



1

Introduction to Neurodiversity -Why is it Important to Understand and Support Neurodivergent **Pupils in School?**

Chapter Aims

- To gain an understanding of the term neurodiversity.
- To understand the model of difference, rather than deficit, and why this is important in education.
- To develop positive attitudes towards difference, and how this might apply in school settings.

- To begin to gain an understanding of the key issues in safeguarding neurodivergent pupils, and how this links with your own placement settings.
- To gain an overview of some of the labels that are used to identify neurodiversity/neurodivergent pupils.

Links to the Core Content Framework (CCF)

High Expectations

- Learn that a culture of mutual trust and respect supports effective relationships.
- Learn how to use intentional and consistent language that promotes challenge and aspiration.

Adaptive Teaching

• *Learn that* seeking to understand pupils' differences, including their different levels of prior knowledge and potential barriers to learning, is an essential part of teaching.

Professional Behaviours

- *Learn that* reflective practice, supported by feedback from, and observation of, experienced colleagues, professional debate, and learning from educational research, is also likely to support improvement.
- Learn how to engage critically with research and use evidence to critique practice.

What is Neurodiversity?

This chapter is going to consider a model you may not be familiar with, and will give you an understanding of the terminology and paradigm shift in thinking towards pupils with Special Educational Needs and Disabilities (SEND).

We all acknowledge our similarities as humans: how we look, how we act, how we live. We also acknowledge the differences that we see: hair colour, height, weight, even socio-economic backgrounds – where we live, what job we do, what possessions we own.

But what about the differences we can't see? What makes us unique in our behaviour, how we process things, how we learn, how we react and how we sense things? We could argue that everyone is **neurodivergent** in their own way. Everyone has individual differences in how they process information and how they respond to this, in the same way that everyone has unique fingerprints. In schools, the education model is designed to accommodate the broadest category of differences, that of the neurotypical learner, which accommodates 60–85% of the population.

The term neurodiversity was first used in the 1990s and means:

Neuro (neurological) - meaning - the nervous system, the brain

Diverse – meaning – differing from one another.

Judy Singer adopted the phrase in 1999 when discussing autism, and from then it has grown in usage. Singer (2017) wrote about neurodiversity in an academic context, in which she explored the difficulties that autistic communities faced. It has now been extended to many forms of the **neurodivergent** brain and includes people with Attention Deficit Hyperactivity Disorder (ADHD), dyslexia and other diagnoses, as you will see later in the chapter.

Different studies indicate that in the UK approximately between 15–20% of people are neurodivergent. The rest of the population is classed as **neurotypical**.

Now think how these figures may equate to your class, and what the impact will be for you as a teacher.

Depending on the study conducted, it is thought that up to 30–40% of the world could be **neurodiverse** in some form. These figures don't include consideration of those with extreme forms of intelligence and giftedness such as savant syndrome and hyperthymesia (extensive autobiographical memory) which, it could also be argued, is a form of neurodiversity.

Let's unpack this further.

The common view taken within the education system is one of a **medical model**, in which everyone who fits into the majority in the way they learn is seen as being neurotypical. There is a 'right' way of functioning and processing, which is the model that the education system is built around, and anyone who processes and functions differently has something wrong with them; they have a 'deficit' or 'impairment', and often the phrase used to identify this is a 'disorder'. Someone with a cognitive difference may be labelled as 'impaired' and is believed to fall short of a neurotypical cognitive type. The medical model 'aspires towards normalization, symptom reduction, and elimination of conditions based in deficits to cause functional impairment in life activities' (Kapp, Gillespie-Lynch, Sherman and Hutman, 2013). The medical model works to alleviate the 'symptoms' of the condition and to omit unwanted behaviours that are identified by the general neurotypical population.

Neurodiversity is a concept which challenges this model, and addresses the view that there is a right or wrong way to function and process. The medical model is a social construct, and the neurodiversity paradigm is here to deconstruct and challenge this viewpoint. Slorach (2016) considers that the differences in **neurocognitive** functioning are a natural human variation and should be recognised as such. It is important to stress that neurological difference is common, as with other human

characteristics, and it is normal to have variance in the population. Rolfe (2019) argues that the medical model takes the viewpoint that any problems lie within the child and the impairment that they have.

