Neurodiversity affirming practice in allied health

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Autism, Anxiety, ARFID, Endometriosis, PMDD, Cleft lip and palate and Hearing impairment

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AuDHD, CFS/ME, ARFID, Autoimmune Disorders

What is neurodiversity?

- The range of differences in individual brain function and behavioural traits, regarded as part of normal variation in the human population
- Yet the neurodiversity framework distinguishes between two main types;
  - Neurotypical refers to an individual whose brain and cognitive development falls within the typical range.
  - Neurodivergent refers to an individual whose brain and cognitive development falls outside (or ‘diverges’ from) the typical range (Goldberg, 2023)
- Despite the neurodiversity movement striving to move aware from a deficit approach, we still end up with binary categories of “normal” vs “non normal” brains with these 2 terms, albeit unintentionally
- Types of neurodiversity include - autism, ADHD, dyslexia, dyscalculia, dysgraphia, and Tourette's syndrome.

A must read! Goldberg, H. (2023). Unraveling neurodiversity: Insights from neuroscientific perspectives. Encyclopedia, 3(3), 972-980.

So is it actually a disability?

It depends who you ask,
and how they define disability…

- Level 1 and 2 autistics often have more capacity to share their experiences, which can lead to bias in what is known about the lived experience
- It depends on co-occurring conditions
- It depends on the accommodations available
- Beware the toxic positivity! Sometimes it's great, sometimes it's really hard, both can be true
- Social vs medical model of disability

(either way it still deserves funding!)

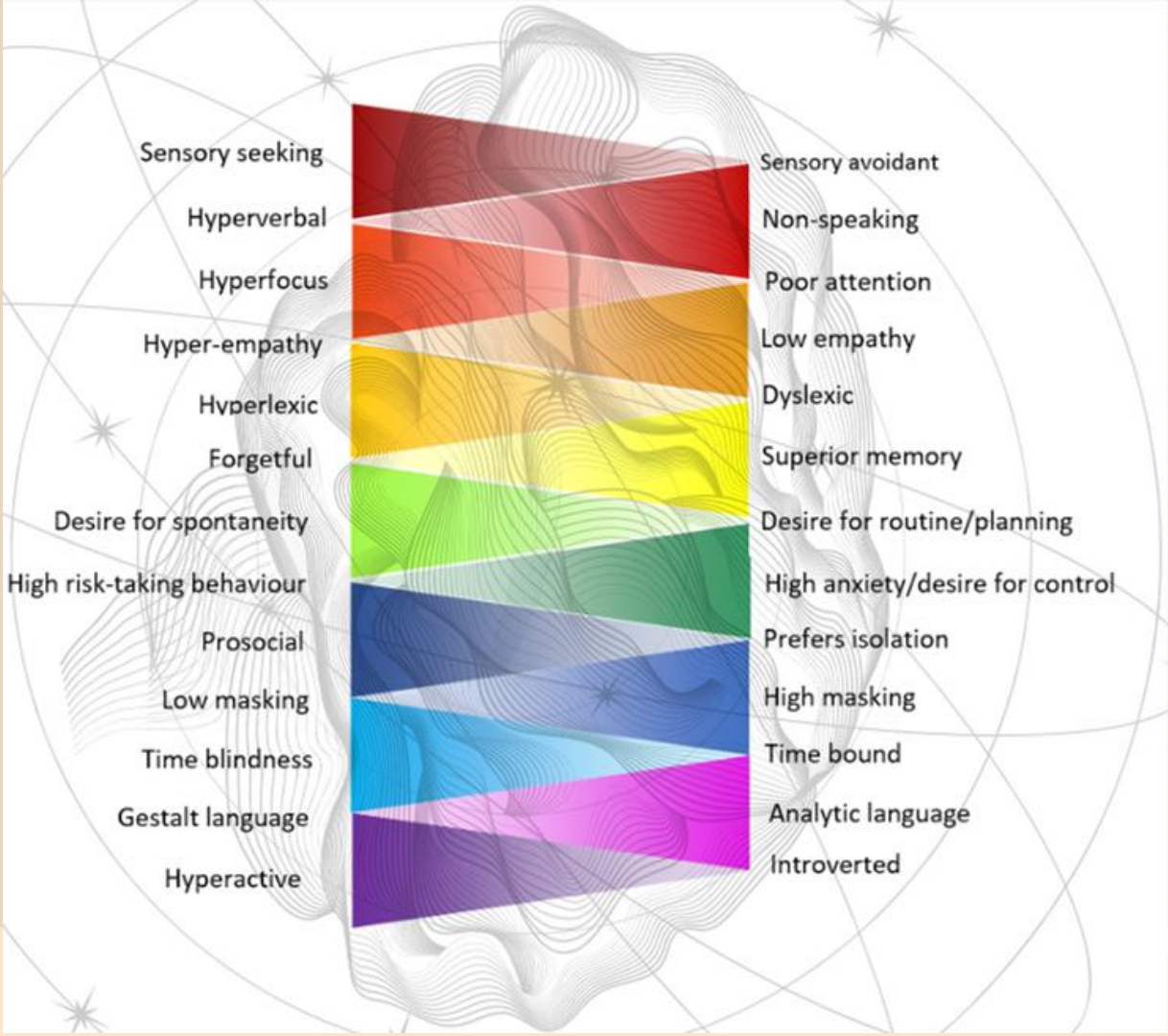
Neurodiversity has been misunderstood for a long time: Where do these myths come from?

