

## **Neurodiversity Approaches and Autism (ASD): A Scoping Review**

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### **Abstract**

Neurodiversity is a movement that wants to make us think differently about autism. It disagrees with the idea that autism is a disease and instead sees it as a neurological difference: a person who thinks and feels the world in a different way. This article talks about the ideas behind the neurodiversity approaches to autism spectrum disorder (ASD), as well as the conflicts that have come up around these approaches. For example, some people say that neurodiversity approaches only look at society and don't consider the role of individual traits in ASD. This study agrees with other research that both individual and social factors play a role in ASD. This article will be mostly about how to deal with neurodiversity. But even this use of "neurodiversity" is hard for ASD to define.

**Keywords:** Autism, ASD, Neurodiversity, Approaches



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### **INTRODUCTION**

Neurodiversity is a way of thinking that looks at differences in how the brain works, like those seen in autism spectrum disorder (ASD), as normal differences in how the brain develops rather than as diseases. A scoping review on neurodiversity and autism would look at the research that has been done on this method and what it might mean for understanding and helping people with ASD. The neurodiversity methods are a different way to look at things than the medical model. Judy Singer, who came up with the word "neurodiversity" in 2016, suggested using and changing the metaphor of "biodiversity." Why not say that, just as biodiversity is important for the stability of ecosystems, neurodiversity may be important for the stability of cultures? Why not use it as a strategy to say that fostering neurodiversity gives society a pool of people who may come into their own in unexpected ways? These few words and a similar passage in Blume's 1998 book were the inspiration for the neurodiversity approaches that are now being used by developmental researchers as an alternative way to explain how some people don't grow normally. These methods to neurodiversity aren't just for people with autism. They can be used with many different kinds of disabled minds and brains. This article will be mostly about how to deal with neurodiversity. But it's hard to even say what this use of "neurodiversity" means. While Walker offers definitions of both the approach/paradigm and the movement, so do other researchers and advocates (e.g., Bailin, 2019; Bolte et al., 2021; Chapman, 2020a; Dwyer, 2019; Robison, 2013; Singer, n.d.; Forest-Vivian et al., n.d.), and these definitions differ from one another in important ways, such as their relationship to the social model of disability, which will be discussed more thoroughly later in this article.

### **A scoping study on neurodiversity and autism could look at some of the following:**

1. Definition and Scope of Neurodiversity: The study could look at how neurodiversity has been defined and used in research and practise, as well as how it has been defined and used in different ways.

2. Perspectives of People with ASD: The review could look at how people with ASD see the neurodiversity method and how it may help or hurt their lives and identities.
3. Implications for Diagnosis and Evaluation: The review could look at how the neurodiversity approach might change how ASD is diagnosed and evaluated, including how it might challenge standard diagnostic criteria and lead to the creation of new evaluation tools.
4. Implications for Interventions and Support: The review could look at how the neurodiversity method can help with interventions and support for people with ASD, such as how it can encourage self-advocacy, empowerment, and the creation of individualised supports.
5. Critiques and Challenges: The study could also look at the criticisms and problems with the neurodiversity approach, such as worries about medicalization, stigma, and the possibility that people who don't agree with the neurodiversity movement will be left out.

### **Review of the Literature**

Gryphon and Pollak (2009) and King et al. (2003) say that learning about neurodiversity can be a turning point towards a more complete understanding of autism. Many parents feel stronger because their child has a disability (Cappe et al., 2011; Meadan et al., 2010; Russell & Norwich, in press), and they may join the movement (Bagatell, 2010; Langan, 2011; Ortega, 2009; Savarese et al., 2010b). Autism self-advocates (Bagatell, 2010; Jones & Meldal, 2001; Punshon et al., 2009) and family friends (Savarese et al., 2010b) may not be less aware of the bad things about autism even if they know more about the good things. The current study has three main goals. It looks at how autistic people, parents of autistic people (some of whom are autistic themselves), relatives and friends of 10 people on the spectrum, and people with no known connection to autism think about autism and neurodiversity.

### **Parental Engagement with Autism Spectrum Disorder as a Social Model**

Many of the differences between neurodiversity methods and the social model are about parenting, such as what good goals are and how to help. So, we wanted to find out if some parenting practises are supported whether or not people are aware of neurodiversity, which would show overlap between deficit- and difference-oriented views of autism, and if some parenting practises are chosen more or less depending on whether or not people are aware of neurodiversity. Since autistic people, parents of autistic people, and people who support neurodiversity often celebrate autism, but also know how important adaptive skills are for autistic people, we expected these groups to be more supportive of parenting practises that focus on adapting to their child or understanding autism as part of their child's identity, but no less supportive of adaptive skills than their counterparts. Because autistic people and people who support neurodiversity don't usually want to get rid of autism, we thought they would be less interested than other people in parenting practises that try to find a cause and fix for autism and services that help autistic people look more like other people.