The **social model** of need is a contrast to the medical model. It takes the stance of a collective responsibility by society to address the difficulties that are a result of how society is formed (Rolfe, 2019). Barriers are imposed, which in turn cause the 'impairment' to become a disability.

The third model is that of the **biopsychosocial model**. This model draws upon biological and social factors, incorporating both and not isolating either of the models.

The neurodiversity model challenges all of these viewpoints, and argues that the 'difference' (for example autism) is not directly a disability itself. Rather, it is the way in which those who are neurodivergent do not conform to the social context and interactions valued by a neurotypical society, resulting in their being discriminated against and becoming disadvantaged.

The neurodiversity paradigm argues against these traditional models and considers that all ways of functioning and processing are equal to any other, they are just different – which is normal, just like other human characteristics. Did you know that 70–80% of the world population have brown eyes, 8–10% have blue, 5% hazel, 5% amber, 3% grey, 2% green, 1% red, 1% heterochromia (different coloured eyes) (WorldAtlas, 2022)? We don't think of one eye colour being right or those less common eye colours as wrong and in need of fixing.

Just as our eyes are different – along with skin colour, hair colour, shape, height, fingerprints – our brains are different, too. Our brains differ in how they function and send signals creating pathways and schemas. We are all physically unique. With this, there are challenges to those who do not function in a neurotypical manner due to the way in which structures and 'norms' in everyday life are built to fit the majority in a neurotypical society.

It is important to remember that the neurodiversity paradigm is not aiming to wipe out diagnosis or labels, or to belittle them and the challenges that individuals face. The medical model uses identifying labels for difference and this can be helpful in identifying supporting strategies and adjustments. It is about considering difference and building on awareness to a level of acceptance within society. It is about accepting the complexity of the human brain, its functioning and processing, and the impact of this on individuals. It is about looking at the positive attributes that individuals hold, and building on these, rather than focussing on the deficits of what an individual can't do. Although neurological differences can indicate disabilities, they do not indicate flaws. Neurodivergent people are not broken or incomplete, they are as human as anyone else.

The neurodiversity model makes the shift from considering the language and terminology we use today. Instead of thinking 'disorders' or having a 'condition' we need to go a step further and understand that we have different types of brain functioning or processing. For example, the neurodivergent brain works differently to the neurotypical brain, similarly to how a computer may use a Microsoft or Apple processing system to get to the outcome needed. Or the difference between an Xbox or Playstation and the need for different input (software) to ensure it enables the required output.

This then has an impact on what we do as practitioners in the classroom; how do we accommodate for the different learners in our classrooms, and their differing ways in processing information and stimuli? What can we do as teachers to ensure access to education and progress for neurodivergent pupils is in line with neurotypical pupils, and that their strengths and differences are recognised?

How is this Different to SEND?

So, how is this different to talking and thinking about Special Educational Needs and Disabilities (SEND) pupils in school?

The language of SEND is still around in school. The term will still be used and is a way of identifying neurodivergent pupils. It is the identification of pupils who need additional support. However, if we shift our thinking and terminology we are moving to a model which focuses on difference rather than deficit, and promotes acceptance of difference and being neurodivergent.

By taking a neurodiversity approach to SEND, we are viewing a normal set of differences which should be respected, as all other differences are when we work with our pupils in school. It is a way of being who we are.

When we start to consider the pupils we work with, we need to recognise everyone's differences, and what works for one individual, won't necessarily work for another – even if they have been given a label!

Co-occurrence

There are arguments for and against the use of labels when identifying the needs or differences in people. Some would argue that labelling a difference draws further attention to it, or can be seen with a negative viewpoint. Others would argue that by identifying a difference, then Education specific and focused strategies that are known to support people can be used.

Often there is the co-occurrence of more than one type of condition or label present; for example, an autistic person may also have General Anxiety Disorder (GAD), dyslexia and/or sensory processing difficulties; 60% of autistic people will also have ADHD.

This makes the neurodivergent brain even more individual!

Developing Positive Attitudes Towards Neurodiversity in Education and Society

You may have seen in the media a shift from 'autism **awareness** day/week/month' to 'autism **acceptance** day/week/month'. This is really important moving forward. We need to change our use of language; we don't just want society to be aware of difference, we want society to be accepting of difference. This is vital. We can see this in other areas such as race and gender, and so why not neurodiversity? Everyone should have the right to be treated with respect and dignity and to have their differences embraced. This is why neurodiversity is so important when we consider the SEND model in schools.