- Outdated stereotypes
- Misrepresentation/narrow representation in media
- Gender bias in research - male presentation is most commonly depicted, female traits of neurodiversity are less understood
- Research conducted by neurotypical researchers/without consultation with neurodiverse community has led to false assumptions and beliefs and unhelpful practices

Source: https://reacho.in/discover/young-sheldon-trailer-the-big-bang-theory-spin-off

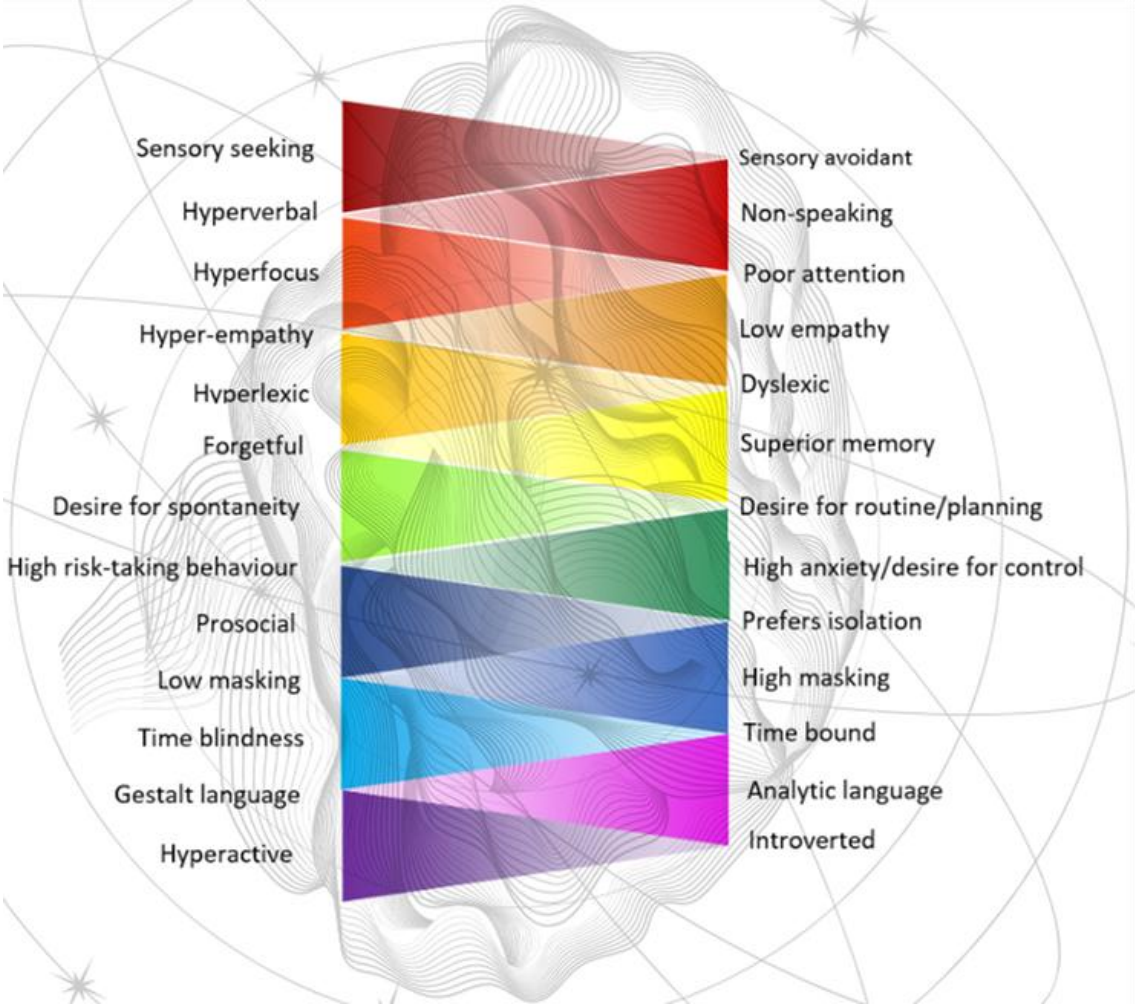
The spectrum of neurodiversity

A model for understanding human brain diversity



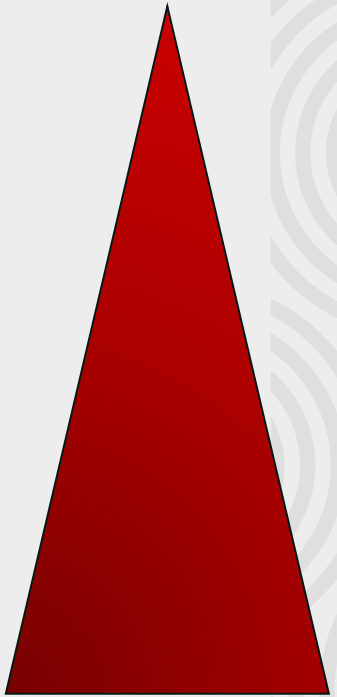
The spectrum of neurodivergence

- An umbrella term of a range of conditions or neurotypes including; Autism, Attention Deficit Hyperactivity Disorder, Tourette's syndrome and dyslexia, dyscalculia, dyspraxia.
- There are many different features of neurodiversity.
- The image explains some of these features.
- Each of these features exist on a spectrum.
- Given the infinite combination of these features within a human brain, no two neurodiverse people present in the exact same way.



Sensory needs

