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INVITED COMMENTARY

A response to the terms in Shah et al's 'Neurodevelopmental disorders and neurodiversity: definition of terms from Scotland's National Autism Implementation Team'†

Nick Chown, Jennifer Layton Annable, Luke Beardon and Nik Howard

The Scottish National Autism Implementation Team's neurodiversity terms are a valiant, but flawed, attempt to reconcile different worldviews on neurodiversity. The aim of harmonising different perspectives is laudable; however, we disagree with the use of 'societal norms' in the authors' framework of terms and challenge some of their proposed definitions.

Keywords
Autism worldview dilemma; autistic spectrum disorders; neurodiversity; neurodiversity-affirmative environments; societal norms.

The Scottish National Autism Implementation Team (SNAIT)'s descriptive model of neurodiversity terms, in their editorial in this journal,[1] that are intended to incorporate different viewpoints on neurodiversity is a valiant, albeit in the final analysis flawed, attempt to reconcile different worldviews on neurodiversity including autism and attention-deficit hyperactivity disorder (ADHD). We agree that the identification of autism spectrum disorder (ASD/ADHD) in daily psychiatric practice is important as it 'can change how the person and their psychopathology are understood, and help the clinician provide more appropriate help'.[1] As the authors rightly state, 'not recognising ASD/ADHD increases the risks of misunderstanding, misdiagnosis, suboptimal help and potentially poorer outcomes'.[1] The aim of harmonising different perspectives on ADHD/ASD is laudable; however, we fundamentally disagree with the use of 'societal norms' as a key aspect of the authors' framework and challenge some of their proposed definitions.

It interests us in particular that the authors write that 'societal norms may disadvantage the individual [so that interventions for neurodiversity should be for] society to better understand and provide an appropriate environment for the neurodivergent'.[1] We agree with them that the onus is on society to ensure a neurodiversity-affirmative environment, changing societal norms that may disadvantage neurodivergent individuals. In their framework SNAIT correctly state that societal norms may be narrow, variable, arbitrary and influenced by context and culture. We are reminded that not so long ago many societies regarded homosexuality as pathological, hence its inclusion in earlier versions of the DSM and ICD. Homosexuality was subsequently removed from the manuals because of change in societal norms whereby it was no longer considered something that should be pathologised but is an aspect of normal human difference. This demonstrates how dangerous it is to pathologise on the basis of societal norms which, as the authors acknowledge, can be arbitrary and variable.

There is also a similarity here with the concept of 'social validity' as used in radical behaviourism and applied behaviour analysis (ABA).[2] In this latter context, traits that are considered socially invalid are to be eradicated. In earlier decades, ABA interventions were used to eradicate 'gay behaviours'. This no longer happens but the mere fact that such interventions were in use when gay people were pathologised demonstrates the need to acknowledge that concepts of societal norm/social validity should never be used to pathologise behaviour. 'Societal norms' are only as good or as bad as the society in which they are embedded.

The authors write that 'diagnosis is defined when traits "outside the limits of normal variation" cause significant functional impairment'.[1] This may well be appropriate in the case of episodic disorders, and trait conditions such as personality disorders, but we argue it is entirely inappropriate in the case of neurodivergence. As the authors themselves point out, diagnosis/identification of autism, ADHD and other aspects of neurodivergence is essential if a clinician is to provide effective help for such individuals should they develop mental health problems. (It often needs to be stated that neurodivergence is not a mental health matter. There is a large cohort of autistic people who clinicians will never need to see because they do not develop mental health problems.) This is because neurodivergence is likely to have an impact on an individual's presentation including their mental health presentation. Also, interventions appropriate for a non-autistic individual may be ineffective, or even harmful, for a neurodivergent person. Neurodivergent individuals will also benefit from an awareness and understanding of their neurodivergence as it will help them to survive, and hopefully thrive, in our neurotypical world. Therefore, in our view, and some of us are neurodivergent (including the lead author) it is important for neurodivergence to be identified even if it does not significantly affect day-to-day existence. Diagnosis is not always called for, but identification is.

Comments on Shah et al's definitions

Neurocognitive functions and neurodevelopment

We agree with these definitions.