We need to further address what we do as educators; not just supporting and expecting neurodivergent people to change and adapt to a neurotypical world, but to consider educators behaving differently themselves. Asking only neurodivergent people to change, to be more sociable, to fit in with a set of norms, is like asking those in other minority groups to dress differently to be more accepted. It is very prejudicial and discriminatory.

We also need to understand that there can still be a stigma attached to disability and, in particular, some ethnic minority communities may be reluctant to seek support for a child because of the stigma that they may receive. It is important as a teacher to engage with families and to find a way to support them and pupils, and to break down the barriers and ensure that every pupil receives the education that they are entitled to. Many more pupils from ethnic backgrounds are being identified as having autism, ADHD and Oppositional Defiance Disorder (ODD).

We are also beginning to understand the underdiagnosis of women and girls, in particular in relation to autism and ADHD. Many women are discovering in later life that their own difficulties they have faced are linked with the traits and identification of autism and ADHD. Currently, more research into the development of identifying tools and criteria for girls is being carried out, and is an important area to keep abreast of.

Use of Language: Identity First Versus Person First Language

There is debate in the neurodivergent community on whether identity first language or person first language is the most appropriate to use. It is something that is incredibly important to an individual. More commonly in the autistic community, for example, it is preferred if identity first language is used: autistic person, they are autistic, I am autistic. Autism is seen as an inherent part of the person's identity, not separate. However, many parents and professionals prefer to use person first terminology such as person with autism, so that the identifier is the person first to demonstrate that the condition does not define them. It is a challenging argument, and can be applied to other **neurodivergencies** too. Autistic people view the strengths, challenges and differences as central to their identity.

It is really important that we all ensure that we understand or know how the young person wishes to be addressed. We can listen to how they address themselves, or ask them how they would like to be addressed, rather than make assumptions.

Safeguarding Neurodivergent Pupils

As you approach the start of your course, you will be given training on safeguarding. This will come from your training centre and will cover aspects of general safeguarding, including what safeguarding is and the key areas you need to know about. You will then, in addition to this, receive safeguarding training at school. The training you need will be at level 2; this is the requirement for teachers and you will be updated annually with school-based training or online training throughout your career. It is really important that your school-based training covers the reporting process for your school. This will be different in individual schools and may be recorded on a coloured form, or using an online system.

Any concerns must be reported to your 'Designated Safeguarding Lead' at your school. They are your point of contact. This may be one person, such as a Head-teacher, or there may be a team which could include a Deputy Headteacher or Special Educational Needs Co-ordinator (SENCo).

You will need to read *Keeping Children Safe in Education Part One*, and will be asked to sign to say you have read this by your training provider. Ensure that you have read the most up-to-date document! It outlines how ALL staff are responsible for safeguarding. Please read this now if you haven't already done so. The link can be found in the further reading section at the end of the chapter.

Furthermore, neurodivergent pupils may have barriers to learning and be more vulnerable to safeguarding concerns. Pupils may struggle in making and developing friendships, or take on behaviours to impress their peers. They may be more vulnerable to bullying or child-on-child abuse. Pupils who are neurodivergent, have SEND needs, have adverse trauma, or are LGBTQ+ are all statistically more likely to have safeguarding concerns.

It is important to note that pupils with communication difficulties, such as Autism or ADHD, may struggle with telling you information or expressing their needs. It is necessary to tailor questions for them, but not to change the safeguarding process; for example, do not ask leading questions, just write down what has been said.

Over time, you will become more knowledgeable with safeguarding. The important thing to remember is; if you have a concern, report it. **See something, Say something, Do something.**

Labels and Language used. What does this mean?

You may have heard of the DSM criteria. We are now on DSM-5. This is the Diagnostic and Statistical Manual of Mental Disorders, and it is used as an assessment criterion for many neurodiverse labels. It outlines the criteria that a person needs to be given a diagnosis and covers areas such as Autism and ADHD. Over the years, it has gone through several iterations as new research is uncovered and ways of thinking around the presentation of the differences change. Areas may become grouped together, or other areas separated over time. For example, there is no 'Asperger Syndrome' in DSM-5, this now falls into the category of Autism.

