

# NEURODIVERSITY

## WHAT IS IT?

neurodiversity is a word that describes everyone's differing neurology and behaviour traits

neurodivergent describes individuals who sit further from 'the norm'

they may have Autism, ADHD, ADD, Dyslexia, Dyspraxia, Dyscalculia, Dysgraphia, Tourette's Syndrome, Stammering, Misophonia, Executive Dysfunction, or Slow Processing... they may or may not have a diagnosis

many people are born neurodivergent, while some acquire neurodivergence as a result of childhood trauma and/or injury

whatever the cause, their 'baseline' neurology and behaviour traits diverge from 'the norm'

neurodivergence itself is not a measure of intelligence or a reflection of capability

many of the worlds best athletes are neurodivergent

# NEURODIVERSITY

## OPTIMISING TALENT

EVERYONE IS NEURODIVERSE

everyone thinks, feels & behaves differently

everyone has to stretch to fit 'the mould'

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neurodivergent people often have to stretch a little further...

stretching in this way is energy consuming and often unnecessary

unnecessary in sport when the traits they are trying to hide or mask are not detrimental to performance

in fact, getting the best out of a neurodivergent athlete involves letting them be their 'true selves' and working from that baseline

not a baseline set by others

# AUTISM

## DEFINITION

“persistent difficulties with social communication and interaction & restricted and repetitive patterns of behaviours, activities or interests”

## POTENTIAL STRENGTHS IN SPORT

sustained & prolonged focus  
attention to detail  
diligence & determination  
honest communication  
loyalty & reliability

## MYTH BUSTING

Autism itself is not an intellectual impairment but the two can cooccur

Autistic people are not anti-social - sensory and communication differences make certain social situations challenging

not every autistic person experiences the same strengths and/or challenges

terminology is ever changing, for example the terms 'Asperger's' and 'high' and 'low functioning' are currently being phased out

top tip: ask the expert (the neurodivergent individual themselves)

# AUTISM

## POTENTIAL STRUGGLES

the definition of Autism according to the DSM-5-TR highlights the common difficulties experienced by Autistic individuals

a person must experience these difficulties to gain a diagnosis

however, the cause of these difficulties is different for every individual, and understanding the cause is key to finding a solution

some examples of causes are; sensory, perception, learning and processing differences

## HOW TO SUPPORT PROGRESS

the first step towards supporting an Autistic individual (athlete or staff) is understanding what their Autism means to them

this means establishing what their experience is and not what others perceive it to be...

top tip: think outside the box in regard to communication methods

the second step is to explicitly and collaboratively identify and agree upon:

shared goals and expectations  
and an approach that ensures sustainable progress



# ADHD

## DEFINITION

“persistent or on-going patterns of inattention and/or hyperactivity-impulsivity”

## POTENTIAL STRENGTHS IN SPORT

ability to hyperfocus (flow)  
creativity  
resilience  
energy & enthusiasm  
spontaneity

## MYTH BUSTING

there are three ways in which a person's ADHD may present:

1) inattentive (known colloquially as add)

2) hyperactive-impulsive

3) combined inattentive & hyperactive-impulsive

ADHD is not an excuse for laziness or disruptive behaviour

some people with ADHD experience periods of intense hyperfocus

# ADHD

## POTENTIAL STRUGGLES

the definition of ADHD according to the DSM-5-TR highlights the common difficulties experienced by individuals with ADHD

a person must experience continued inattentiveness, hyperactive-impulsivity, or a combination of both to gain a diagnosis

the difficulties associated with ADHD can also result from negative circumstances and/or poor lifestyle choices

these factors must be addressed before medical or behavioural intervention is considered

## HOW TO SUPPORT PROGRESS

the first step towards supporting an individual with ADHD is to understand how they experience their condition and how it manifests (seen and unseen)

the second step is to identify what helps and what hinders them in regard to self-management

top tip: be prepared to help them because they may not know!

the third step is to identify whether and what external support might help them to self-manage

once implemented, support should be regularly reviewed

# DYSLEXIA

## DEFINITION

"learning difficulties characterised by problems with accurate or fluent word recognition, poor decoding, and poor spelling abilities"

## POTENTIAL STRENGTHS IN SPORT

pattern recognition  
non-linear thinking (3d)  
visual processing skills  
verbal communication skills  
creativity & ingenuity

## MYTH BUSTING

think of Dyslexia as difficulty in 'decoding' written language; distinct from spoken language

Dyslexia is not a measure of intelligence or processing speed

'Dyslexic friendly' fonts and colours may or may not help Dyslexic individuals to read with greater ease and fluency

Dyslexic individuals often have an affinity for pattern recognition and problem solving

# DYSLEXIA

## POTENTIAL STRUGGLES

regardless of circumstances, the necessity to read and write is felt by every individual on a day-to-day basis

from reading written statements, instructions and agreements

to filling out forms and applications

without adequate support, this can become overwhelming for an individual with Dyslexia, leading to low self-esteem and avoidance

yet performance in sport hinges upon structure and stability at home

## HOW TO SUPPORT PROGRESS

one of the most common reasons Dyslexic individuals do not seek support is fear of judgement

therefore it is essential to challenge negative preconceptions regarding neurodivergence

before considering the communication and provision of support

there are numerous support strategies that may help alleviate some of the difficulties Dyslexic individuals face, such as  
Dyslexic friendly fonts & formats (avoiding crowding)  
Dyslexic friendly colours (avoiding high contrast)  
and speech to text or text to speech software

# DYSPRAXIA

## DEFINITION

"Dyspraxia or developmental co-ordination disorder (DCD), is a common disorder that affects movement and co-ordination"