- Neurodivergent people experience sensory information differently they may perceive too much (leading to sensory avoidance) or too little (leading to sensory seeking)
- These sensory preferences and behaviours are designed to regulate the nervous system of a neurodivergent person
- Preferences can vary between senses
- Touch - e.g., seeking deep pressure to feel calm (weighted blankets, tight hugs), excessive touching of items/people
- Taste - e.g., picky eating, avoidance of certain textures/colours of food
- Sight - e.g., preference for low lighting, wearing sunglasses, holding lights up to eyes
- Hearing - e.g., hands over ears, wearing noise cancelling headphones
- Smell - e.g., acute sense of smell, dislike of strong smells such as perfume, sniffing objects

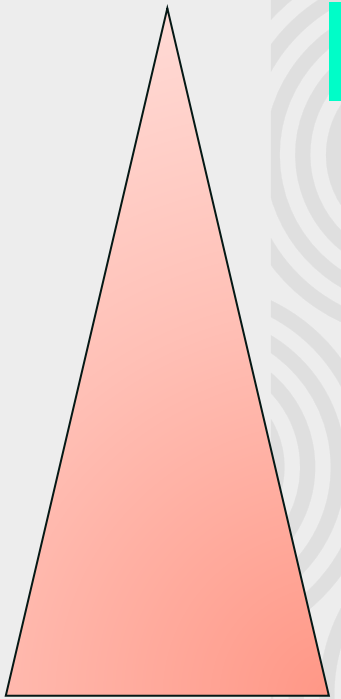


Use of verbal speech

- Neurodivergent people vary in their use of verbal speech
- This can be context specific (i.e., situational/selective mutism)
- Non-speaking does reflect intelligence or language ability
- Non-speaking children may communicate through other forms such as AAC – sign, pictures, electronic devices
- Hyperverbal children are often missed in early diagnosis as they do not have “speech concerns”

