

Key Paradigm Shifts on Disability, Inclusion, and Autism

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Contributor: Eunice S. Y. Tang , Austin Griffiths , Graham F. Welch

In the past two decades, students have been more willing to disclose their disability status when entering higher education (HE) in the United Kingdom (UK). Concurrently, higher education institutions (HEIs) have adopted disability policies and service teams for enhancing equality, diversity, and inclusion in the UK.

autism disability higher education inclusion music music education

1. Introduction

1.1. Trends of Increase in Disability Disclosure in Higher Education in the UK

In the past two decades, students have been more willing to disclose their disability status when entering UK higher education (HE) [1][2]. Concurrently, higher education institutions (HEIs) have adopted disability policies and hired service teams to enhance their equality, diversity, and inclusion policies and practices.

The disability disclosure rate in higher education (HE) in the UK has nearly tripled from the academic year 2003/04 to 2021/22, rising from 5.9% to 15.7% [1][2]. In the academic year 2020/21, the highest disclosure rates were found in students studying design and creative and performing arts (23.6%), ranging from 16.3% of postgraduate-taught students to 24.9% of first-degree undergraduate students [3]. In contrast, students studying business and management (7.7%) were less likely to disclose their disability status [3]. In the subject of music, there was a noticeable increase in students self-reporting with a disability, rising from 14.3% in the academic year 2014/15 to 22.8% in 2021/22 [4][5].

A report from the Office for Students also indicated the constant increase in HE students' disability disclosure, with 14.8% of full-time undergraduate students self-reporting a disability in the academic year 2020/21 [6], compared to 8.5% in 2010/11. In part-time study, the increase in the proportion of entrants disclosing a disability has been more pronounced, rising from 7.6% in the academic year 2010/11 to 18.4% in 2020/21 [6].

UK National Statistics for the year ending in June 2023 show that around one quarter (24.9%) of disabled people aged between 21 to 64 years obtained a degree as their highest qualification, compared to 42.7% of non-disabled people [7]. Although a higher proportion of both people with or without a disability obtained a degree in 2019 compared with 2013, the relative disparity between the two groups has remained consistent over this period [8].

Table 1 provides a breakdown of the types of disabilities and the number of HE students with a reported disability in the academic year 2014/15 compared to 2021/22. This includes both undergraduates and postgraduates studying in the UK. The total numbers of UK higher education students increased from the academic year 2014/15 to 2021/22 by 15%. However, the proportion of students reporting a disability across the same period rose by 82%. There were uneven changes in different types of disabilities during this period. There were exponential increases in reporting for students with mental health and social communication impairments such as autism and for students with comorbidities.

Table 1. Numbers of HE students with a reported disability (HESA, UK domiciled student enrolment by disability and sex 2014/15 to 2021/22, <https://www.hesa.ac.uk/data-and-analysis/students/table-15>, accessed on 10 August 2023).

Types of Disabilities Reported by UK HE Students (All Modes and Levels of Study)	2014/15	% of Disability		% of Disability Overall	
		Type in 2014/15	2021/22	Type in 2021/22	% Increase in Type of Disability from 14/15 to 21/22
A specific learning difficulty such as dyslexia, dyspraxia, or AD(H)D	106,595	47%	134,320	32%	26%
A mental health condition such as depression, schizophrenia, or	33,500	15%	119,480	29%	257%

Types of Disabilities Reported by UK HE Students (All Modes and Levels of Study)	2014/15	% of Disability Type in 2014/15	2021/22	% of Disability Type in 2021/22	Overall % Increase in Type of Disability from 14/15 to 21/22
anxiety disorder					
A long-standing illness or health condition such as cancer, HIV, diabetes, chronic diseases, or epilepsy	22,750	10%	36,235	9%	59%
A disability, impairment or medical condition that is not listed	22,065	10%	30,645	7%	39%
Two or more conditions	21,390	9%	56,875	14%	166%
Social communication impairment such as Asperger syndrome or autistic spectrum disorder	6845	3%	18,820	5%	175%
A physical impairment or mobility issues, such as difficulty using arms or using a wheelchair or crutches	7680	3%	8900	2%	16%
Deaf or a serious hearing impairment	5125	2%	6980	2%	36%
Blind or a serious visual impairment uncorrected by glasses	2910	1%	3700	1%	27%
Any disability	228,860	100%	415,955	100%	82%

The most common disabilities being reported are specific learning difficulties, such as dyslexia, dyspraxia, and attention-deficit hyperactivity disorder (ADHD). In 2021/22, these made up 32% of the total. The second-highest category covered mental health conditions, including depression, anxiety disorder, and schizophrenia. In 2021/22, these were reported by 119,480 HE students (29% of students with a reported disability). This number has increased by 257% since 2014/15, which is the largest increase amongst all types of disabilities. The reporting rate for autism spectrum was 5% in 2021/22. However, this represents an increase of 175% since 2014/15, rising from 6845 HE students to 18,820 HE students [\[9\]](#).

1.2. Trends in the Increase of HE Students Self-Reported on the Autism Spectrum

Table 2 shows the numbers of UK higher education students being reported as having a social communication impairment, such as Asperger syndrome or other autism spectrum, differentiated by students' declared sex from 2014/15 to 2021/22. The ratio of HE female to male students in this social communication needs category varied between 1:3+ and 1:2. This relative decrease in the female:male ratio over time is because the numbers of female students declaring this disability increased by much more (342%) compared to males (126%).

Table 2. A social communication impairment such as Asperger's Syndrome or other autism spectrum disorder reported by HE students by sex from 2014/15 to 2021/22 (HESA, UK domiciled students enrolment by sex and disability, <https://www.hesa.ac.uk/data-and-analysis/students/table-15>, accessed on 10 August 2023).

All Modes and Levels of Study							
Academic Year	Totals	Female	%	Male	%	Other	%
2014/15	6845	1415	21%	5425	79%	5	0.1%
2015/16	8055	1745	22%	6295	78%	15	0.2%
2016/17	9555	2205	23%	7320	77%	30	0.3%
2017/18	11,160	2765	25%	8360	75%	35	0.3%
2018/19	13,015	3440	26%	9515	73%	60	0.5%
2019/20	14,370	4050	28%	10,200	71%	115	0.8%
2020/21	16,685	5015	30%	11,490	69%	180	1.1%

All Modes and Levels of Study							
Academic Year	Totals	Female	%	Male	%	Other	%
2021/22	18,820	6260	33%	12,275	65%	285	1.5%

relation ^[10].

While there has been an increase in the number of HE students on the autism spectrum, the UK National Statistics indicated that an estimated 19.7% of people with autism aged 21 to 64 held a degree or equivalent from July 2020 to June 2021, with the caveat that this was based on a very small sample ^[11].

1.3. Education, Health, and Care (EHC) Plans and Autism

The number of children and young people in England with an Education, Health, and Care (EHC) plan has also been constantly increasing. There were 473,300 pupils with an EHC plan as of January 2022. This is an increase of 10% from 430,700 in January 2021 ^[12]. The most common reason for an EHC plan is autism spectrum disorder (ASD), with almost one in three pupils with an EHC plan diagnosed on the autism spectrum (103,400 pupils) ^[13]. McConkey ^[14] reported a rise in the number of autistic pupils in schools across the UK based on school census data, with Northern Ireland and Scotland reported as having a higher autism prevalence rate in school populations than England and Wales.

