



**Portland**  
College

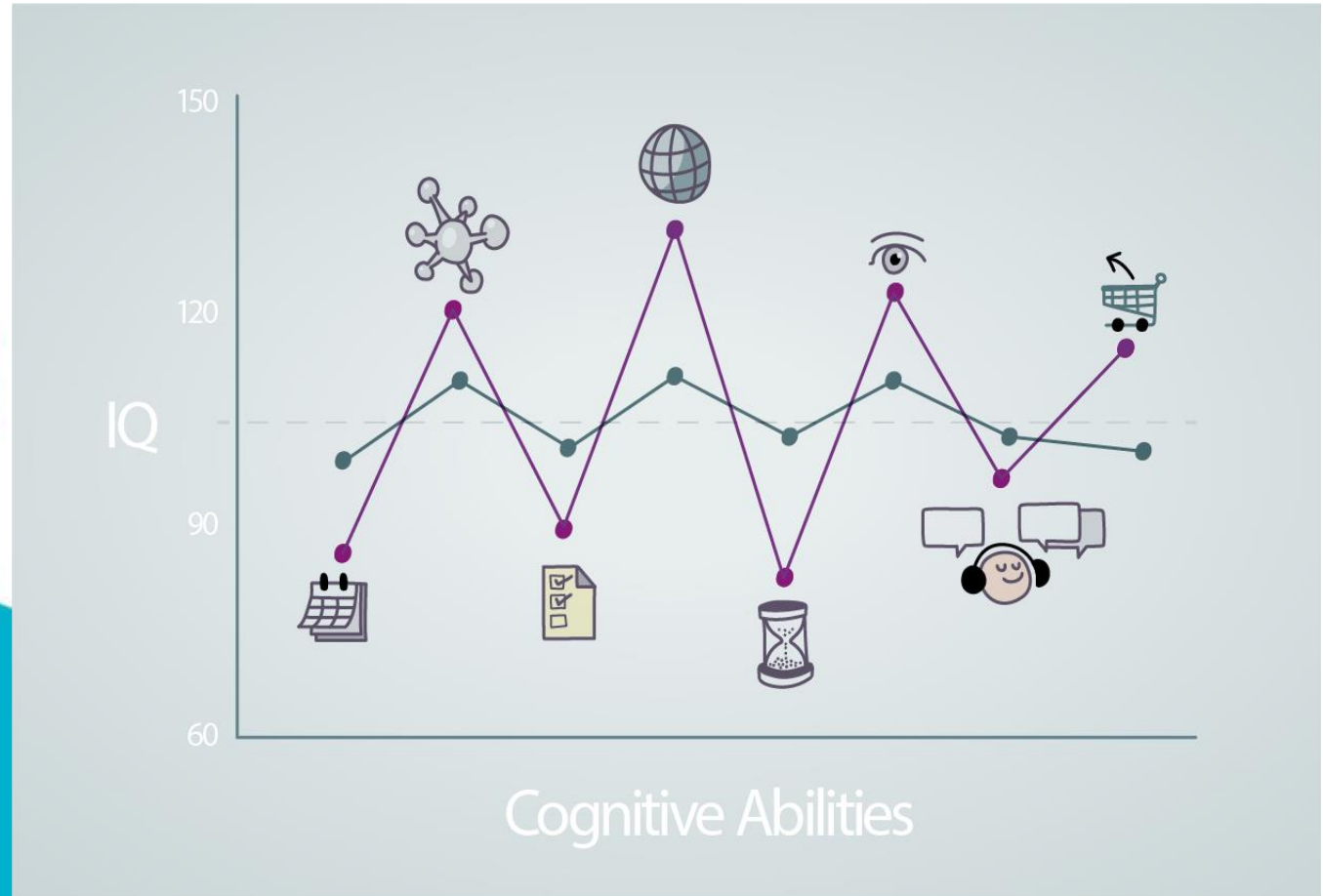


# Neurodiversity & Inclusion in Sport and Physical Activity

# Today's Aims:

- To promote an awareness of Neurodiversity and Spiky Profiles
- ADHD awareness and how to support
- Autism awareness and how to support
- How to support people with neurodiversity in a crisis

# Neurodiversity and Spiky Profiles



## Neurodiversity

## Spiky Profile





# Definitions

## **Neurodiversity**

Neurodiversity means that an individual may think and learn in a different way to others.