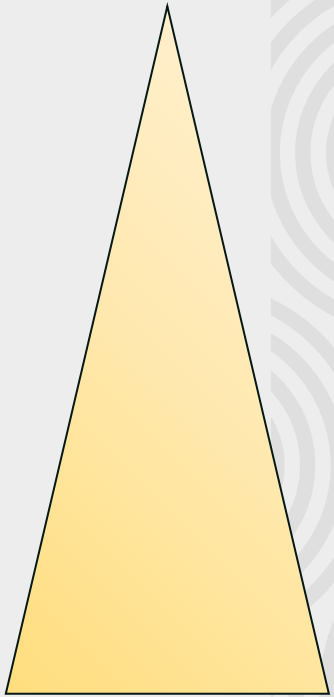
Attention and focus

- Neurodivergent people vary in their ability to maintain and regulate their attention
- This is usually situationally dependent – i.e., the level of interest drives level of attention
- Dopamine seeking – medication can help to regulate attention
- Very common among children with ADHD, AuDHD
- When hyper-focused, attention to detail can be far superior to that of a neurotypical so the concept of “attention deficit” is a misnomer
- Hyperfocus is closely related to special interests



Empathy and perspective taking

- Outdated stereotypes often state that Autistic people do not experience empathy.
- While some struggle with understanding other people's emotions and points of view, others are hyper aware and hypervigilant and can take on those emotions themselves.
- Some have excellent theory of mind which leads them to respond differently to neurotypical people in social interactions.
- Two main ways to categorise empathy:
  - Emotional
  - Cognitive



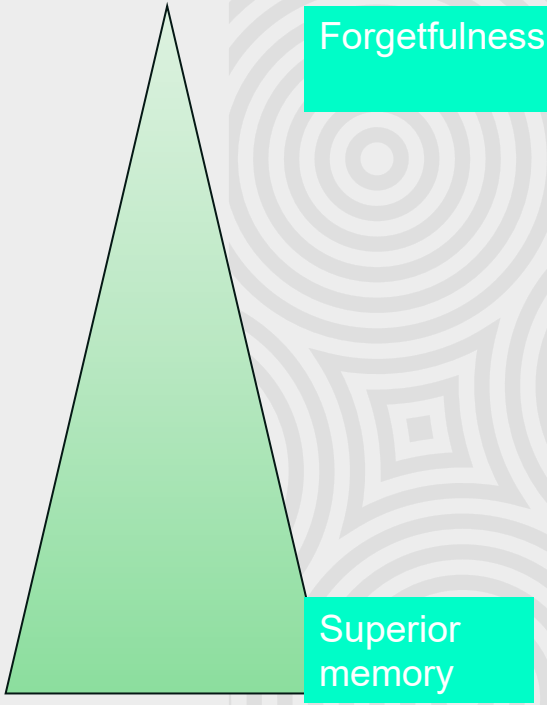
Memory

Working memory
- A type of short-term memory that lasts only seconds
- Used to hold information while performing other tasks
- A common issue in children with language disorders
- A common challenge for people with ADHD

Long-term memory
- A mostly permanent storage space for information
- Can be divided into implicit (unconscious) and explicit (conscious) memory

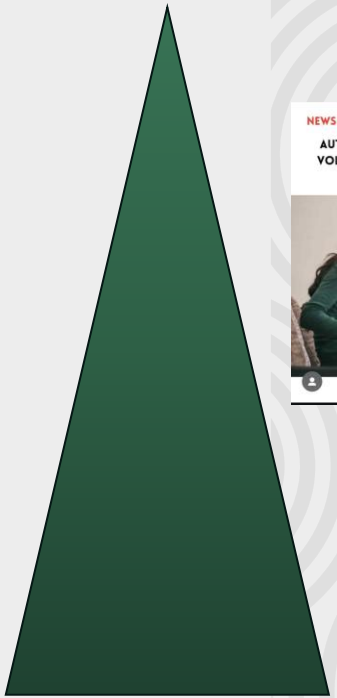
Implicit memory
- Unconscious memories that help with everyday tasks
- Examples include procedural memory, priming, and conditioning
    - For example, riding a bike or driving a car

Explicit memory
- Conscious memories that can be recalled
- Examples include episodic memory
- Autistics often have excellent recall of facts, events and details especially hyperfixations