2. The First Paradigm Shift: From a Medical Model to an Affirmative Model of Disability and the Social Inclusion and Exclusion Debate

It has been suggested that there have been different dominant worldviews that shape the concepts of disability at different times ^[15]. For example, the medical model of disability, coined by Hungarian-American psychiatrist Thomas Szasz in the mid-1950s, prompted a discussion regarding the positions, applications, and contributions of psychiatry to the law ^[16]. In the 1970s, impairment was defined as lacking part of a limb, organism, or mechanism of the body, whilst disability was considered to be something imposed on top of an impairment and which isolated or excluded the individual from full participation in society ^{[17][18]}. Similarly, in the 1980s, disease or disorder was categorised as an intrinsic situation, impairment as exteriorised, disability as objectified, and handicapped as socialised ^[19].

However, this particular medical view received criticism amongst health professionals for reducing disability and diseases down to physiochemical factors ^[20]. A range of alternative perspectives can be seen in the rise in disability activism, such as in the UK in the 1970s (reported and described elsewhere in detail, see ^{[21][22][23]}). In particular, in the 1970s, American psychiatrist George Engel proposed the biopsychosocial model, a framework which took both the biological cause and psychosocial issues within patients into account and called for a replacement of the medical model ^[24]. The biopsychosocial model was later adopted by the World Health Organisation's ^[25] "International Classification of Functioning Disability and Health" (ICF) and officially endorsed by all 191 WHO Member States in the 54th World Health Assembly on 22 May 2001 (resolution WHA 54.21). This international standard for describing and measuring health and disability may be taken as evidence of a distinct paradigm shift, being a fundamental change in underlying assumptions in the perception of disability and this has continued to be evidenced in succeeding decades ^[26].

Following the proposal by Engel ^[24] of a biopsychosocial model, the early 1980s was marked by the introduction of a social model of disability—proposed by British sociologist Michael Oliver ^[27]. This sought to place society's responsibility at the heart of the disability discourse, emphasising the importance of accommodating the needs of disabled people in society. Disability was viewed as distinct from impairment, which is imposed on disabled people by society,

This new paradigm involves nothing more or less fundamental than a switch away from focusing on the physical limitations of particular individuals to the way the physical and social environment impose limitations upon certain categories of people.

^[27] (p. 28)

Oliver ^[28] wrote about the model's derivation from a social work perspective and contrasted this with the prevalent model of disability which focused on the characteristics of the individual. The new model was aimed at professionals in an attempt to re-orient their understanding of how best to address the needs of disabled people, specifically by encouraging them to take account of the possible barriers that the disabled might encounter in society ^[29].

Although the social model of disability received criticism in the 1990s (see, for example, ^[30]), it helped to change the dominant narrative whilst also supporting the emergence of collective disability consciousness ^[29]. In his reflections thirty years later on

criticism of the social model, Oliver wrote that “focusing on impairment and difference will only de-politicise the social model and will not lead to the development of any approaches or alternative models” [29] (p. 1025). The subsequent decades since the 1980s have been marked by a growing interest in the area of disability, including among social scientists, wider academia and policy makers, and this has sparked a variety of journals discussing disability issues within and across disciplines [31].

From a medical model of disability [16] to a biopsychosocial model [24] and then a social model [27], the discussion framing and conceptualising disability has shifted from seeking to break the link between impairment and disability [32], towards taking social, environmental, and cultural factors into account. The paradigm shift to a social model of disability emphasised the negative layers that can surround perceptions of disability that have been imposed on disabled people by society.

Alongside these changing concepts and theorising of disability and impairment, there has been a debate around social inclusion and exclusion since the 1970s, in particular across the UK, wider Europe, and other Western countries. The exclusion discourse began in France in the 1960s [33], when politicians and journalists started to describe people living in poverty as *les exclus*, e.g., [34]. Social exclusion, according to Byrne [35], is derived from inequality. The term inclusion, coming from the Latin *includo*, connoted both positive (“incorporate”) and negative (“entrap”) meanings [36]. In the 1970s, the social inclusion and exclusion debate in UK educational policy context was initially focused on integration or segregation, and whether pupils with special educational needs (SEN) should be educated in special or regular mainstream schools [32].

However, there has been a lack of representation of those in receipt of special education, with professional voices predominant, such as those from education, medical practice, and institutional staff [37]. Certainly, the SEND Code of Practice implies the need to rectify this, with listening to the first-hand views of students with a SEND being one of the CoP’s key principles [38] (p. 20). The term “inclusion” was mentioned in the Warnock Report [39] on page 336, which recommended the replacement of concepts and categories of handicapped children and promoted instead a new conception of special educational needs (SEN) [40]. This was duly enacted into English law in the 1981 Education Act, which encouraged the inclusion of SEN children in mainstream schools, with special schools being only for those with the most complex needs.

In England, there was an extended debate about excluding pupils with SEN from mainstream schools in the late-1970s and the 1980s. Norwich [41] criticised the UK government for emphasising an inclusive system which continued to involve special schools rather than fully inclusive ordinary schools. Daniels et al. [42] reported a clear tension between the emergence of a new policy in the 1988 Education Act which encouraged competition between schools—including the publication of “league tables” on their pupils’ attainment—which was set against the existing policy commitment to include children and young people with SEN in mainstream settings given that the latter’s attainment might not be as high as their peers and thus could reduce the school’s overall attainment profile.

Relatedly, the Timpson Review [43] of school inclusion reported differing exclusion rates in schools, noting that there were longstanding national trends to suggest that children with SEN, boys, those from disadvantaged backgrounds, and those supported by social care were more likely than others to be excluded from school. Exclusion rates also varied by ethnicity. McCluskey et al. [44] argued that the exclusion of pupils with SEN was related to the dynamics and tensions between policies designed to achieve excellence and those seeking to achieve inclusive practice.

In the early 21st century, although the definition of social inclusion has widened, it has remained under-theorised (*cf* [45]). Nevertheless, at the same time, there has been a call for (a) a more affirmative and normative model which emphasises positive personal identities, both individually and collectively [46][47], and (b) for the deficit-based model of disability to be challenged [48][49][50].

3. The Second Paradigm Shift: From Teacher-Centred Learning (TCL) to Student-Centred Learning and Teaching (SCLT) and Inclusive Environments in Higher Education

The prevalent instructional method in higher education has been moving in recent decades from teacher-centred learning (TCL) to student-centred learning and teaching (SCLT) [51]. Customarily, with TCL, lecturers would be standing at the centre of an auditorium-style lecture hall, often called “sage on the stage”, delivering a lecture to students, who sit in rows facing the podium, [51] (p. 17), [52] (p. 30) University lecturers and academics often considered themselves more as a member of their discipline than being “teachers” [53][54]. Conventional teacher-centred learning focuses on transmitting structured knowledge and imparting information.

In contrast, a student-centred approach (SCLT) focuses on facilitating understanding of conceptual change and intellectual development through interacting with students [54]. Under the student-centred approach, a lecturer's role is often perceived more as a "guide on the side" to assist students along their intellectual developmental journey rather than seeing students as empty vessels to be filled [52] (p. 30); see also [55][56]. Samuelowicz and Bain [57] suggested that there is a "broad agreement that these concepts [TCL and SCLT] can be arranged on a continuum" (p. 93) based on their semi-structured interview study with academics drawn from a range of disciplines and they proposed five orientations in lecturers' beliefs towards learning and teaching; these were subsequently revised in a follow-up study to nine orientations with some sub-divisions of the original [58]. In each article [57][58], they provide empirical qualitative evidence of two main clusterings: teacher-centred and learning-centred beliefs.