There are arguments for and against the use of labels as we have seen, and, as I have already mentioned, terms such as disorders or conditions are commonly used. They are useful when gaining an understanding of neurodiversity and how this presents for different people. Labelling can help us process the world around us, and they are included with a description overview below.

It is important to remember that neurodivergent people may view labels negatively, especially if they are presented as a deficit. For example, some would refer to autism as being 'low functioning' or 'high functioning' (linking to Asperger's); however, this can have a detrimental outlook on autistic individuals. The low-functioning term normally relates to those who are non-verbal and dismisses their use of voice and communication in other ways, denying their agency. A high-functioning label can be misleading as it implies people labelled with it function in society without the need of support, but in reality, they may struggle with anxiety or sensory processing and may not access the support required. Additionally, this group of neurodivergents are nine times more likely to die by suicide, and may be denied services.

In this section, we will look at the most common labels used within a neurodiverse society. It is important to note that the presentation of a 'label' or 'diagnosis' may not always present in the way it is outlined by websites or criteria. For example, autism is a spectrum and one autistic person will present very differently from another. Add in further complexities such as co-occurrence or trauma, and what you see in a person may be very different to what is happening underneath for them and vary from person to person, and diagnosis to diagnosis. There will be links to follow at the end of the chapter if you would like to read more around the areas outlined in this section.

We will be looking at / an overview will follow on:

- Attachment Disorder
- Attention Deficit Hyperactivity Disorder (ADHD)
- Auditory Processing Disorder (APD)
- Autism (Autism Spectrum Disorder (ASD)/Autism Spectrum Condition (ASC)
- Development Language Disorder (DLD)
- Dyscalculia
- Dyslexia

- Dyspraxia
- Foetal Alcohol Spectrum Disorder (FASD)
- General Anxiety Disorder (GAD)
- Obsessive Compulsive Order (OCD)
- Oppositional Defiance Disorder (ODD)
- Pathological Demand Avoidance (PDA)
- Post-Traumatic Stress Disorder (PTSD)
- Rejection Sensitivity Dysphoria (RSD)
- Sensory Processing Disorder (SPD)
- Tourette Syndrome (TS)

Attachment Disorder

Attachment Disorder is when a child has difficulty developing a deep emotional connection with the caregiver. The attachment bond may be weak and will impact on the child's development. It may affect the ability to develop trust with others and build secure relationships in life. Attachment Disorder is common with children who have experienced trauma, abuse, been moved from home to home with different caregivers, or been separated from a caregiver after forming a secure bond.

Children with Attachment Disorder rarely seek comfort if they are feeling hurt or distressed, and may become hypervigilant of their surroundings. In other cases, a child may seek comfort from anyone, and not distinguish between caregivers and strangers, putting them at risk.

For children who have faced trauma, the brain pathways and connections may form differently resulting in the behaviours and reactions seen of a child with Attachment Disorder (Newman, Sivaratnam and Komiti, 2015).

Attention Deficit Hyperactivity Disorder (ADHD)

Attention Deficit Hyperactivity Disorder (ADHD) is a common neurodivergent difference. It is normally identified in childhood and continues through adulthood. Indications in a child with ADHD are: difficulty paying attention, such as fidgeting; losing things; making mistakes; being overly active; impulsive behaviours and taking risks. This can impact on development into later life in areas such as maintaining healthy relationships, self-esteem and achieving educational potential.

There are different types of ADHD: inattentive presentation, in which it is difficult to pay attention to tasks and details and to follow instructions; and hyperactiveimpulsive presentation, in which it is difficult to sit still for long, and finding it difficult to turn take. Finally, the combined presentation in which the above are both integrated. ADHD can have co-occurrence with autism. ADHD can also be a misdiagnosis for other areas such as complex PTSD or Attachment Disorder. Sometimes, these present outwardly in terms of behaviour similar to ADHD, but may have different underlying factors.

Auditory Processing Disorder (APD)

Auditory Processing Disorder (APD) is not hearing loss, it is the difficulty in processing sound and what is being said. People with APD may have developed strategies such as reading lips, avoiding background noise, or avoiding certain situations to cope with their difficulties.

APD is a common co-occurrence in neurodiverse learners, in particular with ASC, ADHD and dyslexia. It can appear worse when a learner is feeling overwhelmed or tired.

