors work?
Which are the skills that may sit further into the mentors career as they master their craft?
Do you think there is perhaps an order to developing as a mentor?

Is there anything missing from this exploration into mentoring?

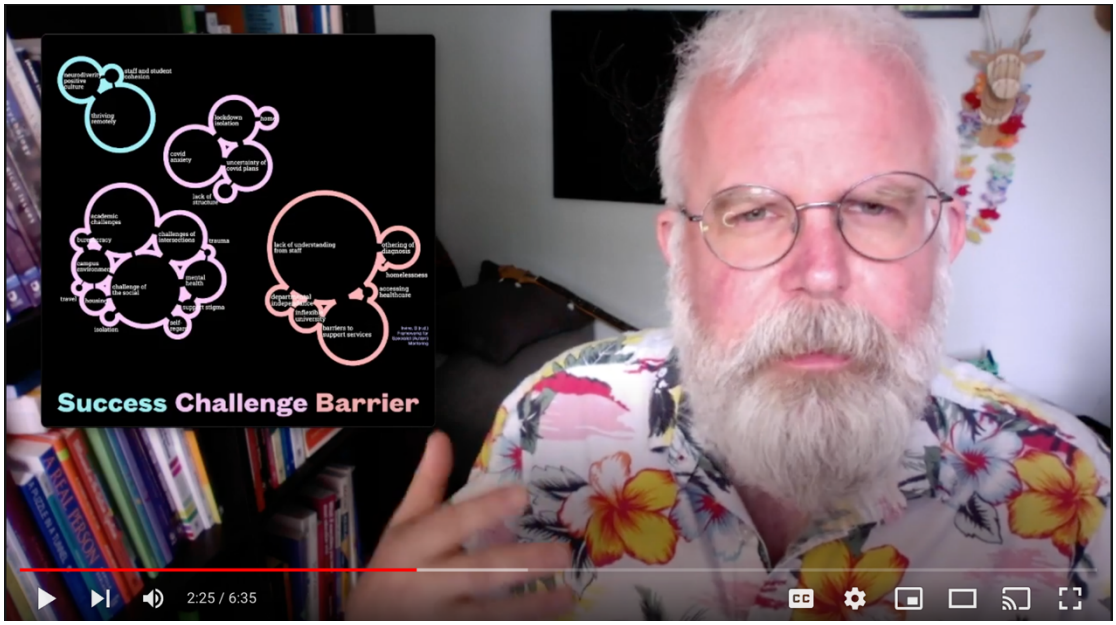
There are unique moments in mentoring. Those that are outside of the ordinary. Do you have any of these stories, and what do they tell us about these moments?

Of course, there may also be other questions and insights. Do bring them to the forum.

Looking forward to seeing you soon.

Brian

Document 7
Video summary of research findings



A Framework for Specialist (Autism) Mentoring (2022) Film. Irvine, B. 17 May 2022.

Available at: https://youtu.be/ucpsqZku0zM (Accessed: 17 May 2022).

Document 8
A framework for Specialist (Autism) Mentoring – participant research summary

Summary v2.0 17 May 2022

A framework for Specialist (Autism) Mentoring



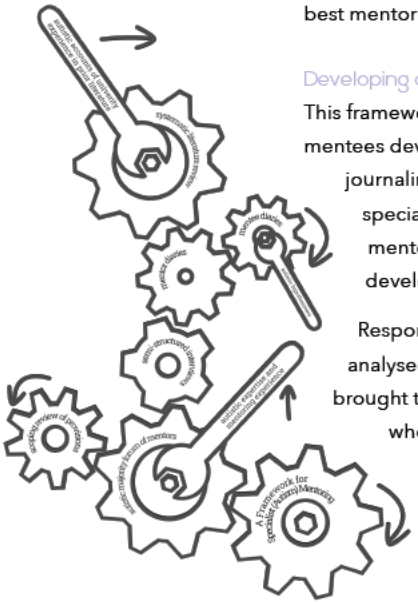
There is no fabled one size fits all when it comes to specialist autism mentoring. Frameworks and strategies that we each put together as practitioners should be, above all, responsive to the needs of the students we encounter. Any framework that limits this is not fit for purpose.