Neurodiversity has a wide spectrum that covers a range of hidden neurological conditions, such as but not limited to:

Autism Spectrum, Dyslexia, Dyspraxia, Tourette's and social anxiety.



# Definitions

## Spiky Profiles

The “spiky profile” is a visual representation of personal and work-related strengths and areas for development.

The aim of the spiky profile is to promote inclusivity rather than exclusivity.

People with neurodiversity are more likely to perform highly in some areas, and lower in others.

This means that their “skill profile” looks “spiky” with peaks and valleys, rather than a consistent ‘middle ground’.



# Neurodiverse conditions which can have spiky profiles

**ADHD:** can cause issues with impulse control, attention, and concentration.

**Autism:** affects the way someone perceives the world. People with autism can find social interaction and change difficult and uncomfortable.

**Dyslexia:** a condition that gives someone language processing difficulties that cause issues with reading, writing, and spelling.

**Dyspraxia:** affecting physical coordination. People may seem clumsy, disorganised, and have trouble with structure.

**Dyscalculia:** a specific learning disorder with impairments in learning basic arithmetic facts, processing numbers and performing accurate and fluent calculations.

**Dysgraphia:** a specific learning disability that affects written expression. Dysgraphia can appear as difficulties with spelling, poor handwriting, and trouble putting thoughts on paper.

**Tourette Syndrome:** a neurological condition where there are tics they can't control - sounds and movements.





# Neurodiversity



The idea of neurodiversity was first established in the 1990s by an Australian sociologist, [Judy Singer](#).

Singer herself was on the autism spectrum, and she created the term neurodiversity.

She created the word as a term to describe a new movement towards neurological diversity being recognised, accepted, and respected.

She hoped they would see neurological diversity not as a defect or a disorder, but simply *different*.

It was soon recognised that there was an issue with how people facing these differences were discriminated against.

# Neurodiversity



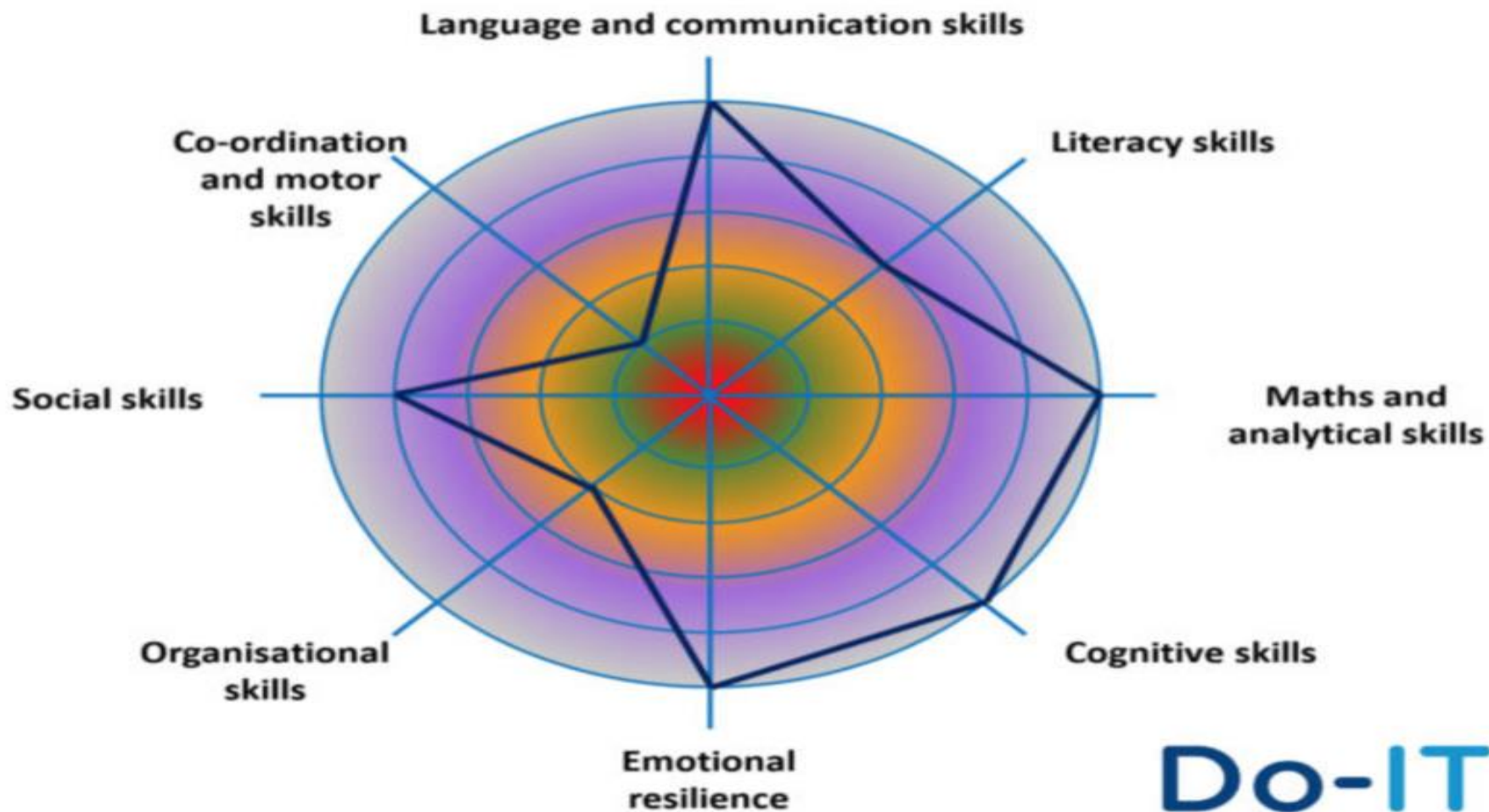
Spiky profiles is the view that neurodiverse people often have different strengths and difficulties, and these are a lot more prominent than what neurotypicals profile would look like.