The 1990s were marked by several studies reporting evidence of a change in approaches to student learning in higher education. For example, Barr and Tagg [59] (p. 13) suggested that they were observing a paradigm shift away from an instruction bias—"to provide instruction"—towards a student learning approach—"to produce learning". Both Prosser et al. [60] and Kember [54] offer qualitative research evidence to suggest that lecturers have shifted their beliefs across a teacher-orientated learning and student-centred learning spectrum towards the latter.

Student-centred learning and teaching (SCLT) is an umbrella term for a number of pedagogical approaches [61], including—but not limited to—(a) active learning involving problem-solving and question formulation to discuss, explain, and debate [62]; (b) co-operative learning, or collaborative learning, where students work with their peers as a team [63]; and (c) experiential learning in which students reflect on or engage with their personal experiences to understand concepts and generate knowledge [64][65]. Although authors may have different ideas of what constitutes SCLT, there is an underlying consensus in the literature that SCLT contrasts with TCL [61]. Lea et al. [66] offer a tenet in the conceptualisation of SCLT:

...reliance upon active rather than passive learning, an emphasis on deep learning and understanding, increased responsibility and accountability on the part of the student, an increased sense of autonomy in the learner, an interdependence between teacher and learner.

(p. 322)

It has been argued that under SCLT, university students become actors who participate actively in their learning process and learning environment, exercising a certain degree of freedom, responsibility and agency to achieve their higher education (HE) study goals [67]. SCLT is considered to enhance students' enthusiasm for engaging in educational activities, working together, and asking questions [68]. However, since SCLT may focus on the individual learner, it has been suggested that the learning outcome depends on whether students, or learners, are capable of implementing the resources provided and whether they share a mutual understanding of the belief system, teaching approach and expectations with their faculty members [61]. Therefore, the effectiveness of SCLT in HE remains in question since it is highly context-dependent [69].

Whilst there is evidence of a paradigm shift from teacher-led to student-centred learning HE, approaches in many parts of the world (as evidenced in the citations above), there has also been a massive rise in HE participation. On average, across the Organization for Economic Cooperation and Development (OECD) countries, the share of 25–34 year-olds with a tertiary degree (i.e., short-cycle tertiary, bachelor's, master's, or doctoral or equivalent) has increased from 27% in 2000 to 48% in 2021 [70], with the projection being that tertiary education will become the majority experience for working age adults.

In the UK, government statistics indicated that the population of university students increased from 3.4% in 1950 to 8.4% in 1970 and from 19.3% in 1990 to 33% in 2000 [71] (p. 14). The HE entry rate among UK 18-year-olds also increased from 24.7% in 2006 to 30.7% in 2015 and peaked at 38.2% in 2021. The entry rate then slightly decreased to 37.5% in 2022, but is still at its second-highest-ever level [72]. There was a new record high of 2.86 million students at UK higher education institutions in the academic year 2021/22 [72] (p. 31). The proportion of students in the UK changed from a small elite group of HE students in the 1960s and 70s to over one in three school-leavers in the 2000s, with a new record high in recent years. Consequently, it has been argued (for example, [73]) that a general removal of barriers to HE for disadvantaged groups was needed—not just for those with disabilities but also for students from all sorts of backgrounds, including low-socio-economic backgrounds and diverse cultures.

Apart from the significant increase in the population of university students and its growing diversity, there are other factors that may influence learning and teaching approaches and the relative practice of inclusive teaching in HE. Firstly, the publication of HE league tables and ranking systems have become an advertising and marketing tool for institutions to attract students [74].

Consequently, students' satisfaction scores have become part of university league tables in England [75]. Student satisfaction also relates to the personal financial costs for students. The introduction of undergraduate course tuition fee contributions in 1998—originally conceived as being capped at GBP 1000 p.a. in 1998 but subsequently raised to GBP 3000 p.a. in 2004 and then to GBP 9000 p.a. from 2012–2013 and GBP 9250 currently—has also encouraged students to see themselves as consumers [76][77]. Relatedly, through an analysis of National Student Survey (NSS) data, Dean et al. [75] have suggested that university students are likely to report being satisfied with a course that is “well-organised and running smoothly” and provides “intellectual stimulation” while allowing students to “present themselves with confidence” and providing “adequate academic advice and support” (p. 359). These satisfaction criteria, aligning with the “guide on the side” SCLT approach [52] (p. 30), are likely to underpin a change in teaching styles becoming more student-focused.

Inclusion at Institutional Level: Support for Disabled Students in Higher Education

While the concepts and definition of SCLT are still evolving [51], there is evidence that student-centred approaches have been extended outside university lecture halls as part of the creation of a more accessible HE environment that is sensitive to the enlarged student population. In large part, this trend can be traced back to the Warnock Report [39] on the education of children and young people with special educational needs, which included commentary on how universities provided (and should provide) support to students with disabilities:

(Section 10.47) Some universities and polytechnics have taken steps to enable students with disabilities to pursue courses of higher education. The University of Sussex, for example, provides facilities for deaf students, as well as a small purpose-built residential unit for physically handicapped students with medical facilities and support staff. We welcome these initiatives and hope that other establishments will emulate them.

(p. 177)

The same section (p. 177) also commends the Open University for making special arrangements for disabled students.

These HE examples in the Warnock Report [39] were written in the late 1970s at a time when social concerns about equal opportunities were first being enacted into English law, such as the Equal Pay Act, 1970 [78]; the Sex Discrimination Act, 1975 [79]; and the Race Relations Act, 1976, amended 2000 [80]. Although legal protection under the Disability Discrimination Act did not emerge until twenty years later in 1995, the 1970s was also a time when disability campaigners began to organise themselves to promote greater acceptance and control over their own lives, such as through the Union of the Physically Impaired Against Segregation [17], one of the earliest disability rights organisations in the UK [81].

Later, in order to comply with The Equality Act 2010 [82], universities were required to protect the interests of students and staff with disabilities and not to lawfully discriminate against them because of their disability. Since then, higher education institutions (HEIs) in the UK have sought to put systems in place to promote equality, diversity and inclusion (EDI). Currently, the majority of HEI providers in the UK have disability policies and services teams to provide reasonable adjustments, represented as internal, non-medical support to ensure compliance with legislation [83]. A report from the Higher Education Funding Council for England (HEFCE) reported that 90% of HEI providers had disability policies and models of support. These included adjustments in assessment (91%), teaching and learning (82%), student support (80%), accommodation (66%), student experience (44%), and inclusive curriculum design or universal design (43%) [84]. The disability service teams customarily carry out action plans, tailor packages for complex cases, support claims for disabled students' allowances (DSA), and manage specific support provisions with mentors and advisors on a one-to-one basis [83]. However, it is important to note that the definitions of equality, diversity, and inclusion (EDI) in policy documents from Russell Group universities have also been reported as remaining opaque and ambiguous and that “inclusion” has been criticised as only a selling point for universities [85].

Outside HEI providers, the Disabled Students' Commission (DSC) was established to act for a three-year period between 2020–2023 as an independent group to improve the support that HEIs provide for disabled students [86]. The DSC was supported by Advance HE, a British charity which advocates EDI in universities. The enactment of The Equality Act 2010 [82] also encouraged the creation of promotion of equality impact assessments (EIAs) to gather evidence to ensure that any policies and practices of HEIs were not inadvertently discriminating against any parties [87]; see also EIA [88]. In addition, a disability inclusion institutional framework (DIIF) has been developed as a resource for HE by Evans and Zhu [89] to allow institutions to audit and promote the inclusion of students and staff with disabilities.

Overall, the second paradigm shift was characterised by two main trends: (i) a move away from teacher-centred learning (TCL) towards student-centred learning and teaching (SCLT) and (ii) the creation of a more inclusive environment in higher education. The principal drivers of the paradigm shift towards responding to students' needs were the increasing numbers of university students, changes in market forces, and the advent of HE league tables and accountability.