A framework for Specialist (Autism) Mentoring

Frameworks

Frameworks are common tools within education.

This framework marks the start of a conversation within the mentoring profession. It will not be the final say. Rather it is offered as a means of reflecting upon practice and developing mentor's own pathways towards becoming the best mentor that they can be.



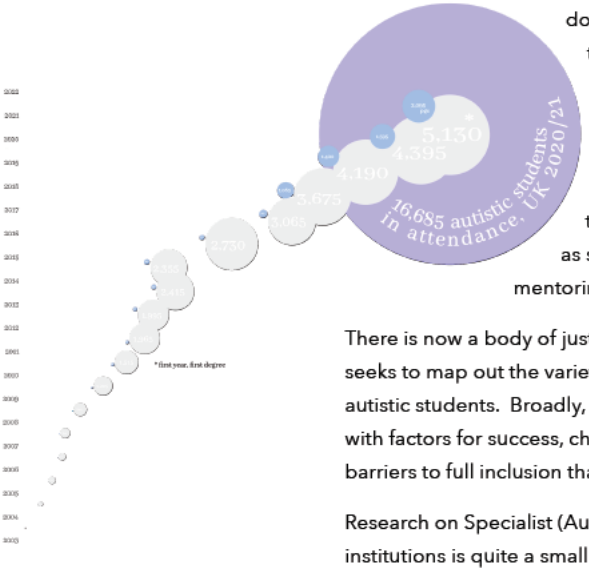
Developing a framework

This framework is rooted in autistic participation. Autistic mentees developed questions that opened fruitful journaling by mentors over the last academic year. A special thanks goes to Louise, an autistic autism mentor who trialled, corrected and guided the development of these online diaries.

Responses to these questions and diaries were analysed to find themes. These themes were then brought to a forum of Specialist (Autism) Mentors, of whom more than half were autistic themselves.

Being Autistic at UK Universities

The number of both UG and PG autistic students in our UK HE institutions continues to rise[1]. A Freedom of Information request to the SfE indicates that 19,527 students were in receipt of Specialist Mentoring for autism or mental health support in 2020, but does not hold a breakdown of these two potentially different supports. Institutions indicate that about 8000 of these students receive Specialist (Autism) Mentoring; though this could be as high as 11000, as some institutions clump all mentoring together.



There is now a body of just over 250 academic papers that seeks to map out the variety of university experience of autistic students. Broadly, these papers are concerned with factors for success, challenges encountered, and the barriers to full inclusion that sadly still exist.

Research on Specialist (Autism) Mentoring in UK HE institutions is quite a small proportion of this work. What we do know is that Specialist (Autism) Mentoring provision is highly valued by autistic students in the UK[2]. To add to this it is the formation of quality mentee-mentor partnerships that are credited with supporting studies[3] and progression towards the mentees own goals[4].

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[1] HESA (2021) *Table 15 - UK domiciled student enrolments by disability and sex 2014/15 to 2019/20.* Available at: https://www.hesa.ac.uk/data-and-analysis/students/table-15 (Accessed: 11 May 2022).

[2] Ames, M.E., McMorris, C.A., Alli, L.N., et al. (2016) *Overview and Evaluation of a Mentorship Program for University Students With ASD.* Focus on Autism and Other Developmental Disabilities, 31 (1): 27–36..

[3] Lucas, R. and James, A.I. (2018) *An Evaluation of Specialist Mentoring for University Students with Autism Spectrum Disorders and Mental Health Conditions.* Journal of Autism and Developmental Disorders, 48 (3): 694–707.
Ridout, S. and Edmondson, M. (2017) *Cygnet mentoring project: combined experiences from a mentor and a mentee.* Autonomy, the Critical Journal of Interdisciplinary Autism Studies, 1 (5).