E.g. Some Neurotypical people may have the same strengths across Maths and social skills but a neurodiverse person may be extremely good at Maths but really struggle with social skills.

E.g. Some Neurodiverse people may have trouble with time management. However they often show high levels of passion, drive, and creative thinking.

# Examples of spiky profiles

## Autism





# Neurodiversity in society

People with neurodivergent features may spend a lot of time trying to adjust to different circumstances in society E.g. accessing sports activities.

They may need to manage their social impressions or find ways to block out distractions.

Over time, this extra effort can take a toll on performance, productivity and physical and mental health due to a term called masking.

If society adopts the concept of neurodiversity, it could ease some of the stigma and stress that affects people.

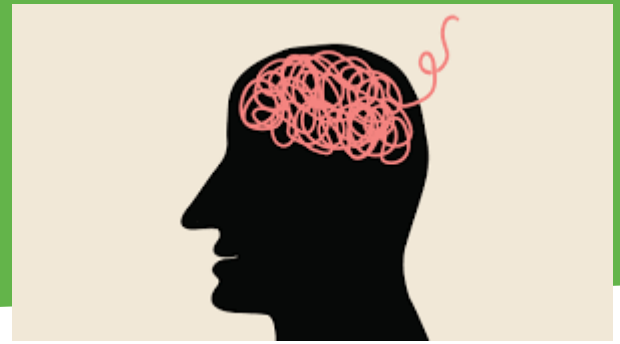
That includes people who shy away from help because they fear judgment from their peers or people in positions of authority.



# Attention Deficit Hyperactivity Disorder (ADHD)



# What is ADHD?



- Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental condition that affects people's behaviour. People with ADHD can seem restless, may have trouble concentrating and may act on impulse.
- There are three different types of ADHD which someone can be diagnosed with. Inattentive/Hyperactive/Combined.
- There are 2.6 million people in UK with ADHD
- ADHD falls under the neurodiversity umbrella not a mental health condition as previously believed.
- ADHD can occur in people of any intellectual ability.