4. The Third Paradigm Shift: From Conceptions of Disability to Neurodiversity—The Example of Autism

In 1908, the German word *autismus* was first used by the Swiss psychiatrist Eugen Bleuler, who also coined the term *schizophrenia* in describing one of his patients who has “shut himself off from the outside world” [90] (p. 65). Derived from the Greek word *auto*, meaning self [91], *autismus* was translated into English as *autism*. More than a hundred years after Bleuler's original labelling, the underlying principles of what might count as autism, its apparent nosology and its social perceptions are still evolving. Within the literature, autism has been reported as a disorder, a disability, a spectrum, a condition, and—more recently—as an example of human neurodiversity. This latter conceptualisation is associated with the so-called social model of disability [31] and suggests that people who are different in some way can still lead fulfilling lives if they have appropriate support from wider society, including medical support if necessary (see [92] for an overview and examples).

With the substantial increase in official disclosure of students in HE with “social communication difficulties”—being a proxy label for autism in official documents (*cf* [93], and see **Table 1** and **Table 2**), it is important to understand the paradigm shift in the understanding of autism historically and contemporarily as one example of how this changing landscape might inform and advance inclusive practice in HE.

4.1. Autism as a Spectrum

The concept of autism as a spectrum was first introduced in 1979. In the Camberwell study [94], $N = 914$ children were identified through the Camberwell cumulative psychiatric and mental retardation register [95]. From profoundly impaired to entirely normal, this study reported a continuum of severity of autistic behaviours amongst these children. The authors expressed their hope that some names other than “autism” and “psychosis” would eventually be used for the behaviour patterns discussed in the study [94]. The term “autism spectrum” thus is seen to encompass people with different levels of language and intellectual abilities and different autistic behaviours whilst also being related to Asperger's and Kanner's earlier descriptions of autistic behaviours, namely severe impairment in a social situation, repetitive behaviour, and some form of language deficit [96][97]. The term “autism spectrum” has been commonly used by researchers since the 1990s [98].

4.2. Autistic Spectrum Disorder (ASD)

The two internationally recognised publications, the American Psychiatric Association's [99]'s *Diagnostic and Statistical Manual (DSM) of Mental Disorders* [99], and the *International Classification of Diseases (ICD)* [25] by the World Health Organisation (WHO) offer clinical definitions of autism. Autism spectrum disorder (ASD) is the clinical term for autism in the latest version of DSM-5-TR, being the fifth-edition text revision of the *Diagnostic and Statistical Manual of Mental Disorders* [99].

Autism Spectrum Disorder (ASD) is a complex developmental condition involving persistent challenges with social communication, restricted interests, and repetitive behaviour [sic]. While autism is considered a lifelong disorder, the degree of impairment in functioning because of these challenges varies between individuals with autism.

(American Psychiatric Association, <https://www.psychiatry.org/patients-families/autism>, accessed on 24 August 2023)

Relatedly, the American Psychological Association offers a rationale for the term “spectrum” in ASD.

Autism spectrum disorder (ASD) refers any one of a group of disorders with an onset typically occurring during the preschool years and characterized by difficulties with social communication and social interaction and restricted and repetitive patterns in behaviors, interests, and activities. The term “spectrum” is used because of the heterogeneity in the presentation and severity of ASD symptoms, as well as in the skills and level of functioning of individuals who have ASD. (American Psychological Association.

<https://www.apa.org/topics/autism-spectrum-disorder>, accessed on 24 August 2023)

While the term “autism spectrum disorders” (plural) was used by some clinicians and researchers, allowing the identification of subtypes in future DSMs, some used the term in a singular form—i.e., autism spectrum disorder—implying the usage of DSM-5-TR [98]. The DSM is commonly accepted by researchers in the English-speaking countries, while the ICD is reportedly used by medical professionals and policy makers in Europe, including the UK [98]. The diagnostic criteria and descriptions of autism are revised regularly by APA and WHO as evidence of an ongoing debate into definitions.

4.3. Autism Spectrum Conditions (ASC)

Autism spectrum conditions (ASC), introduced by British psychologist Baron-Cohen, is considered a less stigmatising label to reflect the cognitive strength of autistic individuals without highlighting a clinical diagnosis requirement [100]. The assumption is that autism conditions lie on a continuum of social and communication skills [101][102][103]. The term ASC has been widely used in recent autism and education research (see, for example, [104][105]). Writers and researchers often quote ASC as originating from DSM-5-TR [99]. However, DSM-5-TR does not use the term ASC, but rather autism spectrum disorder (ASD), and the term “conditions” appeared only in describing neurodevelopmental a group of conditions in the DSM-5-TR [99]. The focus on categorical diagnosis is shifted in some of the social science and education research since the continuum view seeks to work towards a quantitative approach by introducing different measurements [106].

The investigations and academic debate about autistic traits in the general population and everyday social behaviour started in the early 21st century [107][108][109][110] with non-clinical diagnoses or self-assessment tools such as the Camouflaging Autistic Traits Questionnaire (CAT-Q) [111], Music-based Autism Diagnostics (MUSAD) [112], and the Autism-Spectrum Quotient (AQ) [106]. Self-assessment and non-clinical diagnosis tools offer an online initial screening for individuals and are designed to minimise stress or disturbance compared with a more formal external diagnosis. Existing research on autism in the UK has largely examined biomedical issues, such as its causes, with only 1% reported as examining societal issues such as public awareness and attitudes despite this being a research priority for autistic individuals [113].

4.4. Autism as an Example of Neurodiversity

The discussion of the definitions of autism has been extended from medical definitions [25][99] to community discussion, which includes the voices of autistic people [114]. One community definition of autism was articulated by self-labelled neuroqueer educator Nick Walker [114],

Autism is a developmental phenomenon, meaning that it begins in utero and has a pervasive influence on development, on multiple levels, throughout the lifespan. Autism produces distinctive, atypical ways of thinking, moving, interaction, and sensory and cognitive processing. One analogy that has often been made is that autistic individuals have a different neurological “operating system” than non-autistic individuals.

(p. 61)

This definition highlights the diverse neurological capabilities of autistic individuals. Autism strengths, for those who are intellectually capable, are reported as being a meticulous concern for detail and having excellent tolerance for repetitive tasks [115]. These abilities are also reported to occur in other classified disorders, such as attention-deficit hyperactivity disorder (ADHD) and obsessive-compulsive disorder (OCD) [115]. However, autistic individuals are reported to be likely to possess special isolated skills, including memory, visuospatial awareness, reading, drawing, music, and computation [116]. The greater skills in pitch discrimination, visuospatial awareness and memory suggest a possible advantage in specific employment tasks, such as music [117] and a visual-related occupation [118].

While autistic individuals are reported to possess cognitive advantages in superior focus, memory, and creativity [119], studies also show that professionals with high autistic traits, particularly in the performing arts industry, may be vulnerable to low occupational self-efficacy [120]. Accordingly, professional mentoring might help autistic individuals to feel less alone in the performing arts industry [121].

Recent research has reported significant challenges and barriers in HE for autistic university students [122]. Key examples include autistic students feeling nervous in a new context. Loud noises and an overcrowded environment on campus can create stress and anxiety, which can hinder their development in social interaction. An autistic student shared their view on autism,

I think autism is like running on Windows while everyone is a Mac. This leads to information being lost in social situations. People are like the background NPC in video games where you can press 'x' to find out what they are thinking, but my 'x' button is broken.