[4] Martin, N., Milton, D.E.M., Sims, T., et al. (2017) *Does "mentoring" offer effective support to autistic adults? A mixed-methods pilot study.* Advances in Autism, 3 (4): 229–239.

Findings from this project

Analysis of diaries over the year 2020/21 from 15 mentees and 29 mentors echoed the **student experiences** of success, challenge and barrier in previous literature. On top of this a new category for mentoring of **framing and reframing** also emerged (p. 6). From these two pillars some principles of a **mentoring role** may be developed (p.9).

Mentees questions

"What inspires individuals to work with autistic people as mentors?" – Artemis

A desire for justice seemed to be at the root of many calls for **neurodiverse positive cultures**, both from the wider population and the third of mentors in this survey who were **actually autistic mentors**.

Do you actually understand us? Or do you just listen?" – Mollie

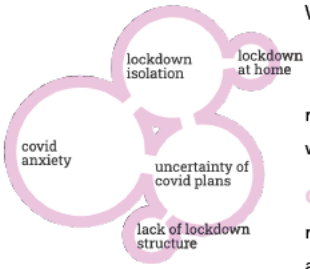
Mentors talked about the need for **understanding that is more than listening** as an act of service to others. But they were honest: "Sometimes I understand, sometimes I just try".

"Do you find different mentoring strategies work better for different students, or do you take a one-size-fits-all approach?" – Sam

It seems that mentors see their role as **bespoke, holistic** practice. Tailoring their approaches to whatever is needed at the time.

Student experiences







These responses are those that reported on the success, challenges, and barriers encountered by mentees without mentors suggesting why or what may be done[5].

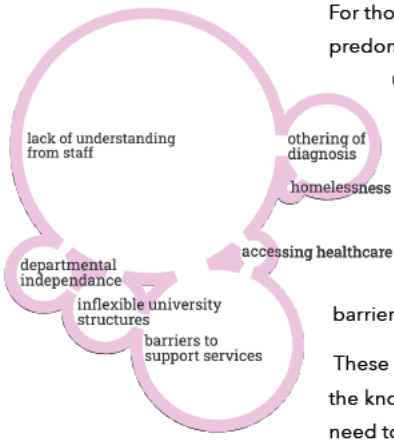
Cultures of success clustered around universities where neurodiversity was expressed through autistic-led institutional change, neurodiverse societies and a zero tolerance of discrimination. Unsurprisingly, university functions better when staff and students strive to understand each other.

Whilst remote learning in **response to the Covid-19** pandemic was reported to have had a beneficial effect on quite a few mentees; about as many talked to their mentors about the anxiety, uncertainty and isolation they were experiencing.

Challenges, perhaps as the core work of the mentee-mentor meeting, were widely shared. Perhaps it can be argued that these are challenges shared by all students, but magnified by sensory need, histories of trauma, stigma and the isolation of being an autistic minority.

Five core challenges emerged: The **academic challenges** of being a student in itself, the challenges and anxieties of the social domain in being misunderstood and misunderstanding. **Intersection challenges** brought by juggling identities in a world that is not always ready to listen. That of the **sensory world** of the busy campus environment. Finally, the challenges that arise from associated poor mental health which is undoubtedly entwined with all the other challenges autistic students encounter.

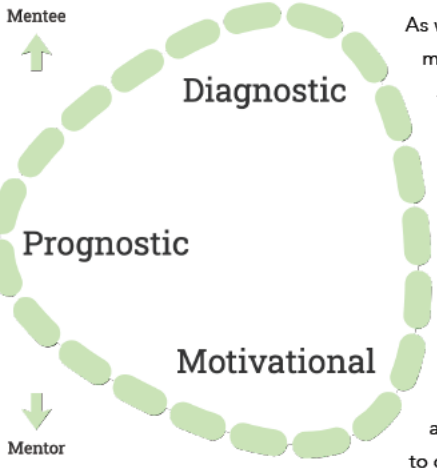
[5] bubble size of diagrams is proportional to number of times theme was referenced by mentors



For those who know HE, it is unsurprising that the predominant barriers are the lack of understanding from university staff. This is in daily encounters marred by misunderstandings, it may be limited to departments being unaware of the wider work of inclusion in an institution, or it can be baked into the university itself when individuals cannot change things to be responsive to student need. Perhaps more worrying is the presence of barriers to support services that mentoring is a part.