# Inattentive ADHD

## **Inattentive ADHD:**

- Struggles to pay close attention to details and may make careless mistakes
- Often has trouble holding attention on tasks or activities.
- Often does not seem to listen when spoken to directly.
- Often has trouble organising tasks and activities.
- Often loses things necessary for tasks and activities
- Is often easily distracted
- Is often forgetful in daily activities
- Starts new tasks before finishing old ones





# How to support ADHD - Inattentive

- Make to-do lists - Create a list of the session activities prior to the session and give to the individual
- "Bite-size" information. Break down activities into a now, next and later depending of the level of understanding.
- Give clear instructions. Make them simple and easy to understand.
- Avoid jargon and allow time to process information
- Organise – Try and make sure the lay out of the room isn't cluttered and any sport resource can be easily found
- Get into a routine – Try and keep the sport sessions structured and stick to planned timings.
- A sense of order helps inattentive individuals stay focused.
- Try and follow a similar schedule every session where possible -- Put up the schedule in a central place in the room.
- Cut down on distractions. Put a do not disturb sign on the door, turn off any stimuli that could distract individuals in the session e.g. phones ringing, TV, music in the back ground as much as possible, try and sit individuals away from doors/windows.



# Hyperactive/Impulsive ADHD

## Hyperactivity and Impulsivity:

- Often fidgets with or taps hands or feet, or squirms in seat.
- Often leaves seat.
- Often runs about or climbs in situations where it is not appropriate
- Often talks excessively
- Fidgeting
- Is often “on the go” acting as if “driven by a motor”.
- Often blurts out an answer before a question has been completed.
- Often has trouble waiting their turn and can interrupt others games



# How to support ADHD – Hyperactive/Impulsive

- Set out a plan for the day in their preferred way e.g. written or symbols with clear boundaries
- Do not single out someone if they are being disruptive
- Break down instructions and check for understanding
- Let off steam by exercising regularly – This is a perfect session to support self regulation for hyperactive/impulsive ADHD
- Find appropriate ways for them to relax such as listening to music or learning breathing exercises for stress
- Small filler tasks/jobs in between activities
- When a small activity has been completed or an instruction followed let the individual know you noticed.
- Incentives can also be introduced such as stickers/tokens etc.

# Autism



# Autism is ...

- Autism is a life-long condition that affects the way in which a person communicates, relates to other people and makes sense of the world around them. Autism is sometimes described as a 'variation' in thinking (neurodiversity).
- Has associated conditions such as ADHD, learning difficulties and sensory processing disorder
- It is a spectrum condition, which means that, while all autistic people share certain traits, their experiences are all different.
- Autistic people simply view things differently to those without the condition, with neither view being 'right' or 'wrong'.
- The main areas of difference in autistic people are social and communication, sensory and repetitive/restrictive behaviours
- Exact causes are unknown but research has shown genetic factors are important and may be associated with a variety of conditions affecting brain development which occur before, during or after birth.

# Impairment of social interaction

- Prefer to spend time alone rather than seeking out the company of other people – Team games can create a challenge
- Limited eye contact or exaggerated eye contact – social rules
- Difficulty recognising others feelings – Theory of mind
- Difficulties with social interaction can mean that people with autism find it hard to form friendships: some may want to interact with other people and make friends, but may be unsure how to go about this
- Not understand the unwritten social rules which most of us pick up without thinking: they may stand too close to another person for example, or start an inappropriate subject of conversation
- Small talk and banter

Use participants names to gain attention – some participants may not make eye contact and so may not know you are talking to them

Begin with one to one activities, perhaps making use of a support worker or assistant activity leader

Respect someone's preference to spend time alone – do not force people into group situations that may be distressing

Social skill groups can provide people with a safe environment to learn and practice skills

Adopt a staggered approach to integrating participants into a larger group - very gradually add more people into the activity

Social stories and comic strip cartoons can be a good way to teach social skills and skills such as turn taking and etiquette around winning and losing



# Communication

- Echolalic speech – which is repeating what they have heard, this may be repeating scenes from TV or a movie and using them to communicate needs.
- Special interests -Talks about one topic intensely even if others don't want to.
- Difficulty processing of information
- Literal understanding of language
- For people with autistic spectrum disorders, 'body language' can appear just as foreign as if people were speaking ancient Greek.
- It is thought that there is a mutual lack of understanding from autistic people and neurotypicals which causes miscommunication.