Neurodiversity

This term covers everyone including those who are neurotypical. However, the author's phraseology that 'Neurodiversity is the statistical normal range of function in a population at a particular age'[1] is potentially confusing. This is because the 'normal' associated with the normal distribution is not the 'normal' in the sense of the 'range [of neurocognitive functions] that society regards as being *normal*

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for a given age' (our italics). We prefer to avoid defining neurodiversity by reference to statistical normality.

Societal norms

Although we agree with Shah et al that societal norms for neurocognitive functions is the 'range that society regards as being normal for a given age',[1] it is the very fact that such norms are 'variable, arbitrary and influenced by context and culture' that makes them so moot/questionable. As they correctly point out, that makes societal norms unsuitable for a framework of definitions for neurodiversity. Societal norms can appear 'normal' but be oppressive. Tanna writes movingly about developing 'more just communities that are not based on the exclusion of those who challenge the oppressive nature of societal norms or simply expose the privilege of those who make such norms seem "normal".'[3]

Neurotypical

The authors write that neurotypicals are those 'whose selective neurocognitive functions fall within prevalent societal norms'.[1] This is a misuse of the concept of societal norms, indeed, the authors acknowledge that societal norms change. Although the diagnosis of autism and other neurodevelopmental conditions is based on expert clinical opinion that develops over time, neurotypicality does not change. Neurotypicality is generally defined as the absence of cognitive differences seen in various neurodevelopmental conditions. For example, many autistic autism researchers regard autism as involving hyperfocus on a narrow range of interests (monotropism) as opposed to a much wider range of interests on which there is less focus (polytropism). The diagnostic criteria for neurodivergent conditions often change. These criteria are based on behaviours, not cognitive differences. The boundary of neurotypicality does not change because neurotypicality is the absence of cognitive difference such as monotropism.

Neurodivergent

The authors' definition of neurodivergent refers to the concept of societal norms with 'individuals whose selective neurocognitive functions/neurodevelopmental differences fall outside prevalent societal norms'[1] being classed as neurodivergent. This acknowledges the authors' apparent perspective that an individual considered neurodivergent at one point in time may be considered neurotypical at another point. Developing societal norms do not affect whether an individual is or is not neurodivergent. Some argue that psychiatric conditions are a form of acquired neurodivergence. Although opinions differ, most proponents of the neurodiversity paradigm regard neurodivergence as the existence of some form of cognitive difference (e.g. dyslexia, dyspraxia) from birth.

Neurodevelopmental disorder or condition

The SNAIT associate a neurodevelopmental disorder or condition with 'significant functional impairment'.[1] We repeat our view that an individual is either neurodivergent or not and that identification of neurodivergence (one or more of ADHD, autism, dyslexia, dyspraxia, etc.) is important for a neurodivergent individual to better understand themselves irrespective of whether or not their condition involves significant functional impairment.

Various ethico-political complications can arise here regarding what constitutes 'significant functional impairment' and, in particular, who makes decisions about this. There are potential dangers relating to the power and authority tightly coiled within any definition of 'societal norms'.

The nature of 'societal norms' naturally and inevitably reflects the majority group who enjoy the privilege of making such distinctions. If the boundaries between neurotypicality and neurodivergence are determined by the majority group there is no hope of ever moving them to include groups marginalised because of their neurodivergent differences. Individuals and communities must be allowed to enjoy full inclusive status within the natural spectrum of humanity, free from the constraints of being considered 'abnormal' or 'outside', while also holding a neurodivergent identity. A framework such as that proposed by the SNAIT will delay achievement of full inclusive status, prolonging negative outcomes for neurodivergent people. As history has illustrated many times, falling outside 'societal norms' can prove, literally, fatal.