These cultures of success, challenges and barriers form the knowledge base which Specialist (Autism) Mentors need to develop. But the art of mentoring seem to be something more. It seemed to be about a process of framing and reframing.

Framing and reframing

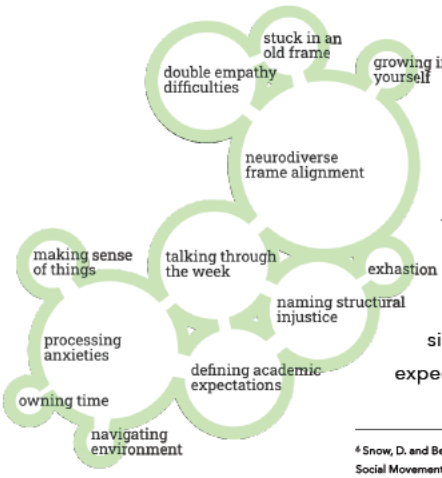


As well as documenting the experience that mentees related to them, mentors told stories of how these experiences were talked-through, processed, transformed, and owned so the mentee could leave the sanctum of the mentoring space and enact change back upon the university. Specialist (Autism) Mentoring seems to be something more than the classic idea of mentoring in which a protege is taken under a wing and shown how to work in a given institution. Mentees are prepared to change their institution for the better.

Specialist (Autism) Mentoring creates a space backstage from the everyday bustle of HE space. The trials of university life are **diagnosed** by the mentee; the mentee and mentor develop strategies as a **prognosis** that maps out the possible best progression through the issues faced; finally the mentor acts as a personal cheerleader magnifying success and **motivating** mentees towards future encounter with challenges.

These three elements are identified in many social movements, and are writ small in the social action of Specialist (Autism) Mentoring, rather than the grand movements of marches, boycotts and sit-ins[6]. These themes - and this may be the most exciting part of this research - were more likely to occur in the diaries of autistic autism mentors than others.

Diagnostic reframing
Prognostic frame alignment
Motivational mentoring



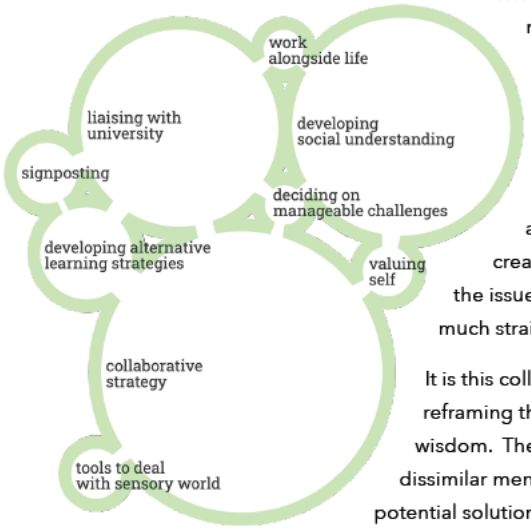
When talking to their mentors mentees work out what is going right and wrong with their universities. They diagnose the social problems of institutions and groups of people in a process of **diagnostic reframing**. As they talk through the week mentees start to identify themselves within a neurodiverse frame.

With the diagnostic element of Specialist (Autism) Mentoring, it is often sufficient to simply name anxieties, difficulties, injustices and expectations. To speak a trouble aloud and to have it

[6] Snow, D. and Benford, R. (1988) Ideology, Frame Resonance and Participant Mobilization. International Social Movement Research, 1: 197-217.

taken seriously as a thing is one of the most powerful tools in the mentors kit. It acts as a balm to a group of students who have stories of having important parts of their selves misunderstood by others. Anxieties shared become less all consuming. Difficulties arising over the gulf of the double empathy gap can be framed as misunderstanding rather than malice. Academic expectations are confirmed.