Routine, rigidity and flexibility

- Autistics - often prefer predictability and rigid adherence to routine, can thrive in a well structures, clearly routine environment
- ADHDer - Need novelty and spontaneity to maintain interest and focus
- AuDHD - oscillate between the 2 extremes to stay regulated

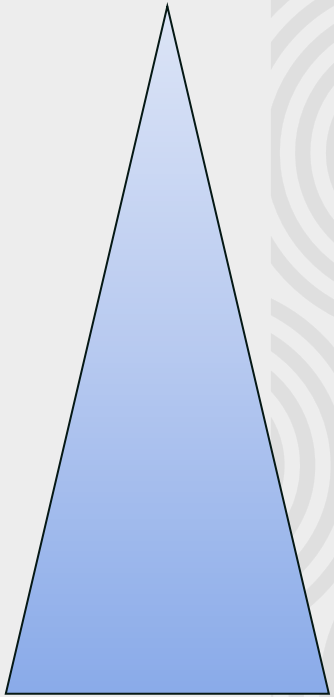


Risk taking and avoidance

- Autism – often high anxiety, particularly around new tasks, fear of failure and fear of making a mistake (can lead to perfectionism)
- ADHD – Can be very impulsive, not think through risks and consequences before acting, always seeking adventure and novelty which could at times be risky

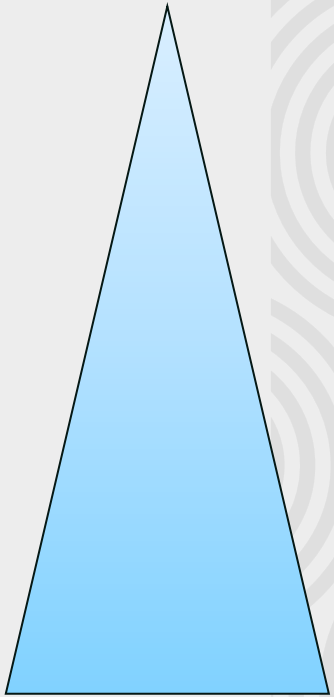
Desire for social interaction

- A huge myth is that neurodivergent people do not want or seek social interactions or relationships
- Often this are highly desired but difficult to initiate and maintain
- Often seek or prefer solitude because of overstimulation, social anxiety or difficulties with emotional regulation, rather than a lack of interest in other people



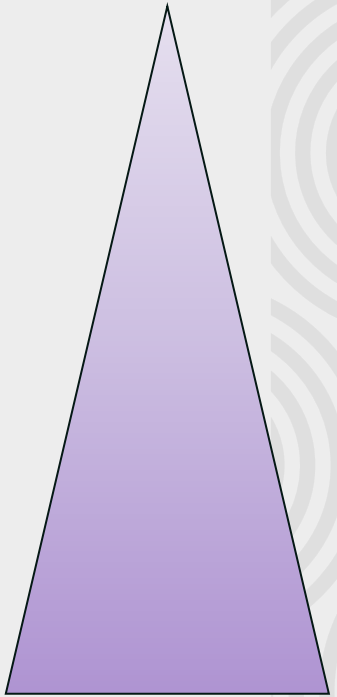
Masking

- Masking = hiding features of neurodivergent in order to fit in with society
- High masking neurodivergents are often later diagnosed and can be highly affected by mental health issues
- Often experience meltdowns or burnout at the end of the day from having to mask all day
- A very common feature in autistic girls, who are often excellent at observations and pattern recognition so can mimic expected social behaviours but find them extremely taxing



Relationship with time

- Autistics - often very time bound, expect things to run on time
- ADHDers - often have difficulties perceiving how much time a task will take and will run late because of their difficulties conceptualising time
- AuDHDers - try really hard to be on time and get stressed about being late but are late anyway due to time blindness

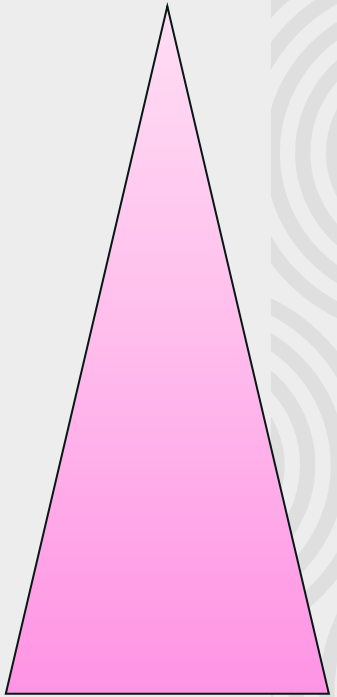


Interoception

Level of awareness around:

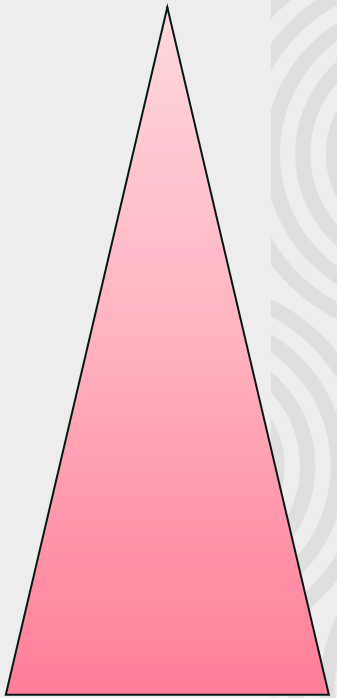
- Temperature
- Pain
- Emotions
- Hunger
- Toileting

Interoception is linked to emotion regulation and mental and physical health. People with high interoception are better able to feel their bodily states and regulate their emotions.



Language development

- Top down (echolalic) vs bottom up language acquisition (more neurotypical)
- Gestalt vs. Analytic language processing
- Literal interpretations
- Understanding abstract concepts
- Understanding idioms, sarcasm, jokes etc.



Reflection: 5 minutes

- What did you discover about yourself and how your brain works?
- Did any of this resonate with your clients / people in your life?
- How can you apply this model into your future practice?

How can be we neuroaffirming allied health practitioners?

- Taking a **strengths-based approach** that view types of neurodiversity such as Autism as a form of **diversity rather than a disability**.
- Shifting away from the idea that brains that are not “typical” are “disordered.”
- Giving space for people to be themselves and find the strategies that work for their unique brain.

Tangible steps

- Be aware and create awareness
- Engage with the neurodivergent community
  - e.g. Facebook groups, Instagram pages, podcasts etc.
- Explore your own internalised bias;
  - Do you have a preconceived idea of what neurodivergence looks like?
  - Are your services really accessible or is that just what it is says on your website?
- Provide pathways for accessing support and diagnosis
- Make adjustments to your practice / clinic space
  - Various seating options, lighting options, reducing background noise
- Advocacy posters (see advocacy episode)

Mindset shifts

- Remember that we cannot do therapy with a dysregulated client
- Allowing freedom and choice where possible
- Creating a sense of equality e.g. in speech we both say the target words
- Using declarative language without expecting a response;
  - “I wonder...”, “You can”, “We can”, “I notice....”
- Laughter and play is therapeutic in nature for clients
  - Sometimes being light-hearted is the best way to break the stress response if you have a good relationship
- Incorporating novelty
- Allowing for sensory seeking behaviours
- Flipping the power dynamic

Language matters

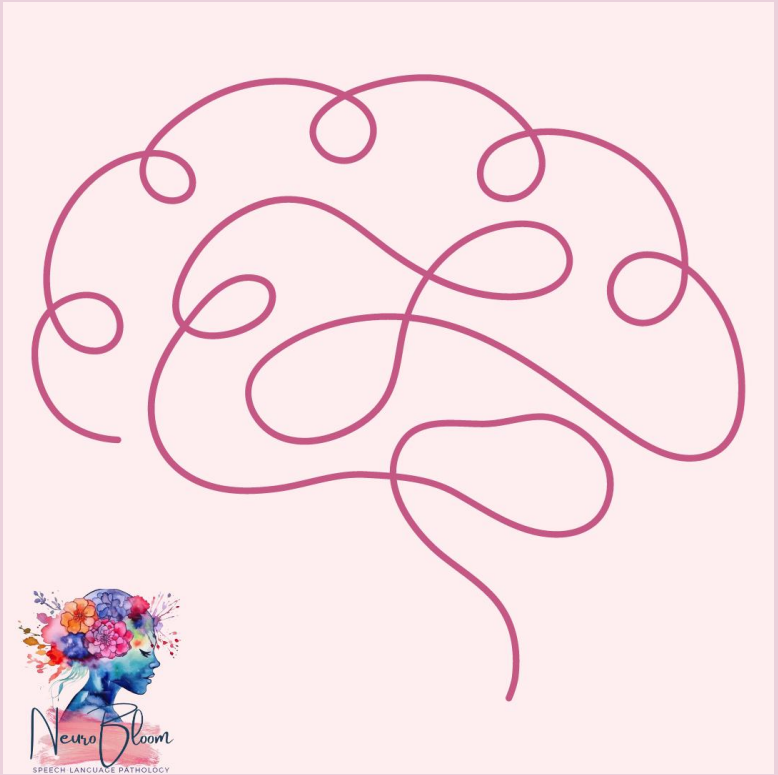
Neurodiversity: describes the variety of ways people think, learn, and behave