APD learners may need support with: information being repeated to them; staying focused as they may be easily distracted. They may struggle to follow conversations or spoken instructions; they may have difficulty keeping up with a conversation or processing a conversation in a noisy environment.

They may need support through: slowing down instructions; keeping information short; providing captions and written summaries; reducing background noise; sending texts rather than a phone call; and being patient.

Autism (Autism Spectrum Disorder ASD/Autism Spectrum Condition ASC)

Autism is a processing difference. It is not an illness, and autism is not something that needs curing, which has been advised by some autism groups. The processing difference can have an impact on the person's life and the challenges they face. Autistic people experience differences in three areas: communication, sensory processing, and flexibility in thinking.

Communication – There is a difference in the way autistic people communicate and use language, and can be seen in the interaction and development of relationships.

Sensory processing – Autistic people experience sensory difference, either high (hyper) or low (hypo) sensitivity. This can alter throughout the day and depending on their environment.

Flexibility in thinking – There is a difference in the interests of autistic people and how they learn. They can become hyper-focused around special interests to them. They are more comfortable with routines and structure as this makes them feel safe.

The use of the word 'spectrum' can be very misunderstood in relation to autism. People think of it as a length, and you are either on the lower end, or on the higher end. But this is not true at all. The spectrum is one of a profile of abilities, in which an individual may be more strongly affected in different categories, which is why one autistic person is very different to another autistic person. A really good explanation of this is given in the link at the end of the chapter (Autism; NeuroClastic).

Developmental Language Disorder (DLD)

Developmental Language Disorder (DLD) is not associated with other conditions. It is solely related to difficulty in talking and understanding spoken language. Children are normally healthy and have no other difficulties. DLD has an enormous impact on a child's education, and early intervention and support is preferable.

Dyscalculia

Dyscalculia is a specific learning difficulty when there is a difficulty with mathematical learning, in particular arithmetical skills. It can affect grasping concepts and number facts, and will affect accuracy and fluency in calculation. It is often co-occurring with ADHD, dyslexia and/or dyspraxia, which is likely due to sharing cognitive features and the type of processing involved.

Dyslexia

Dyslexia can co-occur with other learning differences and can run in families. Dyslexia primarily affects difficulty in reading and writing; however, there are many more areas of difference within someone who has a dyslexic brain. Dyslexic people may process information differently and they may find it challenging to remember information or have difficulty with their organisational skills. Dyslexic people can have strengths in areas such as the creative fields. The British Dyslexia Association has adopted the Rose (2009) definition of dyslexia.

Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. Dyslexia occurs across the range of intellectual abilities. It is best thought of as a continuum, not a distinctive category, and there are no clear cut off points. Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation. Dyslexic readers can show a combination of abilities and difficulties that affect the learning process. Some also have strengths in other areas, such as design, problem solving, creative skills, interactive skills and oral skills.

Dyspraxia

Dyspraxia is a form of Developmental Coordination Disorder (DCD) and is a common disorder affecting the fine and/or gross motor coordination in children

and adults. Individuals may vary in how their difficulties present and they may change over time depending on the current environmental demands and life experiences. An individual's coordination difficulties may affect how a person functions with everyday life skills and in education and employment. Children may demonstrate difficulties with a range of tasks including self-care, writing and riding a bike. As they progress into adulthood many of these challenges will continue and may affect tasks such as driving a car and home maintenance. There may be a range of co-occurring difficulties such as time management, planning and personal organisation. Many people with dyspraxia also experience difficulties with memory, perception and processing. Dyspraxia can also affect articulation and speech. Dyspraxia is thought to be caused by a disruption in the way messages from the brain are transmitted to the body. This affects a person's ability to perform movements in a smooth, coordinated way. Or as we are thinking – a neurological difference in the way the brain processes information.

Foetal Alcohol Spectrum Disorder (FASD)

Foetal Alcohol Spectrum Disorder (FASD), previously known as Foetal Alcohol Syndrome, occurs when an infant is exposed to large quantities of alcohol in the womb before birth. Alcohol taken by the mother, passes through the mother's blood and to the foetus.

FASD can cause issues with a range of functions such as vision, hearing, balance and coordination. There may be developmental or learning difficulties such as memory and concentration, or with impulse control, which may impact upon education development. There may be communication and speech and language delays, and issues with social skills and regulating emotions, leading to poor reasoning and judgement. There may also be physical damage such as bone, muscle and joint problems, or organ damage to the kidneys or heart.