Mentors are required to listen and, where appropriate, to wisely reflect back mentees thinking so the mentee's can develop robust frames that will allow them to name issues and joys.



When the simple revelation of a trouble is not enough, then the mentee and mentor together set to developing strategies as a form of **prognostic framing**. They look at what has been diagnosed as wrong with the institution or group and work out what might happen next and how to influence it. Together they create plans that will hopefully ensure that the issues will eventually be resolved without too much strain.

It is this collaborative nature of the prognostic reframing that brings in the mentor's experience and wisdom. They may have seen similar patterns in dissimilar mentees and are able to co-develop potential solutions to support mentees in reaching their own chosen goals.

A part of this is talking through social understanding. Having a place to discuss observation of the university context is pivotal to rehearsing a place in it. Not only do mentors chat about friendships, family and acquaintances, but they often provide a drafting and proof-reading service for more formal emails to tutors and departments. Not only does this de-escalate worries around the 'proper' way to consult authority, but also positions the mentor as a

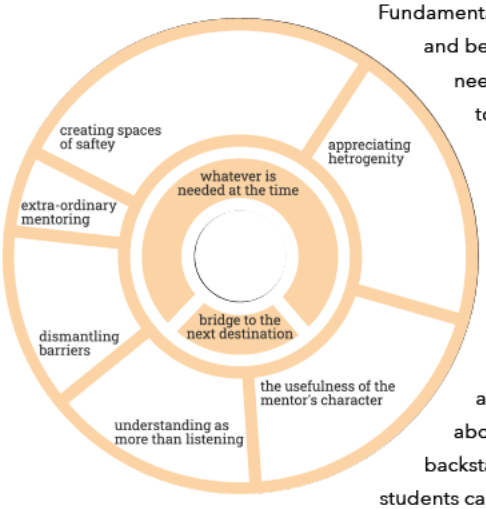
shield that allows a focus on being a student rather than jumping through hoops.



Alongside the diagnostic and prognostic naming and framing, it became apparent that mentors had a core task in the encouragement and motivational framing.

There seems to be something essential about sharing the joy of being at university. Mentees need a mentor who finds weekly joy in their conversations. Who can reflect back success in which ever domain it is seen. Who can speak to that persons virtues. Who can recognise the deep import of passions and special interests. Who is a willing audience to the mentees performance of being themselves. When this is done, the mentee them-self is empowered to go out and take on the tasks and future challenges of student-hood.

The mentoring role



Fundamentally, mentoring was described as a flexible and bespoke provision, providing whatever was needed at the time that would allow students to flourish. This immediacy was tempered with an eye to the future, with mentors describing themeless functioning as bridges to next challenges at university and beyond.

Around this - in what has already been dubbed the Poké Ball model - sit narratives of how mentors bring mentoring about. In many cases these were stories about carving out institutional space backstage. In creating trusted places in which students can be accepted for themselves. Some of this is tied up in the mentor themselves as they each sought to

appreciate the diversity of mentees, whilst also fostering their own humility and bravery as they tried to do the right thing.

This leads us to the last observation, in doing the right thing there is much "extra-ordinary" mentoring. Zoom games are played, owl pellets for dissection are sourced, permission given to be fragile, barriers are chipped away and students are empowered. Boundaries may be set, but wisdom and compassion allows them to be redrawn by need.

Forum of Master Mentors

It was these extraordinary mentors that met via small online groups to talk about the joys of really good mentoring. Together they talked about the need for mentors to be **fearless**.

Such great mentors cherished the advocacy that they cemented within the institutions of higher education. They saw their job as being able to teach mentees **how to self-advocate**; to prepare students to confidently and clearly state their own needs and preferences when they are ready to do so; and how to circumnavigate bureaucracy when needed.