[122] (p. 308)

This quote echoes the community definition proposed by Walker [114], in which people on the autism spectrum share a different “operational system” than so-called neurotypical people. Research suggests that autistic university students' internal states could affect their levels of motivation [123]. Anxiety could appear in social situations for these students. It is therefore seen as important to have mediating influences, including coping strategies and problem-solving skills, peer relationship-building, and access to help and support. Such mediating influences can impact positively on their internal states [123].

On the other hand, Witcher [124] suggests that the key factors affecting the post-secondary transition process for students on the autism spectrum are parental support; accommodations; influential figures; and social, independent, and faculty functioning. Additionally, autistic students are reported to face health, sensory, cultural, and academic challenges [125]. To enhance inclusion and support HE students on the autism spectrum, the Office for Students (OfS)—an independent public body reporting to government—has funded various projects. For example, the University of Chester has developed preventative strategies to support the mental well-being of autistic students and the University of Bristol has a training programme for university staff to improve autistic students' mental health [126]. The discussion of an inclusive environment for autistic individuals in HE, including academics, is growing [127][128]. Nevertheless, it is important to note that to identify students with ASC is to embrace a diverse group in terms of strengths and needs and to note that HE support can be idiosyncratic [129]. Core principles and programmes for facilitating the success of autistic students in higher education have been created in other countries, such as the United States [130] and Australia [131].

5. Summary and Concluding Remarks

The past fifty years have been marked by several major paradigm shifts in higher education, including in terms of the sector's size, public accountability, related internal organisation and processes, and its response to changes in wider cultural expectations of society and education. There has been a very large increase in the HE student population. This opening up of HE recruitment has also seen a rise in the numbers of students reported as having some form of disability, both self-labelled and certificated. The increase in reported disability has been concurrent with a greater acceptance within wider society for people who are different in some way, and this is related to a social movement towards inclusion and an acceptance of diversity. What counts as disability has also been challenged, moving away from a medical model to a social model. Strengths in the profiles of HE students with autism in terms of their musical capability and prowess offer an example of why the concept of neurodiversity is important if our policy and practice intentions are for higher education to be sensitive to inclusive difference in the move towards student-centred learning and teaching (SCLT). As part of this process, it continues to be important to investigate and include student voice in our neurodiverse provision.

References

1. HESA. Higher Education Statistics Agency (HESA). Students in Higher Education 2003/04. Available online: <https://www.hesa.ac.uk/data-and-analysis/publications/students-2003-04> (accessed on 8 August 2023).
2. HESA. Higher Education Statistics Agency (HESA). Higher Education Students Statistics: UK 2021/22—Students Numbers and Characteristics. Available online: <https://www.hesa.ac.uk/news/19-01-2023/sb265-higher-education-student-statistics/numbers> (accessed on 7 May 2023).
3. Advance HE. Equality in Higher Education: Students Statistical Report 2022. Available online: <https://www.advance-he.ac.uk/knowledge-hub/equality-higher-education-statistical-reports-2022> (accessed on 5 April 2023).
4. HESA. Higher Education Statistics Agency (HESA). Table 7—HE Student Enrolments by Subject of Study and Disability Marker 2014/15 to 2018/19. Available online: <https://www.hesa.ac.uk/data-and-analysis/students/table-7> (accessed on 8 August 2023).

5. HESA. Higher Education Statistics Agency (HESA). Table 44—HE Student Enrolments by Subject of Study and Disability Marker 2019/20 to 2021/22. Available online: <https://www.hesa.ac.uk/data-and-analysis/students/table-44> (accessed on 7 May 2023).
6. OfS. Office for Students (OfS). Equality, Diversity and Student Characteristics Data. Available online: <https://www.officeforstudents.org.uk/publications/equality-diversity-and-student-characteristics-data/> (accessed on 10 January 2024).
7. ONS. Office for National Statistics (ONS). Outcomes for Disabled People in the UK: 2021. Available online: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/articles/outcomesfordisabledpeopleintheuk/> (accessed on 5 April 2023).
8. ONS. Office for National Statistics (ONS). Disability and Education, UK: 2019. Available online: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/bulletins/disabilityandeducationuk/2019#disability-and-education-data> (accessed on 5 April 2023).
9. HESA. Higher Education Statistics Agency (HESA). UK Domiciled Students Enrolment by Sex and Disability 2014/15 to 2021/22. Available online: <https://www.hesa.ac.uk/data-and-analysis/students/table-15> (accessed on 7 May 2023).
10. NHS Digital. Estimating the Prevalence of Autism Spectrum Conditions in Adults. Available online: <https://digital.nhs.uk/data-and-information/publications/statistical/estimating-the-prevalence-of-autism-spectrum-conditions-in-adults/estimating-the-prevalence-of-autism-spectrum-conditions-in-adults-extending-the-2007-adult-psychiatric-morbidity-survey> (accessed on 5 April 2023).
11. ONS. Office for National Statistics (ONS). Disability and Education Dataset. Available online: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/datasets/disabilityandeducation> (accessed on 5 April 2023).
12. HM Government. Education, Health and Care Plans. Available online: <https://explore-education-statistics.service.gov.uk/find-statistics/education-health-and-care-plans#dataBlock-c6fc7124-5373-49df-9ff4-3ec1b80492ed-charts> (accessed on 5 April 2023).
13. HM Government. Special Educational Needs in England. Available online: <https://explore-education-statistics.service.gov.uk/find-statistics/special-educational-needs-in-england> (accessed on 5 April 2023).
14. McConkey, R. The rise in the numbers of pupils identified by schools with autism spectrum disorder (ASD): A comparison of the four countries in the United Kingdom. *Support Learn.* 2020, 35, 132–143.
15. Darcy, S.; Buhalis, D. Conceptualising Disability. In *Accessing Tourism: Concepts and Issues*; Buhalis, D., Darcy, S., Eds.; Channel View Publications, Limited: Bristol, UK, 2011; Volume 45, pp. 21–45.
16. Szasz, T.S. Some observations on the relationship between psychiatry and the law. *A.M.A. Arch. Neurol. Psychiatry* 1956, 75, 297–315.
17. UPIAS. Fundamental Principles of Disability. Available online: <https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/UPIAS-fundamental-principles.pdf> (accessed on 5 April 2023).
18. Oliver, M. *Understanding Disability: From Theory to Practice*; Palgrave: London, UK, 1996.
19. WHO. International Classification of Impairments, Disabilities and Handicaps. A Manual of Classification Relating to the Consequences of Disease. Available online: https://apps.who.int/iris/bitstream/handle/10665/41003/9241541261_eng.pdf?sequence=1 (accessed on 11 June 2023).
20. Hogan, A.J. Social and medical models of disability and mental health: Evolution and renewal. *Can. Med. Assoc. J.* 2019, 191, E16–E18.
21. Barnes, C.; Barton, L.; Oliver, M. *Disability Studies Today*; Polity Press: Cambridge, UK, 2002.
22. Barnes, C.; Mercer, G. *Exploring Disability: A Sociological Introduction*; Polity: Cambridge, UK, 2009.
23. Oliver, M. *Understanding Disability: From Theory to Practice*, 2nd ed.; Palgrave Macmillan: New York, NY, USA, 2009.