General Anxiety Disorder (GAD)

Everyone has anxiety at various points in their lives; for example, starting a new job, interviews, sitting tests or medical appointments. It is normal to feel unease or worry about them.

General Anxiety Disorder (GAD) is when a person finds it difficult to control their worries and this becomes a daily struggle and can affect their lives significantly. It is a long-term condition and the daily worries are uncontrollable and cover a wide range of issues, rather than one specific event.

Anxiety may be associated with other conditions such as panic disorder, phobias, Post Traumatic Stress Disorder (PTSD), social anxiety disorder or autistic-specific anxiety.

Obsessive Compulsive Disorder (OCD)

Obsessive Compulsive Disorder (OCD) can be categorised with two parts. The first, obsessions – which are unwelcome thoughts that intrude repeatedly and can cause anxiousness. The second, compulsions – are the repetitive activities that are done to reduce the anxiety caused by the first element: the obsession.

OCD can cause a real disruption to daily life. Repeating behaviours can take up much time during the day, or situations may be avoided to prevent a trigger. This could be extreme, such as not going to work or seeing friends and family. The obsessive thoughts can lead to exhaustions, or make it difficult to continue with relationships.

Oppositional Defiant Disorder (ODD)

Oppositional Defiant Disorder (ODD) is a behavioural disorder that is diagnosed in childhood. The behaviours seen to indicate this disorder are: defiance; lack of cooperation; irritability; negativity towards parents, peers and authority figures such as teachers.

Children get irritable, upset, and push boundaries, which is normal behaviour. However, with ODD the behaviours happen more frequently, and they have an impact on learning and on relationships that go beyond what is normally associated with childhood and adolescence.

Indicators of ODD include: excessive arguments with parents and other adults; questioning rules and refusing to follow them; blaming others for their own mistakes (it is never their fault); temper tantrums; and becoming easily irritated and annoyed by others.

It can be difficult to separate some of the extent of the indicators with other neurodivergent elements such as autism spectrum difficulties, ADHD or bipolar disorder. Some of these conditions may co-exist with each other too. Early onset ODD is likely to co-occur with one of these aspects. Only around 10% of cases are ODD alone.

Pathological Demand Avoidance (PDA)

It is a natural human trait to avoid certain demands on ourselves at different times and for different reasons. However, demand avoidance is when this becomes more significant and impacts upon daily life.

There are different types of demand avoidance. First, autistic demand avoidance, in which autistic people avoid triggers or situations that cause anxiety, sensory overload, disruption to their routines or participation in activities they are not interested in. Autistic people may withdraw, refuse, shutdown, or meltdown to avoid these things. In order to address some of these issues, removing sensory triggers, or giving plenty of notice and support during changes may be of benefit.

The same types of demands or situations may occur with PDA specifically and for the same reasons. However, the uniqueness of PDA is that the demands are avoided purely because someone else has asked, which leads to a lack of control which can then cause anxiety. At times, this may seem irrational or dramatic in relation to the request that is being made.

PDA can be represented in individuals in different ways. One person may show more externalised presentation such as physical aggression or controlling. Another person may have an internalised presentation such as resisting demands more quietly or increased anxiety. Some have a variable presentation which can be affected by their environment.

Post-Traumatic Stress Disorder (PTSD)

Post-Traumatic Stress Disorder (PTSD) is when a high level of anxiety and associated difficulties are developed in relation to a traumatic experience. It may involve flashbacks of the incident, event or period of time, or nightmares which relive the fear and anxiety felt at the time. It can be described as an acute stress reaction. It can induce physical pain, intrusive thoughts, irritability and aggression.

The physical hormones continue to be triggered when the event has passed and these cause a constant fight or flight response.

Rejection Sensitivity Dysphoria (RSD)

People with this condition are sensitised to the perception of being rejected. It goes beyond how most people feel when rejected, for example, for a job, or by friends, or in school. People with RSD have a strong emotional reaction to any negative comments, judgements or criticism being made on them. It may lead to physical discomfort and inhibit them in their daily activities. They feel like a failure which is disproportionate to what has been said. They may feel as though people are against them, or try and overcompensate to keep people happy and liking them. RSD can co-exist with ADHD.