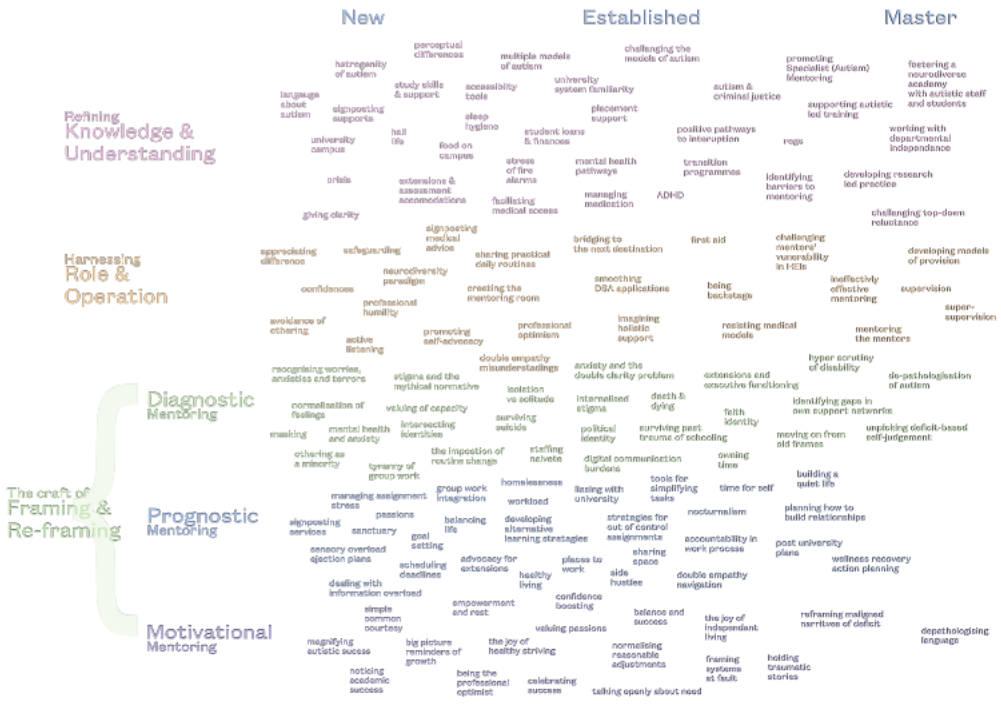
The forum of master mentors spoke about the transformative potential for going to university, for learning to be independent young adults, to help autistic young people find their own tribe, to be an **enduring non-judgemental relationship** in which the whole identity of self can be unpacked in **spaces of safety and acceptance**.

Finally they talked about how difficult conversations of trauma and alienation can be done with grace and compassion. The mentor room becomes a place of understanding when so often people are misunderstood.

A Framework for Reflection

Bringing all this together it is possible to construct a loose framework that enables mentors reflect upon their own skills and training needs. It sits around the three outcomes from the research. The **knowledge and understanding** of the student experience, the **harnessing of the role and operation of mentoring** and, finally, the **craft of framing and reframing**.

This is not a capability framework, it is a framework for mentoring professionals to consider how they can develop their practice as they play a core role in developing our neurodiverse institutions of higher education.



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Draft v1.6 13 July 2022

A National Body for Specialist (Autism) Mentoring



The following draws from the thesis of Irvine, B. (2022) A framework for Specialist (Autism) Mentoring in UK Higher Education, University of Birmingham. To extend principles of participatory research into the formation of a national body requires authentic autistic leadership so as to fully develop the profession of Specialist (Autism) Mentoring. Accordingly the objective set out below will need to be re-assessed and re-framed by those autistic mentors recruited to the leadership panel.

Objective 1: To found a lasting national body of Specialist (Autism) Mentors working in HE

1.1 To found an organisation through which the profession of Specialist (Autism) Mentoring can be enhanced

There has been a ten-fold increase of autistic students at HEIs over the last decade. These students may receive DSA to fund a Specialist (Autism) Mentor whist they are at university. A tendering process for mentoring provision, alongside a loose definition of mentoring as a provision to "remove barriers to learning" have culminated with some

1

outstanding mentoring provision being offered; but this does not seem to be evenly spread throughout HEIs.