Check for understanding

Use language that is clear, precise and concrete

Be aware that some people may struggle to make or maintain eye contact – this doesn't mean that they aren't paying attention

Allow time for instructions and information to be processed – six second rule



Find out how the person prefers to communicate and respect their preference

Be careful with the use of metaphors and sarcasm – may cause confusion

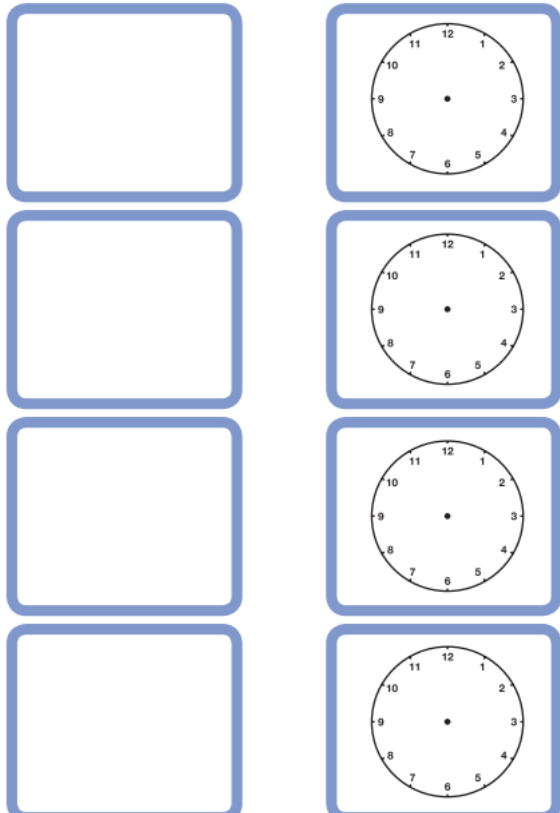
Try not to rely too much on your body language and facial expressions – some people may not understand how to interpret them







Use visual aids to back up your verbal communication.

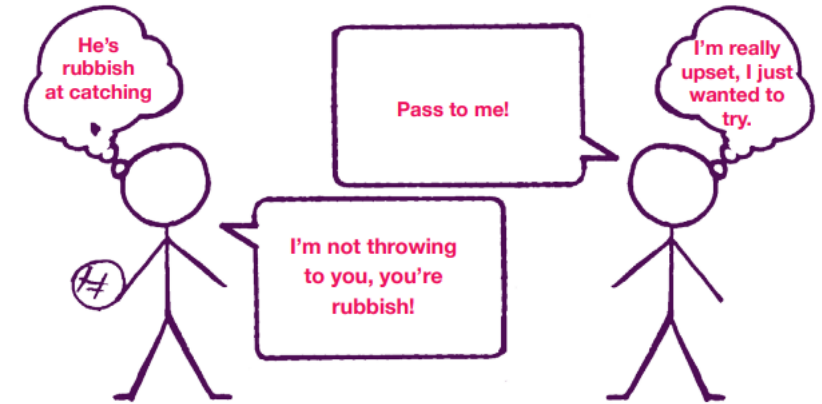


# Ways to help

Social stories, Comic strip conversations, Visual strips, technology, Signing, Objects of reference



		
Playing games with other people can be fun	When we play games, we all wait for our turn.	Sometimes, I get to go first. I enjoy going first.
		
I remember that sometimes other people like to go first too.	Sometimes, I am waiting for everyone to have a go, and then it is my turn. This is ok!	We all have a go at being first, playing games with other people is fun!



# Flexible Thinking – Theory of mind

- Difficulty understanding and interpreting other people's thoughts, feelings and actions
- Find it hard to predict what will happen next, or what could happen next
- Difficulty understand the concept of danger, for example they may be unaware that running straight from the changing rooms and jumping into the swimming pool even though they are unable to swim, poses a danger to them
- Difficulties engaging in imaginative play and activities
- Find it hard to prepare for change and plan for the future
- Difficulties coping in new or unfamiliar situations.
- May need things in same place

Try not to promise anything that can't be guaranteed

Ensure that the environment is structured with clear boundaries in place

Help participants to prepare for change through the provision of supported rehearsal or Now and Next visual aids

Consider the use of visual aids and resources such as visual timetables, social stories and picture symbols

Offer the opportunity for participants to meet you and explore the environment at a quieter time ahead of the session

Provide a consistent structure to the session – but remember that this doesn't necessarily mean doing the same activity every time!