Sensory Processing Disorder (SPD)

Everyone has sensory processing, it is a neurological process in which information is taken in through our senses and then organised so we can respond to it appropriately. This includes through smell, taste, touch, sound, vision, movement, body position, gravity. Neurotypical people use this information automatically and effectively. For people with SPD, this can affect their daily lives, including their behaviour, social interaction, education and work.

There are two main different types of sensory difficulties. First, is hyper (over) sensitive and includes fear of heights, avoidance of food textures, colours and temperature, avoidance of play equipment, fear of loud or sudden sounds, disliking touch such as hair brushing or washing, the shower and having nails cut. The second is hypo (under) sensitive. This includes appearing not to feel pain to temperature, seeking out movement such as rocking or fidgeting, chewing things and having poor awareness of the surrounding environment.

At times, depending on the environment and situation, both hyper and hypo can be interchangeable within an individual. SPD often co-occurs with autism and ADHD, but can also be a stand-alone neurodivergence.

Tourette Syndrome (TS)

Tourette Syndrome (TS) is an inherited neurological condition. It is more common in boys and affects one in every hundred. TS is characterised by tics, which are involuntary sounds and movements. Coprolalia is a form of TS in which the person swears or says inappropriate things. This only occurs in a minority of people with TS, and is not common, despite popular belief.

TS also co-exists with other conditions such as ADHD, OCD and anxiety.

Chapter Summary

You have begun to gain an understanding of the term neurodiversity and neurodivergent pupils, and how this model differs from traditional models such as the medical and social models we see in society and in education today. You have started to think about a shift in language towards difference and not deficit, and you have been directed to consider the implications around safeguarding for neurodivergent pupils and the additional barriers they may face. Finally, you have an overview of some of the terminology around the differences, or labels, that are used.

So, what does this all mean for us as a teacher in the classroom? How can we begin to support individuals with their differences in a class of 30 pupils and meet the needs of all neurotypical and neurodivergent pupils?

This book will support your development and understanding as you train, and address some of the issues and challenges that you will face.

Glossary of Key Terms

- Biopsychosocial model this model draws upon biological and social factors.
- Medical model this model holds the belief that there is a right way of functioning and processing.
- Neurocognitive the processes that take place in the brain; for example, the way in which we remember and retrieve information.
- Neurodivergencies the different neurodivergent strands grouped together.

- Neurodivergent the way in which our brain works in a neurocognitive way is in a smaller percentage of the population (often having a diagnosis such as autism, ADHD or dyslexia). The term 'Neurodivergent' relates to an individual person, or people with individual differences.
- Neurodiverse a group of neurodivergent people with a range of ways of functioning and processing.
- Neurotypical the way in which our brain works in a neurocognitive way is within the largest percentage of the population and society standardises this as 'normal'.
- Social model holds the belief that it is a collective responsibility by society to address difficulties and barriers that are imposed.

Further Reading

- *Keeping Children Safe in Education* (2022) https://assets.publishing.service.gov.uk/ government/uploads/system/uploads/attachment_data/file/1014058/KCSIE_2021_ Part_One_September.pdf
- Is the diagnosis system undermining SEND support? *TES*. www.tes.com/magazine/ teaching-learning/general/send-support-schools-diagnosis-system-underminingsend-support-neurodiversity
- About Neurodiversity; how neurodiversity can shape our experiences, and what you can do to embrace neurodiversity. Edinburgh University. www.ed.ac.uk/ salvesen-research/about-neurodiversity
- Neurodiversity as a strengthening point for your team and our society. Forbes. www. forbes.com/sites/forbestechcouncil/2021/08/13/neurodiversity-as-a-strengtheningpoint-for-your-team-and-our-society/?sh=5236528d28f9
- SEND Code of Practice (2020 updated version) www.gov.uk/government/publications/ send-code-of-practice-0-to-25

Online Resources

- Attachment Disorder Help Guide: www.helpguide.org/articles/parenting-family/attachment-issuesand-reactive-attachment-disorders.htm
- Attention Deficit Hyperactivity Disorder (ADHD) ADHD Foundation: www.adhdfoundation.org.uk/what-we-do/training/ www.cdc.gov/ncbddd/adhd/facts.html
- Autism (Autism Spectrum Disorder (ASD)/Autism Spectrum Condition (ASC) NeuroClastic: https://neuroclastic.com/its-a-spectrum-doesnt-mean-what-youthink/?fbclid=IwAR10zTutk4JTgRoLhTWdNEBRhbw4ch46Y5iKrDWjLFkG b7C1GMgV56f16fk