With no central body the provision of Specialist (Autism) Mentoring is opaque. From a freedom of information request to SfE it can be estimated that 660 mentors (95% ci [382, 872]) are working in the UK's 169 degree-awarding institutions; giving support to around half of autistic students in HE.

A central body is required to ensure parity of provision and to develop the profession. Such a body should reflect participatory principles in having autistic leadership from the outset.

Once established such a body needs to secure ongoing funding to ensure ongoing impact. his could be through research bodies, host institutions, charitable measures or subscriptions; members should have a say in how such funding can be established.

1.2 To found a body to advocate for Specialist (Autism) Mentoring within policy reform

With reform of the Disabled Students Allowance on the horizon, the vulnerabilities of Specialist (Autism) Mentoring as zero-hour, mentee dependant workers require addressing in policy.

Unlike Specialist (Mental Health) Mentoring there has, as yet, been no centralised body to advocate for structures and funding for mentoring supervision.

The new national body will commit to producing a white paper, building on the current debate following Lord Holme's recommendations for DSA (Cochrane and Holmes, 2022).

1.3 To use this new professional body to embed a Framework for Specialist (Autism) Mentoring in UK HE:

Through the provision of frequent lightning talks, online drop-ins and newsletters, the reflective framework developed though ESRC funding will be offered to all mentors.

Mentors are required to participate in professional development and ongoing accreditation - though most struggle to find such courses. In partnership with a university with a track record in autism and adults both CPD and accredited PG courses will be developed.

Objective 2: To ensure this professional body has enduring autistic leadership

2.1 Recruit two research assistants. Both will be be practising mentors and at least one will be autistic.

This model will be incorporated into the statutes of the new professional body.

Autism studies sits with a legacy in which autistic researchers have been alienated from the production of knowledge. With a third of mentors participating in the ESRC funded research disclosing themselves to be autistic, a national body of Specialist (Autism) Mentors needs to be founded with principals of participation ensuring autistic perceptions and needs remain paramount.

Indicative start up year costings at 2 RAs for 1 day a week

Activity	Output / Outcome	Delivery date	Cost (£)
Project initialisation/ ongoing administration	2 days of 2xRAs (envisaged as one day a week each) Scheduling of flash-talks Scheduling of drop-ins Instrument of governance for autism majority master-mentor forum.		£786
Flash-talks to mentors with membership	3 days of 2xRAs Online flash talks led by RAs; potential for recruiting ECRs and practitioners in field. Focus on disseminating current research and encouraging further study in field.	Termly	£786
Member mentors zoom drop-in	10 half days 2xRAs Providing tangible support in mentoring advice and networking.	Monthly	£1310
Termly newsletters to all UK mentors	Circulated to all of UKs 600+ mentors, regardless of membership, via DSA NMH listings, Newsletters unpacking findings from ESRC doctoral research on Framing and Reframing (Irvine, n.d).	Termly	£524
Branding	1 day of 2xRA Recruited RA brings skills		£262
Website	4 days of 2xRAs		£1048
Contacting and inducting Specialist (Autism) Mentors as members	3 days of 2xRAs Direct contact to institutions. Social media campaign. Email campaigns Promotion via NADP. Development and circulation of member handbook.	Termly	£786
Networking event for Specialist (Autism) Mentoring mentors.	2 days of 2xRAs Event for mentors held. Developed by RAs		£786 min!
Development of funding stream	2 days of 2xRAs Either future funding secured from charitable organisations or subscription model. 3 and 10 year plan for new national body.		£524
Appraisal	Potential for publication in GAP on Autistic Leadership and the development of a national body for Specialist (Autism) Mentoring.		£524

Minimum project Costs. Start Up year	Amount (£)
Research assistant (autistic) 28 days for 8 hours at band 6 of £16.38 1 year term-time	£3669.12
Research assistant (allied or autistic) 28 days for 8 hours at band 6 of £16.38 1 year term-time	£3669.12
Professional body memberships NADP	£110
Total	£7448.24