24. Engel, G.L. The Need for a New Medical Model: A Challenge for Biomedicine. *Sci. (Am. Assoc. Adv. Sci.)* 1977, 196, 129–136.
25. WHO. International Classification of Diseases 11th Revision (ICD-11). 6A02 Autism Spectrum Disorder. Neurodevelopmental Disorders. Available online: <https://icd.who.int/browse11/l-m/en#/http://id.who.int/icd/entity/437815624> (accessed on 10 August 2023).
26. Leonardi, M.; Lee, H.; Kostanjsek, N.; Fornari, A.; Raggi, A.; Martinuzzi, A.; Yáñez, M.; Almborg, A.-H.; Fresk, M.; Besstrashnova, Y.; et al. 20 Years of ICF International Classification of Functioning, Disability and Health: Uses and Applications around the World. *Int. J. Environ. Res. Public Health* 2022, 19, 11321.
27. Oliver, M. A New Model of the Social Work Role in Relation to Disability. In *The Handicapped Person: A New Perspective for Social Workers*; Campling, J., Ed.; RADAR: London, UK, 1981; pp. 19–32.
28. Oliver, M. *Social Work with Disabled People*; Macmillan: London, UK, 1983.
29. Oliver, M. The social model of disability: Thirty years on. *Disabil. Soc.* 2013, 28, 1024–1026.
30. Crow, L. Including all of our lives: Renewing the social model of disability. In *Exploring the Divide: Illness and Disability*; Barnes, C., Mercer, G., Eds.; Disability Press: Leeds, UK, 1996.
31. Barnes, C. Understanding the social model of disability. In *Routledge Handbook of Disability*, 2nd ed.; Watson, N., Vehmas, S., Eds.; Routledge: Oxon, UK; New York, NY, USA, 2019; pp. 14–31.
32. Oliver, M.; Barnes, C. Disability studies, disabled people and the struggle for inclusion. *Br. J. Sociol. Educ.* 2010, 31, 547–560.
33. Silver, H. Social exclusion and social solidarity: Three paradigms. *Int. Labour Rev.* 1994, 133, 531–578.
34. Klanfer, J. *L'Exclusion sociale: Étude de la marginalité dans les sociétés occidentales*, par Jules Klanfer; Bureau de Recherches Sociales Rouen (Impr. Rouennaise): Paris, France, 1965.
35. Byrne, D. *Social Exclusion*, 2nd ed.; Open University Press: Maidenhead, UK, 2005.
36. Felder, F. The Value of Inclusion. *J. Philos. Educ.* 2018, 52, 54–70.
37. Read, J.; Walmsley, J. Historical perspectives on special education, 1890–1970: Special issues: Lessons from history. *Disabil. Soc.* 2006, 21, 455–469.
38. DfE. Department for Education (DfE). Special Educational Needs and Disability Code Of Practice: 0 to 25 Years: Statutory Guidance for Organisations Which Work with and Support Children and Young People Who Have Special Educational Needs or Disabilities. 2015. Available online: https://assets.publishing.service.gov.uk/media/5a7dcb85ed915d2ac884d995/SEND_Code_of_Practice_January_2015.pdf (accessed on 20 August 2023).
39. Warnock Report. Special Educational Needs: Report of the Committee of Enquiry into the Education of Handicapped Children and Young People. 1978. Available online: <https://webarchive.nationalarchives.gov.uk/ukgwa/20101007182820/http://sen.trrb.ac.uk/attachments/21739b8e-5245-4709-b433-c14b08365634.pdf> (accessed on 1 August 2023).
40. Norwich, B. From the Warnock Report (1978) to an Education Framework Commission: A Novel Contemporary Approach to Educational Policy Making for Pupils with Special Educational Needs/Disabilities. *Front. Educ.* 2019, 4, 72.
41. Norwich, B. How inclusion policy works in the UK (England): Successes and issues. In *What Works in Inclusion?* Boyle, C., Topping, K., Eds.; McGraw-Hill, Open University Press: Maidenhead, UK, 2012.
42. Daniels, H.; Thompson, I.; Tawell, A. After Warnock: The Effects of Perverse Incentives in Policies in England for Students with Special Educational Needs. *Front. Educ.* 2019, 4, 36.
43. Timpson, E. Timpson Review of School Exclusion. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/807862/Timpson_review.pdf (accessed on 14 August 2023).
44. McCluskey, G.; Cole, T.; Daniels, H.; Thompson, I.; Tawell, A. Exclusion from school in Scotland and across the UK: Contrasts and questions. *Br. Educ. Res. J.* 2019, 45, 1140–1159.

45. Topping, K. Conceptions of Inclusion: Widening Ideas. In *What Works in Inclusion?* Boyle, C., Topping, K., Eds.; McGraw-Hill, Open University Press: Maidenhead, UK, 2012.
46. Lee, P. *Shooting for the Moon: Politics and Disability at the Beginning of the Twenty-First Century*. In *Disability Studies Today*; Barnes, C., Oliver, M., Barton, L., Eds.; Polity Press in Association with Blackwell Publishers: Cambridge, UK, 2002.
47. Swain, J.; French, S. Towards an affirmation model of disability. *Disabil. Soc. Suppl. Models Mean. Metaphor.* 2000, 15, 569.
48. Pickard, B. *Challenging Deficit-Based Discourse in Higher Education through a Social Connection Model of Responsibility: A Critical Disability Studies Perspective*. Ph.D. Thesis, University of South Wales, South Wales, UK, 2020.
49. Bolt, D. Not forgetting happiness: The tripartite model of disability and its application in literary criticism. *Disabil. Soc.* 2015, 30, 1103–1117.
50. Bolt, D. *Complex and Critical: A Methodological Application of the Tripartite Model of Disability*. In *Critical Readings in Interdisciplinary Disability Studies: (Dis)Assemblages*; Springer: Cham, Switzerland, 2020; pp. 69–78.
51. Hoidn, S.; Resusser, K. *Foundations of Student-Centered Learning and Teaching*. In *The Routledge International Handbook of Student-Centered Learning and Teaching in Higher Education*; Hoidn, S., Klemenčič, M., Eds.; Routledge. Routledge Handbooks Online: Abingdon, UK, 2020.
52. King, A. From Sage on the Stage to Guide on the Side. *Coll. Teach.* 1993, 41, 30–35.
53. Becher, T. *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines*; SRHE and Open University Press: Milton Keynes, UK, 1989.
54. Kember, D. A reconceptualisation of the research into university academics' conceptions of teaching. *Learn. Instr.* 1997, 7, 255–275.
55. Wright, G.B. Student-centered learning in higher education. *Int. J. Teach. Learn. High. Educ.* 2011, 23, 92–97.
56. Bligh, D.A. *What's the Use of Lectures?* Antony Rowe Ltd.: Eastbourne, UK, 2000.
57. Samuelowicz, K.; Bain, J.D. Conceptions of teaching held by academic teachers. *High. Educ.* 1992, 24, 93–111.
58. Samuelowicz, K.; Bain, J.D. Revisiting academics' beliefs about teaching and learning. *High. Educ.* 2001, 41, 299–325.
59. Barr, R.B.; Tagg, J. From Teaching to Learning—A New Paradigm For Undergraduate Education. *Change Mag. High. Learn.* 1995, 27, 12–26.
60. Prosser, M.; Trigwell, K.; Taylor, P. A phenomenographic study of academics' conceptions of science learning and teaching. *Learn. Instr.* 1994, 4, 217–231.
61. Trinidad, J.E. Understanding student-centred learning in higher education: Students' and teachers' perceptions, challenges, and cognitive gaps. *J. Furth. High. Educ.* 2020, 44, 1013–1023.
62. Felder, R.M.; Brent, R. Active learning: An introduction. *ASQ High. Educ. Brief* 2009, 2, 1–5.
63. Bruffee, K.A. *Collaborative Learning: Higher Education, Interdependence and the Authority of Knowledge*, 2nd ed.; Johns Hopkins University Press: Baltimore, MD, USA, 1999.
64. Chan, C.K.Y. *Assessment for Experiential Learning*; Routledge: London, UK, 2023.
65. Kolb, D.A. *Experiential Learning: Experience as the Source of Learning and Development*; Pearson Education: London, UK, 2014.
66. Lea, S.J.; Stephenson, D.; Troy, J. Higher Education Students' Attitudes to Student Centred Learning: Beyond 'Educational Bulimia'? *Stud. High. Educ.* 2003, 28, 321–334.