Risk of functional impairment

The authors consider that risk of functional impairment 'increases as the neurocognitive function becomes more extreme, and if the environment becomes increasingly unsupportive'.[1] The reference to function becoming more extreme appears to relate to the issue of 'severity' of a neurodivergent condition, for example as in the DSM-5 criteria for autism. Beardon[4] has shown that the use of the concept of 'severity' in relation to autism is inappropriate. An autistic person may appear 'less' autistic in an autism-friendly environment and 'more' autistic in an autism-unfriendly environment when they are equally autistic in both environments; it is simply a perception that they are more or less autistic. (It is possible that in an autistic environment, such as the Autscape conference by and for autistic people, an autistic person may appear *more* autistic than usual because they do not have to mask their autism.) This view is reflected in Beardon's equation: AUTISM + ENVIRONMENT = OUTCOME, which emphasises the importance of the environment.

Neurodevelopmental differences

This term is used by the SNAIT to 'describe various neurotypes without labelling these as disordered, divergent or functionally impaired'.[1] We ask: when does a difference become a disorder, divergence or functional impairment?. The adoption in the authors' framework of the terms 'neurodevelopmental disorder or condition' and 'neurodevelopmental differences', without explaining where the boundaries between the two definitions lie, is, in our view, an unsatisfactory attempt to reconcile different worldviews on autism. For instance, those coming from the medical viewpoint who regard autism as a pathology would presumably choose 'neurodevelopmental disorder or condition' whereas proponents of the neurodiversity paradigm would choose 'neurodevelopmental differences'. The SNAIT Figure 1 model – which proposes a bell curve of neurodivergence – may have the negative effect of perpetuating the myth of 'good' and 'bad' neurodivergence. This myth and how it lands is already associated with the inclusion or lack of other characteristics within an individual that cause marginalisation or stigma. As such, a White man with neurodivergent traits may not be pathologised, but someone of non-European heritage may be.

Discussion

Fundamentally, there are unreconcilable differences between many of the perspectives on neurodiversity. The first author (N.C.) uses the term 'autism worldview dilemma' where such diametrically opposed positions as that of radical behaviourism (which seeks to eradicate autistic behaviours) and the neurodiversity paradigm (under which autism is regarded as an aspect of normal human cognitive difference) result in radically different attitudes towards autism. The authors' framework[1] does nothing to reconcile different perspectives on autism and other aspects of neurodiversity as it claims to. More importantly, embedding the concept of 'societal

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norms', which the authors accept are variable, arbitrary and influenced by context and culture, can lead to pathologisation of difference as happened with homosexuality.

We agree with the SNAIT that it is essential for psychologists and psychiatrists to know that they are working with a neurodivergent client if they are to develop a sound therapeutic relationship with the client and for their practice with that client to be effective. It is, therefore, unhelpful that the DSM-5 and ICD-11 criteria require significant impairment for diagnosis, as lack of a diagnosis or identification will affect both the client's understanding of themselves and the clinician's ability to understand the client. Diagnostic practice based on the arbitrary concept of societal norms by definition leaves neurodivergent people at the whims of society. The SNAIT have extended the debate about the competing medical and social views of autism to wider neurodiversity. In aiming to provide definitions 'harmonising apparently discordant perspectives'[1] on neurodiversity the SNAIT may be attempting to reconcile the irreconcilable. We advocate a neurodiversity-affirmative approach[5] where neurodivergence is regarded as natural human difference, while acknowledging that some individuals require support and that neurodivergence is linked with a greater likelihood of associated health concerns. There is clearly a bio-medical dimension to autism – alongside the cognitive and sensory dimensions – which requires a humane and empathic response from society. A virtue of the SNAIT proposals is the implied move in the direction of a more encompassing framework aiming to incorporate these social and bio-medical impacts satisfactorily – as is observable in the World Health Organization's biopsychosocial model which is used clinically.

Neurodivergence is core to psychiatric work. It has been reported that autistic people represent 18.9% of people seen in adult out-patient psychiatry (and that it may be as many as one in every three patients). Shaw et al[5] write that '(this) autism prevalence highlights the need for better recognition of autism in daily psychiatric practice'. We would add that there is a need for better recognition of neurodivergence in psychiatric practice.

Nick Chown, London South Bank University, UK; **Jennifer Layton Annable**, Independent researcher, UK; **Luke Beardon**, Sheffield Hallam University, UK; **Nik Howard**, Independent researcher, UK

Correspondence: Nick Chown. Email: npchown@gmail.com

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Declaration of interest

None.

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