Neurodivergence: refers to people whose brains process information differently from neurotypicals - the threshold of what classifies “divergence” is difficult to define

Some affirming label alternatives:

- Autism Spectrum Disorder vs Autism/Autistic
- Attention Deficit Hyperactivity Disorder vs Attention Dysregulation, Hyperfocus Driven
- Pathological Demand Avoidance vs Pervasive Desire for Autonomy
- Sensory Processing Disorder vs Sensory preferences
- Auditory Processing Disorder vs Auditory Processing Differences

Mental health and neurodivergence



The relationship between neurodivergence and mental health concerns

- **Over 35% of children who are autistic experience suicidality**
- **Misdiagnosis or missed-diagnosed especially in girls / females**
- **40% of autism at least one other DSM-5 anxiety disorder**
- **Eating disorders 3 x more likely in ADHD**
- **70% of autistic children demonstrated 'atypical' eating behaviours**
- **17.5% of autistic children have PTSD**
- **90% of Autistic females have experienced sexual assault**
- Autistic adults also have a **higher prevalence of loneliness** which is associated with poorer health outcomes
- Loneliness can occur when our desired relationships e.g. friendship or romantic isn't aligned with our reality can include; quality, quantity and specific experiences
- **Societal pressures to be neurotypical;** social exclusion, traumatic experiences, gaslighting, lack of accessible

How can we support mental health for neurodivergent people?

- Raising awareness of the prevalence
- Screening clients + referring to help (Suicidal thoughts and urges questionnaires: STUQ)
- Training mental health clinicians to support neurodivergent people
- Starting consent education at a young age
- Strategies to facilitate engagement for autistic people; wording, timing, formatting, various ways to respond, choices, in person or online format, support person if needed, sensory tools and fidgets, lowering noise or lighting

Co-occuring conditions

Conditions that commonly co-occur

- **80% of autistic people have sleep disorders or disturbances**
- **GI problems** occur in **46% to 84%** of Autism population
- **1.6 times** more likely to have **eczema or skin allergies**
- **1.8 times** more likely to have **asthma and food allergies**
- **2.1 times** more likely to have **frequent ear infections**
- **2.2 times** more likely to have **severe headaches**
- **3.5 times** more likely to have **diarrhoea or colitis**
- **7 times** more likely to report **gastrointestinal (GI) problems**
- Approximately **30%** of children with autism have **anxiety related to toileting**
- Approximately **25%** of children with autism have **immune deficiency and dysfunction** (i.e., dysautonomia, POTS MCAS etc.)

Avoidant Restrictive Food Intake Disorder (ARFID)

Not just a fussy eater!

- ARFID or avoidant restricted food intake disorder is characterised by persistent difficulties meeting nutritional needs and can occur across the lifespan.
- ARFID is not due to gastrointestinal complications or body image diagnoses such anorexia or bulimia.
- ARFID can occur due to a variety of factors which can also co-occur such as; lack of interest in food, aversion to sensory properties of foods and averse and traumatic experiences with food such as choking.
- ARFID commonly occurs with neurodivergent individuals.

How can we support people with ARFID?

- We never force them to eat! This just makes the anxiety around meal times so much worse
- Any food is better than no food at all
- Don’t make negative comments about food choices.
- Start safe and chain to more nutritional options
- This can take a long time!