67. Klemenčič, M. Students as Actors and Agents in Student-Centered Higher Education. In *The Routledge International Handbook of Student-Centered Learning and Teaching in Higher Education*; Hoidn, S., Klemenčič, M., Eds.; Routledge: Abingdon, UK, 2020.
68. Kotecha, M. Enhancing students' engagement through effective feedback, assessment and engaging activities. *MSOR Connect.* 2011, 11, 4–6.
69. Harju, A.; Åkerblom, A. Colliding collaboration in student-centred learning in higher education. *Stud. High. Educ.* 2017, 42, 1532–1544.
70. OECD. Education at a Glance 2022: OECD Indicators. Available online: <https://www.oecd-ilibrary.org/sites/a8525f6b-en/index.html?itemId=/content/component/a8525f6b-en#boxsection-d1e1860> (accessed on 11 October 2023).
71. Bolton, P. Education: Historical Statistics. Available online: <https://core.ac.uk/download/pdf/74377934.pdf> (accessed on 22 August 2023).
72. Bolton, P. Higher Education Student Numbers. 2023. Available online: <https://researchbriefings.files.parliament.uk/documents/CBP-7857/CBP-7857.pdf> (accessed on 3 August 2023).
73. Hockings, C. Inclusive Teaching and Learning in Higher Education: A Synthesis of Research. Available online: <https://www.advance-he.ac.uk/knowledge-hub/inclusive-learning-and-teaching-higher-education-synthesis-research> (accessed on 30 August 2023).
74. Hazelkorn, E. The Impact of League Tables and Ranking Systems on Higher Education Decision Making. *High. Educ. Manag. Policy* 2007, 19, 1–24.
75. Dean, A.; Shubita, M.; Claxton, J. What type of learning journey do students value most? Understanding enduring factors from the NSS leading to responsible decision-making. *J. Glob. Responsib.* 2020, 11, 347–362.
76. Bunce, L.; Baird, A.; Jones, S.A. The student-as-consumer approach in higher education and its effects on academic performance. *Stud. High. Educ.* 2017, 42, 1958–1978.
77. Tomlinson, M. Student perceptions of themselves as 'consumers' of higher education. *Br. J. Sociol. Educ.* 2017, 38, 450–467.
78. HM Government. Equal Pay Act. Available online: <https://www.legislation.gov.uk/ukpga/1970/41/enacted> (accessed on 18 January 2024).
79. HM Government. The Sex Discrimination Act. Available online: <https://www.legislation.gov.uk/ukpga/1975/65/enacted> (accessed on 18 January 2024).
80. HM Government. The Race Relations Act 1976 (Amendment) Regulations 2003. Available online: <https://www.legislation.gov.uk/uksi/2003/1626/contents/made> (accessed on 18 January 2024).
81. Baldwinson, A. UPIAS—The Union of Physically Impaired Against Segregation (1972–1990): A Public Record from Private Files. 2019. Available online: <https://tonybaldwinson.files.wordpress.com/2019/09/2019-upias-research-notes-tony-baldwinson-isbn-9781913148010.pdf> (accessed on 20 August 2023).
82. Equality Act. The Equality Act. Available online: <https://www.legislation.gov.uk/ukpga/2010/15/contents> (accessed on 20 April 2023).
83. Hubble, S.; Bolton, P. House of Commons Briefing Paper: Support for Disabled Students in Higher Education in England. Available online: <https://researchbriefings.files.parliament.uk/documents/CBP-8716/CBP-8716.pdf> (accessed on 5 April 2023).
84. Williams, M.; Pollard, E.; Langley, J. Models of Support for Students with Disabilities. Institute for Employment Studies Report. Available online: <https://webarchive.nationalarchives.gov.uk/20180103173830/http://www.hefce.ac.uk/pubs/rereports/Year/2017/modelsofsupport/> (accessed on 29 July 2023).

85. Koutsouris, G.; Stentiford, L.; Norwich, B. A critical exploration of inclusion policies of elite UK universities. *Br. Educ. Res. J.* 2022, 48, 878–895.
86. DSC. Disabled Students' Commission. Available online: <https://www.advance-he.ac.uk/equality-diversity-inclusion/disability-equality-higher-education/disabled-students-commission> (accessed on 8 August 2023).
87. Pyper, D. The Public Sector Equality Duty and Equality Impact Assessments. 2013. Available online: <https://commonslibrary.parliament.uk/research-briefings/sn06591/> (accessed on 28 August 2023).
88. EIA. Equality Impact Assessment (EIA). Available online: <https://www.advance-he.ac.uk/guidance/equality-diversity-and-inclusion/governance-and-policies/equality-impact-assessment> (accessed on 8 August 2023).
89. Evans, C.; Zhu, X. The Disability Inclusion Institutional Framework. Available online: https://inclusiveheorg.files.wordpress.com/2022/08/disability_inclusion_institutional_framework_uk_2022-1.pdf (accessed on 28 July 2023).
90. Bleuler, E. The Prognosis of Dementia Praecox: The Group of Schizophrenias. In *The Clinical Roots of the Schizophrenia Concept: Translations of Seminal European Contributions on Schizophrenia*; Cutting, J., Shepherd, M., Eds.; Cambridge University Press: Cambridge, UK, 1986.
91. Watts, N. *The Oxford Paperback Greek Dictionary*; Oxford University Press: Oxford, UK, 1997.
92. Welch, G.F.; Ockelford, A. Musical Development and Neurodiversity: Section Introduction. In *The Oxford Handbook of Early Childhood Learning and Development in Music*; Barrett, M.S., Welch, G.F., Eds.; OUP: New York, NY, USA, 2023; pp. 799–802.
93. Williams, M.; Pollard, E.; Takala, H.; Houghton, A.-M. Review of Support for Disabled Students in Higher Education in England. Available online: <https://www.officeforstudents.org.uk/media/a8152716-870b-47f2-8045-fc30e8e599e5/review-of-support-for-disabled-students-in-higher-education-in-england.pdf> (accessed on 11 October 2023).
94. Wing, L.; Gould, J. Severe impairments of social interaction and associated abnormalities in children: Epidemiology and classification. *J. Autism Dev. Disord.* 1979, 9, 11–29.
95. Wing, J.K.; Hailey, A.M. Evaluating a Community Psychiatric Service: The Camberwell Register, 1964–1971; Oxford University Press of the Nuffield Provincial Hospitals Trust: 1972. Available online: <https://www.nuffieldtrust.org.uk/sites/default/files/2017-01/evaluating-a-community-psychiatric-service-web-final.pdf> (accessed on 24 August 2023).
96. Asperger, H. 'Autistic psychopathy' in childhood. In *Autism and Asperger Syndrome*, 1st ed.; Frith, U., Ed.; Cambridge University Press: Cambridge, UK, 1991; pp. 37–92.
97. Kanner, L. Autistic disturbances of affective contact. *Nerv. Child* 1943, 2, 217–250.
98. Boucher, J. *Autism Spectrum Disorder: Characteristics, Causes and Practical Issues*, 3rd ed.; SAGE Publications Ltd.: London, UK, 2022.
99. APA. American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., Text Revision). Available online: <https://doi.org/10.1176/appi.books.9780890425787> (accessed on 8 August 2023).
100. Baron-Cohen, S.; Scott, F.J.; Allison, C.; Williams, J.; Bolton, P.; Matthews, F.E.; Brayne, C. Prevalence of autism-spectrum conditions: UK school-based population study. *Br. J. Psychiatry* 2009, 194, 500–509.
101. Baron-Cohen, S. *Mindblindness: An Essay on Autism and Theory of Mind*; The MIT Press: Cambridge, MA, USA, 1995.
102. Frith, U. (Ed.) *Autism and Asperger Syndrome*; Cambridge University Press: Cambridge, UK, 1991.
103. Wing, L. Asperger's syndrome: A clinical account. *Psychol. Med.* 1981, 11, 115–129.
104. Byrne, G.; O'Mahony, T. Acceptance and commitment therapy (ACT) for adults with intellectual disabilities and/or autism spectrum conditions (ASC): A systematic review. *J. Context. Behav. Sci.* 2020, 18, 247–255.
105. Cassidy, S.A.; Bradley, L.; Bowen, E.; Wigham, S.; Rodgers, J. Measurement properties of tools used to assess depression in adults with and without autism spectrum conditions: A systematic review. *Autism Res.*