### **Early Intervention, Neurodiversity, and the Social Model**

One of the most important questions about neurodiversity methods is how they relate to the "strong" social model of disability, which was created by people with physical disabilities in the UK (see Oliver, 1990; UPIAS, 1975). The strong social model is basically the opposite of the medical model. Instead of saying that pathology within the individual is the only cause of disability, the social model says that disability comes from society's responses to individuals' "impairments." For example, a physically disabled person who can't get into a building

because there aren't any wheelchair ramps is disabled by the building's design, not by their body. But the social plan has been called into question. Shakespeare and Watson (2001) call it an inflexible ideology and point out that it leads to a result that seems crazy: if disability is caused by society and not by biology, then there is no need to try to stop injuries that make people disabled. When the social model is used to talk about neurodevelopmental disorders like autism, its flaws become clear because many autistic people might still face hurdles even if society did a better job of including autistic people (Ballou, 2018). For example, a person who has trouble with executive function might still have trouble managing their time even if they have schedule apps and other help. When Singer used the word "neurodiversity" in her thesis in 2016, she was not just reacting against the medical model. She also disagreed with how the social model ignored biology. She said, "We need to go beyond the construction of binary oppositions like 'Medical Model vs. Social Model'" (locs. 555–557). The idea behind her neurodiversity method was to find a kind of middle ground.

But, as we've already said, others have come up with their own ideas about neurodiversity, so Singer's method is just one of many. Some contemporary views of the neurodiversity approaches indicate that they are aligned with the social model (e.g., Bolte et al., 2021; Krcek, 2013; Labour Party Autism/Neurodiversity Manifesto Steering Group, 2018; Forest-Vivian et al., n.d.), although other authors question this assertion (e.g., Bailin, 2019; Ballou, 2018; Dwyer, 2019; Kapp, 2013; Singer, n.d.). Both the social model and the neurodiversity method reject the dominant medical model, so theoretical debates between them may seem complicated and technical. But it's possible that confusion about these theoretical points has led to heated discussions about the neurodiversity approaches. By saying that all disability-related barriers are made by society, the strong social model (Shakespeare & Watson, 2001) rejects interventions that try to help disabled people or teach them skills. This is a controversial point of view, and the idea that the social model and neurodiversity methods are similar has probably made people more against neurodiversity.

Some people who don't agree with the neurodiversity methods say that they are even more extreme. People who are against neurodiversity approaches often say that they don't want people to have access to supports or that they don't think autism is a disability. However, most neurodiversity advocates don't take these views (den Houting, 2019). One common argument against neurodiversity approaches is that they don't work for autistic people with intellectual disabilities, who are sometimes called "low-functioning" (a term that many neurodiversity advocates don't like because it stigmatises people with intellectual disabilities and downplays the challenges of other autistics; see, for example, Brechin, 2018; Flynn, 2018; Sequenzia, n.d.). For example, Jaarsma and Welin (2012) say that neurodiversity approaches are not reasonable when applied to so-called "low-functioning" autistics who might need "care." They say that neurodiversity approaches say autism "is not to be treated like a disability or a handicap but rather as a natural variation" (p. 23). Even though Jaarsma and Welin misrepresent the goals of neurodiversity supporters in this article (den Houting, 2019), parents have said similar things about the need for treatment (for example, Maurice in Celiberti, 2015). Some parents of autistic people with very serious problems think that neurodiversity methods are only for "high-functioning" autistic people and don't apply to their families' needs (Costandi, 2019; Lutz, 2015).

Some people who support neurodiversity may be doing more harm than good by giving more extreme ideas about neurodiversity and spending too much time and energy criticising parents (Mitchell, 2019; Singer, n.d.). Even some people with autism have taken issue with what they see as the extremism of the neurodiversity movement, which they think is against

treatments (Clements, 2017). Dekker (2020) says that the neurodivergent community he started in the 1990s respected people on the autism spectrum who had unpopular opinions, even to the point of supporting cures. However, Dwyer et al. (2021), Hiari (2018), and Mitchell (2019) say that people with unpopular opinions are often attacked and kicked out of neurodivergent communities today.

## **RESEARCH METHODS**

### **Participants**

The 10 people who filled out the poll are from many different backgrounds. They ranged in age from 8 to 18, with 12 being the average. No matter what diagnosis they had, more subjects were male: 36.2 percent were women and 63.8 percent were men.

### **Qualitative questions and coding**

Participants were asked to give their own definitions of neurodiversity, even if they had heard of it before. "What is the neurodiversity approach in your words?" "Neurodiversity definitions were put into groups that didn't overlap, which showed how they felt. "Positive/neutral valence" answers didn't say anything bad about or criticize the neurodiversity approaches, and they might have talked about the approaches' strengths. "Mixed valence" answers gave both a neutral definition and a criticism, or they talked about both the approaches' strengths and flaws. "Negative valence" answers only talked about the bad things about the methods. Twelve of the answers to each question were double-coded by the first and second writers. This is 20% of the sample. The first author was the one who coded the rest of the answers. Cohen's kappa = 1.0 on the classification of the valence of neurodiversity approaches definitions. All of the meanings agreed on how to classify the valence of neurodiversity.