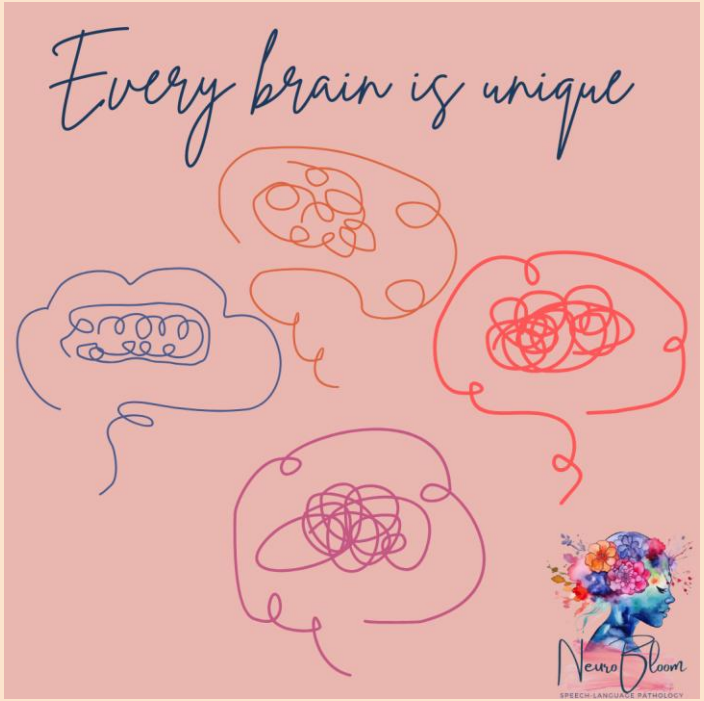
For the latest ARFID intervention literature:

Listen to our two podcast episodes on ARFID:

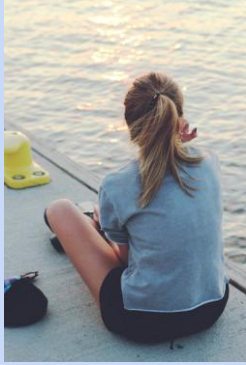
Case Studies

"Allowing a student with a hidden disability (ADHD, Anxiety, Dyslexia) to struggle academically or socially when all that is needed for success are appropriate accomodations and explicit instruction, is no different than failing to provide a ramp for a person in a wheelchair ".

@neurominds_



Lets meet Layla



- 13 years old (Year 7)
- Autism and anxiety diagnoses
- Rejection sensitivity dysphoria
- Sensory averse
  - She doesn't like loud noises or bright lights
- She loves reading
  - Especially Harry Potter, Lord of the Rings and other fantasy
- She experiences social anxiety and sometimes has anxiety attacks
- Layla does NOT like public speaking
- She can often struggle with making friends and maintaining friendships long term
- Layla has ARFID and only eats a small variety of foods
  - Her preferred foods are; pasta, chicken nuggets, cheese toasties and potato wedges
- Layla attends fortnightly psychology appointments via telehealth

How can we support Layla in a neuroaffirming way?

Lets meet Rory

- 9 years old (Year 3)
- Diagnosed with a moderate intellectual disability at age 3
- Rory's Dad is an amputee, he uses a wheelchair and has his own support worker
- Rory loves sports
  - (cricket, athletics and swimming)
- Handover from previous speech pathologist said he was "non-verbal". However, he attempts to communicate verbally
- He has a liberator device with LAMP software
  - (this is often not taken out of his school bag and not charged)
- Sensory avoidant
  - (afraid of loud noises, large crowds, bright lights and popping games)
- Struggles with hygiene
  - Including; handwashing, teeth brushing, showering and toileting
- Rory has trouble with buttons, zippers and holding cutlery
- Refuses to attend doctors or dentist appointments
  - (he hides under chairs or runs away

How can we support Layla in a neuroaffirming way?

Lots of episodes available on neurodiversity to continue your learning!

https://open.spotify.com/show/5UMZglvsD96fTa3jaAEhKT

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Professional development

- NeuroBloom Speech Pathology offers professional development in both in person and online formats.
- Courses range from 2 hours to 2 days in length, depending on your needs.
- Topics include;
  - Neurodiversity affirming practice
  - Understanding Autism and ADHD
  - Creating affirming workplaces
  - Advocating for your / your client / your child's needs
  - Qualitative and quantitative research

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