Autism Education Trust: www.autismeducationtrust.org.uk/

- Developmental Language Disorder (DLD)
 British Dyslexia Association: www.bdadyslexia.org.uk/dyslexia/neurodiversity and-co-occurring-differences/developmental-language-disorder-dld
- Dyscalculia British Dyslexia Association: www.bdadyslexia.org.uk
- Dyslexia British Dyslexia Association: www.bdadyslexia.org.uk/dyslexia
- Dyspraxia Dyspraxia Foundation: https://dyspraxiafoundation.org.uk/
- Foetal Alcohol Spectrum Disorder (FASD)
 Foetal Alcohol Spectrum Disorder Network: www.fasdnetwork.org/ https://nationalfasd.org.uk/
- General Anxiety Disorder (GAD) Mind: www.mind.org.uk/information-support/types-of-mental-health-problems/ anxiety-and-panic-attacks/anxiety-disorders/
- Oppositional Defiance Disorder (ODD) LancUK: www.lanc.org.uk/related-conditions/oppositional-defiant-disorder/
- Obsessive Compulsive Disorder (OCD) OCD UK www.ocduk.org/
- Pathological Demand Avoidance (PDA)
 Pathological Demand Avoidance Society: www.pdasociety.org.uk/ what-is-pda-menu/what-is-demand-avoidance/
- Post-Traumatic Stress Disorder (PTSD) Mind: www.mind.org.uk/information-support/types-of-mental-health-problems/ post-traumatic-stress-disorder-ptsd-and-complex-ptsd/about-ptsd/
- Rejection Sensitivity Dysphoria (RSD)
 Psychology Today: www.psychologytoday.com/gb/blog/friendship-20/201907/ what-is-rejection-sensitive-dysphoria
- Sensory Processing Disorder (SPD) Sensory Processing Disorder UK: https://thesensoryseeker.com/ sensory-processing-disorder-in-the-uk/
- Tourette Syndrome (TS) Tourette's Action: www.tourettes-action.org.uk/67-what-is-ts.html

Links to the Teachers' Standards

- 1. Set high expectations which inspire, motivate and challenge pupils; establish a safe and stimulating environment for pupils, rooted in mutual respect.
- 5. Adapt teaching to respond to the strengths and needs of all pupils; have a secure understanding of how a range of factors can inhibit pupils' ability to learn, and how

best to overcome these; have a clear understanding of the needs of all pupils, including those with special educational needs; those of high ability; those with English as an additional language; those with disabilities; and be able to use and evaluate distinctive teaching approaches to engage and support them.

• *Part two, personal and professional conduct;* have regard for the need to safeguard pupils' well-being, in accordance with statutory provisions.

- Reflect-

Think back to Chapter One. Name three things you have learnt that you will need to consider for your future practice, jot these down and reflect on how they relate to the practical strategies within this chapter.

How are you feeling about implementing a neurodiverse model in your classroom? Have other practitioners in your school started to think about a neurodiversity model?

We are going to start linking elements from Chapter One into your classroom practice.

References

Autistic Advocacy (2022) https://autisticadvocacy.org/about-asan/identity-firstlanguage/ [accessed 26.05.22]

Kapp, S., Gillespie-Lynch, K., Sherman, L. and Hutman, T. (2013) Deficit, difference, or both? autism and neurodiversity. *Developmental Psychology*, 49 (1), pp. 59–71.

Newman, L., Sivaratnam, C. and Komiti, A. (2015) *Attachment and early brain development – neuroprotective interventions in infant–caregiver therapy*. Taylor & Francis Online.

Rolfe, S. (2019) Models of SEND: The impact of political and economic influences on policy and provision. *British Journal of Special Education*, 46 (4), pp. 423–444.

Singer, J. (2017) Neurodiversity: The Birth of an Idea. Judy Singer.

Slorach, R. (2016) *A Very Capitalist Condition: A History and Politics of Disability*. London: Bookmarks Publications.

WorldAtlas (2022) www.worldatlas.com/articles/which-eye-color-is-the-mostcommon-in-the-world.html [accessed 26.05.22]