# Stimming



## Stimming and special interests

- When people show stimming or routine like behaviours this may be because they are feeling stressed the behaviour comforts them
- A routine is something the person does so often that it is familiar to them. As it is familiar it feels safe, the opposite to what it is that's worrying them.
- People feel in control of their own rituals and are comforted by them.
- Stimming can include simple ones such as flicking fingers or objects, tapping, rocking etc.



# Restricted Repetitive Behaviour, Interests or Activities

## Knowing what comes next

People with Autism often have difficulty understanding what is happening around them.

Think about how you feel when you don't know what is happening, or what's going to happen next or when nobody tells you what's going on. Think about an experience when this has happened, maybe your first day at work, or just after an interview or if a relative is seriously ill.

## How do you feel??

We cannot predict or guess what might happen next and most of us may feel insecure or even frightened. Either way, not knowing what comes next causes people to feel stressed, because if they don't know what is coming next they cannot be sure they can cope with it. The body gets itself ready for flight, fight or freeze, the changes in body chemistry lead to stress and more repetitive behaviours.

# How different senses can be effected

- **Vision (Hypo)** - Seeks out certain lights and colour
- **Vision (Hyper)** - Sees minute details, affected by bright colours
- **Hearing (Hyper)**- Quiet background noises can be overwhelming and distracting
- **Hearing (Hypo)**- Seeks out sound, may not hear instruction
- **Tactile (Hyper)** - Dislike touch, finds contact sport difficult
- **Tactile (Hypo)**- Likes contact sports, may want to hold objects, seeks out objects
- **Smell (Hyper)** –Dislikes strong smells
- **Smell (Hypo)**- Seeks out smells, may want to smell hair



# How different senses can be effected

- **Taste (Hyper)**- Likes plain food that is familiar, beige diet
- **Taste (Hypo)**- Tends to like strong tasting foods
- **Proprioception (Hyper)** Uneven flooring and steps are difficult to navigate
- **Proprioception (Hypo)**- movement breaks are useful, cannot stay still, bumps into other
- **Vestibular (Hyper)**- Fearful of activities with movement
- **Vestibular (Hypo)**- Likes rocking and bouncing
- **Interoception (Hyper)** May want to seek out food and drink
- **Interoception (Hypo)** Not knowing when you feel hungry, full, hot, cold, or thirsty



# Supporting in a crisis

- Drinking plenty of fluid, water if possible to improve executive function and avoid brain fog, memory issues, tiredness and lack of focus.
- Pick your fights - Many neurodivergent people hate conflict.
- They can also be argumentative, fussy, moody, emotional or just refuse to speak. Do we really need a huge crisis happening just over a petty power struggle e.g. making the person act a certain way or if they say something out of turn.
- These include sensory stimuli, social interaction difficulties, information processing and language processing both verbal and written.
- As a result, they will feel overwhelmed and undervalued.
- Accept behaviour as a form of communication and work to understand what the person is trying to say
- Find supportive and empowering ways to interact with them will help much better than exclusion or punishment.



# Supporting in a crisis

- If your individuals are coming to a session they may need to decompress.
- This may be due to masking all day which is exhausting for the mind and body. This could present in different ways – Either bouncing off the walls or needing a space to relax
- Let them let off steam in a safe way and use your resources effectively e.g. punch bags, physical exercise, heavy lifting etc. or allow where possible some time some time alone in a quiet area
- Ask them what they need and listen to what they say.
- Find alternative ways to get the instructions across if the individual is insistent on not sitting with the groups.
- Walk and talk
- Sensory resources
- Be aware of your body language and personal space
- Pick your battles



# Remember to focus on the Positive!



There is **too much** attention on the impairments that come with conditions like ADHD and Autism.

It is better approach is to focus on what someone's good at, not what they lack. For example, there's some evidence that:

**People with ADHD have high levels of spontaneity, courage, and empathy. They can hyper-focus on certain tasks.**

**Those with autism pay attention to complex details, have good memories, and show certain "specialty" skills.**

Experts think this can be an asset in certain jobs, such as computer programming or music. As noted by one researcher, Wolfgang Mozart had strong music memory and absolute pitch.



Thank you  
Any questions