## POTENTIAL STRENGTHS IN SPORT

experts at learning  
good problem solving skills  
industrious  
'underdog' mentality

## MYTH BUSTING

many dyspraxic individuals can permanently improve their movement planning, control, and coordination

they simply require alternative learning methods to do so

e.g., time, consistency and explicit instruction... sounds like sport

dyspraxic athletes can achieve in mainstream sport - look up rugby union player elis genge



# DYSPRAXIA

## POTENTIAL STRUGGLES

Dyspraxia like all neurodivergent conditions can manifest obviously or subtly, and just about anywhere in-between

Dyspraxic individuals may take longer to learn a certain skill or sequence and may appear uncoordinated at times

they may also struggle with activities involving greater fine motor skills and/or balance

however, motor control and coordination can improve with age and does improve with physical and neurological training and/or repetition

## HOW TO SUPPORT PROGRESS

rather than viewing a Dyspraxic individual through a deficits lens, try to focus on the strengths they must have embodied to get this far

consider integrating balance, coordination and agility exercises into an individuals programme

if this has already been catered for, but doesn't seem to be aiding progression, consider

firstly allowing the individual more time or one-on-one coaching and secondly applying an alternative teaching/coaching method

top tip: sometimes the greatest issue is miscommunication and/or misinterpretation rather than a lack of ability or capability

# DYSCALCULIA

## DEFINITION

"persistent difficulty in understanding numbers, learning how to manipulate numbers and performing mathematical calculations"

## HOW DOES IT RELATE TO SPORT?

the ability to understand and work with numbers is arguably fundamental to understanding performance and ensuring progress

yet for a dyscalculic individuals, numbers can be confusing, frustrating and overwhelming

this can lead to limited engagement and low self-esteem

however, the correct understanding and support can enable individuals to circumvent their challenges

## HOW TO SUPPORT PROGRESS

a dyscalculic individual may benefit from translation of numeric information into colours, words or concepts - simple!

remember - it's a challenge, not a barrier

# DYSGRAPHIA

## DEFINITION

"a disorder of written expression that impairs writing ability and fine motor skills"

## HOW DOES IT RELATE TO SPORT?

in essence, dysgraphic individuals struggle to control and time the fine motor movements required to write fluently

they may also struggle with movements requiring similar skills in sport

there are methods by which dysgraphic individuals can improve their handwriting

it serves to follow that these methods would transfer into a sporting context

## HOW TO SUPPORT PROGRESS

set a programme that focuses on increasing muscle strength and control in hands, arms, shoulders and core

be sure not to conflate poor hand writing with low intellect

# MISOPHONIA

## DEFINITION

"an extreme emotional, physiological or behavioural reflex response to specific sounds, their associated stimuli, or cues"

## HOW DOES IT RELATE TO SPORT?

misophonia affects approximately 20% of the population - it's very common

being emotionally or physiologically impacted by certain sounds is likely to distract and detract from the bottom line

the bottom line being the task at hand

allowing honest and open minded discussion regarding neurodiversity may enable those experiencing misophonia to seek help and find solutions

## HOW TO SUPPORT PROGRESS

identify and eliminate potential triggers; try noise reducing or noise cancelling headphones

certain therapies can help to reduce an individuals reflex response to triggering sounds

# TOURETTE'S SYNDROME

## DEFINITION

"a neurological condition that causes an individual to make involuntary movements and/or sounds called tics"

## HOW DOES IT RELATE TO SPORT?

tics often worsen when an individual is overly stressed or fatigue: an unavoidable element of sport

tics themselves can be exhausting, and would therefore impact an athletes ability to recover from training and competition

yet participation in exercise is particularly beneficial for individuals with tourette's syndrome

## HOW TO SUPPORT PROGRESS

it's essential for athletes and coaches to be mindful of energy consumption and recovery - for an individual with tourette's syndrome, this is even more important

ps respect will go a long way..



# EXECUTIVE DYSFUNCTION

## DEFINITION

"difficulty with important functions related to memory, attention, and thinking"

## HOW DOES IT RELATE TO SPORT?

it's no secret that a lot of athletes have ADHD

ADHD is essentially an executive function deficit disorder (EFDD)

it may inhibit an individual's ability to handle frustration, start and finish tasks, recall and follow multi-step directions, stay on track, self monitor, and balance tasks (like sport and academic or domestic demands)

## HOW TO SUPPORT PROGRESS

step by step instructions; written and/or visual aids;  
help with planning, scheduling & organisation;  
prompts, reminders; patience & understanding;  
informed mentoring

# SLOW PROCESSING

## DEFINITION

"a greater length of time required to take in, make sense of, and respond to information"

## HOW DOES IT RELATE TO SPORT?

when not acting on instinct, an individual may require more time to consider a situation

training is repetition - we train to make movements and sequences second-nature, therefore an individual's slow processing can be mitigated for in this regard

consider this: slow processing can come hand in hand with high accuracy

## HOW TO SUPPORT PROGRESS

time to prepare and/or respond where possible

practice to make tasks, movements and/or sequences second nature

patience & understanding

# STAMMERING

## DEFINITION

"a speech disorder in which the flow of speech is regularly disrupted by involuntary repetition, protraction and/or pausing"

## HOW DOES IT RELATE TO SPORT?

stammering does not detract from physical performance

however, fear of judgement can affect an individuals confidence and willingness to engage

it is true that judgement is necessary and unavoidable in sport - especially in competitive sport...

but judgement should always be objective and task-oriented

## HOW TO SUPPORT PROGRESS

question judgement that deviates from the bottom line: the task at hand

foster inclusive environments in which people can express themselves without fear of consequences