- 2018, 11, 738–754.
106. Baron-Cohen, S.; Wheelwright, S.; Skinner, R.; Martin, J.; Clubley, E. The Autism-Spectrum Quotient (AQ): Evidence from Asperger Syndrome/High-Functioning Autism, Males and Females, Scientists and Mathematicians. *J. Autism Dev. Disord.* 2001, 31, 5–17.
 107. Constantino, J.N.; Todd, R.D. Autistic Traits in the General Population: A Twin Study. *Arch. Gen. Psychiatry* 2003, 60, 524–530.
 108. Jameel, L.B. Autistic Traits and Everyday Social Behaviour UCL. Ph.D. Thesis, University College London, London, UK, 2016.
 109. Palmer, C.J.; Paton, B.; Enticott, P.G.; Hohwy, J. 'Subtypes' in the Presentation of Autistic Traits in the General Adult Population. *J. Autism Dev. Disord.* 2015, 45, 1291–1301.
 110. Pender, R. Latent Trajectories of Autistic Traits in the General Population. UCL. Ph.D. Thesis, University College London, London, UK, 2017.
 111. Hull, L.; Mandy, W.; Lai, M.C.; Baron-Cohen, S.; Allison, C.; Smith, P.; Petrides, K.V. Development and Validation of the Camouflaging Autistic Traits Questionnaire (CAT-Q). *J. Autism. Dev. Disord.* 2019, 49, 819–833.
 112. Bergmann, T.; Sappok, T.; Diefenbacher, A.; Dames, S.; Heinrich, M.; Ziegler, M.; Dziobek, I. Music-based Autism Diagnostics (MUSAD)—A newly developed diagnostic measure for adults with intellectual developmental disabilities suspected of autism. *Res. Dev. Disabil.* 2015, 43–44, 123–135.
 113. Pellicano, E.; Dinsmore, A.; Charman, T. What should autism research focus upon? Community views and priorities from the United Kingdom. *Autism* 2014, 18, 756–770.
 114. Walker, N. *Neuroqueer Heresies: Notes on the Neurodiversity Paradigm, Autistic Empowerment, and Postnormal Possibilities*; Autonomous Press: La Vergne, TN, USA, 2021.
 115. Bury, S.M.; Hedley, D.; Uljarević, M.; Gal, E. The autism advantage at work: A critical and systematic review of current evidence. *Res. Dev. Disabil.* 2020, 105, 103750.
 116. Meilleur, A.S.; Jelenic, P.; Mottron, L. Prevalence of Clinically and Empirically Defined Talents and Strengths in Autism. *J. Autism Dev. Disord.* 2015, 45, 1354–1367.
 117. Happé, F.; Vital, P. What aspects of autism predispose to talent? *Philosophical Transactions of the Royal Society of London. Biol. Sci.* 2009, 364, 1369–1375.
 118. Chen, J.L.; Leader, G.; Sung, C.; Leahy, M. Trends in Employment for Individuals with Autism Spectrum Disorder: A Review of the Research Literature. *Rev. J. Autism Dev. Disord.* 2015, 2, 115–127.
 119. Cope, R.; Remington, A. The Strengths and Abilities of Autistic People in the Workplace. *Autism Adulthood* 2022, 4, 22–31.
 120. Buckley, E.; Pellicano, E.; Remington, A. Higher levels of autistic traits associated with lower levels of self-efficacy and wellbeing for performing arts professionals. *PLoS ONE* 2021, 16, e0246423.
 121. Buckley, E.; Pellicano, E.; Remington, A. "Knowing That I'm Not Necessarily Alone in My Struggles": UK Autistic Performing Arts Professionals' Experiences of a Mentoring Programme. *J. Autism Dev. Disord.* 2022, 52, 5451–5470.
 122. Vincent, J.; Potts, M.; Fletcher, D.; Hodges, S.; Howells, J.; Mitchell, A.; Mallon, B.; Ledger, T. '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. *Educ. Action Res.* 2017, 25, 300–315.
 123. Ward, D.; Webster, A. Understanding the Lived Experiences of University Students with Autism Spectrum Disorder (ASD): A Phenomenological Study. *Int. J. Disabil. Dev. Educ.* 2018, 65, 373–392.
 124. Witcher, S.M. *Higher Education Disability Professionals Perceptions on Transition Processes for College Freshmen with Autism Spectrum Disorders*; Eastern Michigan University: Ypsilanti, MI, USA, 2020.

125. Sullivan, M.J. What Are the Lived Experiences of University Students with Autism during Their Middle and High School Years? The University of Wisconsin-Madison: Madison, WI, USA, 2020; Available online: <https://www.proquest.com/openview/e6400ded324e6534f6f20bec2a36ee38/1?pq-origsite=gscholar&cbl=18750&diss=y> (accessed on 24 August 2023).
126. OfS. Supporting Student Mental Health through Collaboration and Evaluation. Available online: <https://www.officeforstudents.org.uk/news-blog-and-events/blog/supporting-student-mental-health-through-collaboration-and-evaluation/> (accessed on 31 July 2023).
127. Farahar, C.; Foster, A. #AutisticsInAcademia. In Lived Experiences of Ableism in Academia: Strategies for Inclusion in Higher Education; Brown, N., Ed.; Bristol University Press: Bristol, UK, 2021; Chapter 12; pp. 197–216.
128. MacLeod, A.; Allan, J.; Lewis, A.; Robertson, C. 'Here I come again': The cost of success for higher education students diagnosed with autism. *Int. J. Incl. Educ.* 2018, 22, 683–697.
129. Anderson, A.H.; Stephanson, J.; Carter, M. A systematic literature review of the experiences and supports of students with autism spectrum disorder in post-secondary education. *Res. Autism Spectr. Disord.* 2017, 39, 33–53.
130. ASAN. Benchmarks to Inclusion: Creating Core Principles to Facilitate Autistic Student Success in Higher Education. Available online: <https://autisticadvocacy.org/wp-content/uploads/2021/03/Benchmarks-paper-draft.pdf> (accessed on 10 January 2024).
131. Brownlow, C.; Martin, N.; Thompson, D.-M.; Dowe, A.; Abawi, D.; Harrison, J.; March, S. Navigating University: The Design and Evaluation of a Holistic Support Programme for Autistic Students in Higher Education. *Educ. Sci.* 2023, 13, 521.

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