### **Results**

In this part, we use the term "primary" variables to describe the independent variables that we use to test our hypotheses. Due to the small number of studies done, only p values under .05 were considered statistically significant, and Bonferroni corrections were made for all post-hoc comparisons. So that demographic factors could be used as covariates in all analyses, the general linear model was used for categorical outcome variables and the binomial logistic regression analysis was used for continuous outcome variables. We used a binomial logistic regression to look at how people felt about neurodiversity based on whether or not their definitions of neurodiversity included criticism of it. We focused on people who said they knew about neurodiversity. The model as a whole wasn't important ( $p=.095$ ). In fact, most of the people who answered did not give a critical description of neurodiversity. For the people in this study, being aware of neurodiversity was usually linked to not being critical of the methods.

## **RESEARCH RESULT AND DISCUSSION**

To look at how people feel badly about autism, a univariate analysis was done with the same independent factors as above and the number of people who said they felt badly about autism as the dependent variable. There were no major effects or interactions seen. So, being aware of neurodiversity and identifying as autistic were linked to good feelings about autism, but not to negative feelings. Having an autistic child had nothing to do with whether I felt good or bad about autism. Self-identifying as autistic and being aware of neurodiversity were both linked to having more positive feelings about autism, but not less negative feelings. This



is in line with a nuanced view of neurodiversity approaches, in which recognising the strengths of autism don't make it harder to understand its problems.

### **Significance of Neurodiversity Approaches**

So far, we haven't talked about who exactly the neurodiversity methods should be used with. In reality, the word "neurodiversity" just means that everyone's brains and minds are different. However, the neurodiversity approaches seem to be aimed at "neurodivergent" people, who have brains that are different in a way that is linked to disability. But it doesn't make sense to use the neurodiversity methods on everyone who is neurodiverse. For example, someone with a cancerous brain tumour could be called neurodiverse, but it would make no sense to treat their tumour in any way other than the medical model. Still, the neurodiversity methods have been used for a lot more than just autism. Armstrong (2010), for example, says that the neurodiversity methods can help people with autism, ADHD, dyslexia, depression, anxiety, intellectual disabilities, and schizophrenia learn better. Armstrong's case is based on the idea that focusing on the good things about neural differences and trying to make the world around students fit their needs ("niche construction") can be more helpful in promoting student well-being than focusing on what's wrong. Other writers use the approaches of neurodiversity with still other groups of people. For example, Constantino (2018) talks about how the ideas of the neurodiversity movement could be used to help people who stutter. She points out that the goal of fluency, which is a normalization-based approach to intervention, could sometimes make it harder for people to communicate in a useful way. But the neurodiversity methods are questioned when it comes to how far they go. Armstrong (2010) says that anxiety is covered by the methods, but Holman (2017) and Forest-Vivian et al. (n.d.) say that some autistic people try to get rid of co-occurring anxiety by using a medical approach. Clearly, there needs to be a way to decide whether a neurodiversity approach or a medical model approach should be used in a given scenario (Chapman, 2019a).

### **CONCLUSION**

In short, a scoping study on neurodiversity and autism could tell us about the current state of research and practise on this topic, as well as what it might mean for how we understand and help people with ASD. By looking at different points of view and areas of interest, such a review could help us understand the role of neurodiversity in the autism field in a more nuanced and complete way. This article has also talked about how neurodiversity approaches value neurological differences in a positive way and how this affects how language is used. It argues that using positive or neutral language doesn't have to stop disability from being recognised or help from being given. Also, the range of neurodiversity methods was talked about. The decision of the person has a lot to do with whether a neurological disability should be treated with a neurodiversity approach or a medical model approach. But if there is a real threat to safety, it might be necessary to make an exception. Also, younger people and those who don't talk much might not be able to make an informed choice about their identity, but it was said that many parts of neurodiversity approaches could still help them. In some situations, it might even be possible to use parts of both the neurodiversity model and the medical model. This neurodiversity method would see disability as a result of the interaction between the person and their environment. It would also allow interventions that could either change the person in limited ways (like teaching them skills or giving them medicine to help them deal with problems) or change their environment and society. This neurodiversity method would not allow interventions that try to make disabled people normal or cure them.

## Recommendations

Autism (ASD) and the neurodiversity approaches offer researchers and people who work with people with autism valuable possibilities. A balanced view of neurodiversity provides key concepts that can guide the creation, delivery, and evaluation of early interventions. Future recommendations for research and practice include: Partnerships with autistic people, along with careers and other stakeholders, on intervention research steering and advisory boards and throughout engagement, involvement, and co-production processes; Reflection by intervention researchers and practitioners on how their intervention practices align with a neurodiversity framework and the views of autistic people, especially around intervention targets. With close attention to the needs, preferences, and priorities of autistic people, we can move past historical differences, misunderstandings, and wrongdoings to a place where we value the expertise of autistic people, embrace practices that respect and accept different neurotypes, and make sure our interventions focus on the things that matter most to the recipients.

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